

# **PARTICIPATING SPECIAL ENTITY AGREEMENT**

**Between**

**THE EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY  
and the  
CHEVRON PIPE LINE COMPANY**

## **1.0 PARTIES**

This Agreement is made and entered into by the East Contra Costa County Habitat Conservancy (“Conservancy”) and Chevron Pipe Line Company (“Participating Special Entity” or “PSE”) as of the Effective Date.

## **2.0 RECITALS**

The Parties have entered into this Agreement in consideration of the following facts:

- 2.1** The East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (“HCP/NCCP,” or “Plan”) is intended to provide a comprehensive framework to protect natural resources in eastern Contra Costa County, while improving and streamlining the environmental permitting process for certain projects that would cause impacts on endangered and threatened species. The primary policy priority of the Plan is to provide comprehensive species, wetlands, and ecosystem conservation and contribute to recovery of endangered and threatened species within East Contra Costa County while balancing open space, habitat, agriculture, and urban development. To that end, the Plan describes how to avoid, minimize, and mitigate, to the maximum extent practicable, impacts on Covered Species and their habitats while allowing for certain development and other activities in selected regions of the County and the Cities of Pittsburg, Clayton, Oakley, and Brentwood.
- 2.2** The Conservancy is a joint powers authority formed by its members, the County of Contra Costa (“County”), the City of Pittsburg (“Pittsburg”), the City of Clayton (“Clayton”), the City of Oakley (“Oakley”) and the City of Brentwood (“Brentwood”), to implement the HCP/NCCP.
- 2.3** The HCP/NCCP covers approximately one-third of the County, or 174,082 acres, all in East Contra Costa County, in which impacts from certain development and other activities are evaluated, and in which conservation will occur.
- 2.4** The area covered by the HCP/NCCP has been determined to provide, or potentially provide, habitat for twenty-eight (28) species that are listed as endangered or threatened, that could in the future be listed as endangered

or threatened, or that have some other special status under federal or state laws.

- 2.5 The Conservancy has received authorization from the United States Fish and Wildlife Service (“USFWS”) under incidental take permit TE 160958-0, and the California Department of Fish and Game (“CDFG”), under incidental take permit 2835-2007-01-03, for the Take of the twenty-eight (28) special-status species and certain other species, as take is defined respectively under federal and state law, while carrying out certain development and other activities.
- 2.6 The Conservancy may enter into agreements with participating special entities that allow certain activities of theirs to be covered by the Federal Permit and the State Permit, subject to the conditions in the Implementing Agreement (“IA”), the HCP/NCCP and the Permits.
- 2.7 PSE plans to implement the Chevron Pipeline KLM Site 1357 Repair Project and seeks an extension of the Conservancy’s permit coverage to perform required maintenance at Site 1357 on the KLM pipeline in eastern Contra Costa County as part of a pipeline integrity management plan to comply with Department of Transportation hazardous materials and safety regulations, as further described in Exhibit 1.
- 2.8 The Conservancy has concluded, based on the terms of this Agreement and the application submitted by PSE (the “Application”), that PSE has provided adequate assurances that it will comply with all applicable terms and conditions of the IA, the HCP/NCCP, and the Permits. The Application is attached hereto as Exhibit 1 and is hereby incorporated into this Agreement by reference.

### 3.0 **DEFINITIONS**

The following terms as used in this Agreement will have the meanings set forth below. Terms specifically defined in FESA, CESA or NCCPA or the regulations adopted by USFWS and CDFG under those statutes shall have the same meaning when used in this Agreement. Definitions used in this Agreement may elaborate on, but are not intended to conflict with, such statutory or regulatory definitions.

- 3.1 **“Application”** means the application submitted by the PSE in accordance with Chapter 8.4 of the HCP/NCCP, and which is attached hereto as Exhibit 1. The Application contains a cover sheet, the results of required planning surveys and the avoidance, minimization and mitigation measures that will be a condition of the PSE using Conservancy’s Permits.
- 3.2 **“Authorized Take”** means the extent of incidental Take of Covered Species authorized by the USFWS in the Federal Permit issued to the Conservancy pursuant to Section 10(a)(1)(B) of FESA, and the extent of Take of Covered Species authorized by CDFG in the State Permit issued

to the Conservancy pursuant to California Fish and Game Code section 2835.

- 3.3 **“CDFG”** means the California Department of Fish and Game, a department of the California Resources Agency.
- 3.4 **“CESA”** means the California Endangered Species Act (Fish & G. Code, § 2050 et seq.) and all rules, regulations and guidelines promulgated pursuant to that Act.
- 3.5 **“Changed Circumstances”** means changes in circumstances affecting a Covered Species or the geographic area covered by the HCP/NCCP that can reasonably be anticipated by the Parties and that can reasonably be planned for in the HCP/NCCP. Changed Circumstances and planned responses to Changed Circumstances are more particularly defined in Section 12.2 of the IA and Chapter 10.2.1 of the HCP/NCCP. Changed Circumstances do not include Unforeseen Circumstances.
- 3.6 **“Covered Activities”** means those land uses and conservation and other activities described in Chapter 2.3 of the HCP/NCCP to be carried out by the Conservancy or its agents that may result in Authorized Take of Covered Species during the term of the HCP/NCCP, and that are otherwise lawful.
- 3.7 **“Covered Species”** means the species, listed and non-listed, whose conservation and management are provided for by the HCP/NCCP and for which limited Take is authorized by the Wildlife Agencies pursuant to the Permits. The Take of Fully Protected Species is not allowed. The Take of extremely rare plants that are Covered Species is allowed only as described in Section 6.0 and the IA.
- 3.8 **“Effective Date”** means the date when this Agreement is fully executed.
- 3.9 **“Federal Listed Species”** means the Covered Species which are listed as threatened or endangered species under FESA as of the Effective Date, and the Covered Species which are listed as threatened or endangered pursuant to FESA during the term of the HCP/NCCP as of the date of such listing.
- 3.10 **“Federal Permit”** means the federal incidental Take permit issued by USFWS to the Conservancy and other local agencies pursuant to Section 10(a)(1)(B) of FESA (permit number TE 160958-0), as it may be amended from time to time.
- 3.11 **“FESA”** means the Federal Endangered Species Act of 1973, as amended (16 U.S.C § 1531 et seq.) and all rules, regulations and guidelines promulgated pursuant to that Act.
- 3.12 **“Fully Protected Species”** means any species identified in California Fish and Game Code sections 3511, 4700, 4800, 5050 or 5515 that occur within the Plan Area.

- 3.13 **“HCP/NCCP”** or **“Plan”** means the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan.
- 3.14 **“Implementing Agreement”** or **“IA”** means the “Implementing Agreement for the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan,” dated January 22, 2007.
- 3.15 **“Jurisdictional Wetlands and Waters”** means State and federally regulated wetlands and other water bodies that cannot be filled or altered without permits from either the U.S. Army Corps of Engineers under section 404 of the Clean Water Act or, from the State Water Resources Control Boards under either section 401 of the Clean Water Act or the Porter-Cologne Water Quality Act, or CDFG under section 1602 of the Fish and Game Code, as further explained in Chapter 1.3.5 of the HCP/NCCP.
- 3.16 **“Listed Species”** means a species (including a subspecies, or a distinct population segment of a vertebrate species) that is listed as endangered or threatened under FESA or CESA.
- 3.17 **“NCCPA”** means the Natural Community Conservation Planning Act (Fish & G. Code, § 2800 et seq.) and all rules, regulations and guidelines promulgated pursuant to that Act.
- 3.18 **“Non-listed Species”** means a species (including a subspecies, or a distinct population segment of a vertebrate species) that is not listed as endangered or threatened under FESA or CESA.
- 3.19 **“Party”** or **“Parties”** means any or all of the signatories to this Agreement.
- 3.20 **“Permit Area”** means the area within the Plan Area where the Conservancy has received authorization from the Wildlife Agencies for the Authorized Take of Covered Species while carrying out Covered Activities.
- 3.21 **“Permits”** means the Federal Permit and the State Permit.
- 3.22 **“Plan Area”** means the geographic area analyzed in the HCP/NCCP, located in the eastern portion of Contra Costa County, as depicted in Figure 1-1 of the HCP/NCCP. The Plan Area is further described in detail in Chapter 1.2.1 of the HCP/NCCP. The Plan Area is also referred to as the “Inventory Area” in the HCP/NCCP.
- 3.23 **“Preserve System”** means the land acquired and dedicated in perpetuity through either a fee interest or conservation easement intended to meet the preservation, conservation, enhancement and restoration objectives of the HCP/NCCP.
- 3.24 **“Project”** means the Chevron Pipeline KLM Site 1357 Repair Project, as described in Section 2.7.

- 3.25 “State Permit”** means the state Take permit issued to the Conservancy and other local agencies pursuant to Section 2835 of the California Fish and Game Code (permit number 2835-2007-01-03), as it may be amended from time to time.
- 3.26 “Take”** has the same meaning provided by FESA and its implementing regulations with regard to activities subject to FESA, and also has the same meaning provided in the California Fish and Game Code with regard to activities subject to CESA and NCCPA.
- 3.27 “Unforeseen Circumstances”** under the Federal Permit means changes in circumstances affecting a Covered Species or geographic area covered by the HCP/NCCP that could not reasonably have been anticipated by the Plan developers and USFWS at the time of the Plan’s negotiation and development, and that result in a substantial and adverse change in the status of a Covered Species. “Unforeseen Circumstances” under the State Permit means changes affecting one or more species, habitat, natural community, or the geographic area covered by the Plan that could not reasonably have been anticipated at the time of Plan development, and that result in a substantial adverse change in the status of one or more Covered Species.
- 3.28 “USFWS”** means the United States Fish and Wildlife Service, an agency of the United States Department of Interior.
- 3.29 “Wildlife Agencies”** means USFWS and CDFG.

#### **4.0 PURPOSES**

This Agreement defines the Parties’ roles and responsibilities and provides a common understanding of actions that will be undertaken to avoid, minimize and mitigate the effects on the Covered Species caused by the Project, and to provide for the conservation of the Covered Species within the Plan Area. The purposes of this Agreement are to ensure implementation of each of the terms and conditions of this Agreement, and the relevant terms of the IA, the HCP/NCCP, and the Permits, and to describe remedies and recourse should either Party fail to perform its obligations as set forth in this Agreement.

#### **5.0 AVOIDANCE, MINIMIZATION AND MITIGATION OF IMPACTS**

##### **5.1 General Framework**

As required by FESA and NCCPA, the HCP/NCCP includes measures to avoid and minimize take of Covered Species and to conserve natural communities and Covered Species at the landscape-, habitat- and species-level. Chapter 6 of the HCP/NCCP provides further instructions to determine which avoidance and minimization measures are applicable to particular Covered Activities. PSE shall implement all applicable avoidance and minimization measures as required by the HCP/NCCP, including but not

limited to those identified in Chapter 6, as described in the Application and this Agreement.

## **5.2 Surveys and Avoidance Measures**

Planning surveys are required prior to carrying out any Covered Activity for which a fee is collected or land in lieu of a fee is provided. PSE has submitted a planning survey report for approval by the Conservancy in accordance with Chapter 6.2.1 of the HCP/NCCP. This planning survey report is contained within the Application, which describes the results of the planning survey and describes in detail the pre-construction surveys, construction monitoring, avoidance measures and mitigation measures that apply to the Project and shall be performed by PSE. Based on the Application, the Conservancy has determined that PSE will implement and comply with all applicable preconstruction surveys and construction monitoring requirements described in Chapters 6.2.2 and 6.2.3 of the HCP/NCCP.

## **5.3 No Take of Extremely Rare Plants or Fully Protected Species**

Nothing in this Agreement, the HCP/NCCP or the Permits shall be construed to allow the Take of extremely rare plant species listed in Table 6-5 of the HCP/NCCP (“No-Take Plant Population”) or any Fully Protected Species under California Fish and Game Code sections 3511, 4700, 4800, 5050 or 5515. PSE shall avoid Take of these species.

## **5.4 Delineation of Jurisdictional Wetlands and Waters**

Jurisdictional Wetlands or Waters are present on the site of the Project, and PSE has provided to the Conservancy a jurisdictional delineation in accordance with Chapter 6.3.1 of the HCP/NCCP. PSE shall pay the Wetland Mitigation Fee based on the delineation, as specified in the Application.

## **5.5 Fees and Dedications**

As set forth in the Application, PSE agrees to pay the Conservancy a one-time payment of **\$50,725.62**, which amount includes all HCP/NCCP mitigation fees necessary for the Project. The payment also includes an amount sufficient to implement additional actions that will contribute to the recovery of endangered and threatened species (“Contribution to Recovery”). The overall payment amount is the sum of the following:

**Permanent Impact Development Fee:** \$5,418.37

**Permanent Impact Wetland Mitigation Fee:** \$2,398.94

**Temporary Impact Development Fee:** \$2,170.26

**Temporary Impact Wetland Mitigation Fee:** \$23,829.50

**Contribution to Recovery:** \$16,908.54

The payment must be paid in full before any ground-disturbance associated with the Project occurs. Notwithstanding the above, the Parties acknowledge that the Conservancy adjusts its fee schedule annually on March 15 of each year in accordance with the fee adjustment provisions of Chapter 9.3.1 of the HCP/NCCP. If the PSE pays before March 15, 2014 and construction of the Project commences before March 15, 2014, the amount due will be as stated above. If PSE pays on or after March 15, 2014 or construction of the Project does not commence before March 15, 2014, the amount due will be subject to

annual fee adjustments for all fees, and subject to annual adjustments of the Contribution to Recovery based on the formula set forth in Chapter 9.3.1 for the HCP/NCCP wetland mitigation fee. Based on these adjustments, if PSE pays before March 15 of any year, but construction does not commence before March 15 of that year, PSE will either be required to submit an additional payment for any increases or be entitled to a refund without interest for any decreases.

## **6.0 TAKE AUTHORIZATION**

### **6.1 Extension of Take Authorization to PSE**

As provided in Chapter 8.4 of the HCP/NCCP, after receipt of the Wildlife Agencies' written concurrence that the Proposed Activity complies with the HCP/NCCP, the Permits and the IA, and after execution of this Agreement, payment of fees, compliance with the California Environmental Quality Act (Public Resources Code section 21000, et seq.) ("CEQA"), the Conservancy shall issue a Certificate of Inclusion to PSE that specifically describes the Authorized Take and required conservation measures and extends Take authorization under the Permits to PSE. PSE is ultimately responsible for compliance with all applicable terms and conditions of this Agreement, the IA, the HCP/NCCP and the Permits.

#### **6.1.1 Compliance with the California Environmental Quality Act**

The Conservancy's issuance of a Certificate of Inclusion to the PSE is a public agency action that must comply with CEQA. For purposes of the Project, the Conservancy is the CEQA lead agency. The Conservancy has determined the Project is exempt from CEQA pursuant to a statutory exemption for emergency repairs to public service facilities (Pub. Resources Code section 21080 (b)(2); Cal. Code Regs., tit. 14, §15269 (b)).

### **6.2 Duration of Take Authorization**

Once the Take authorization has been extended to the Project, it shall remain in effect for a period of fifteen (15) years, unless and until the Permits are revoked by USFWS or CDFG, in which case the Take authorization may also be suspended or terminated.

### **6.3 Section 7 Consultations with USFWS**

Nothing in this Agreement is intended to alter the obligation of a federal agency to consult with USFWS pursuant to Section 7 of FESA (16 U.S.C. §1536(a)). The PSE acknowledges that, if the Proposed Activities are authorized, funded, or carried out by a federal agency, the federal agency and the Proposed Activities must also comply with Section 7. As provided in Section 16.1 of the IA, USFWS has made a commitment that, unless otherwise required by law or regulation, it will not require any measures under Section 7 that are inconsistent with or exceed the requirements of the HCP/NCCP and the Permits for activities covered by the HCP/NCCP and the Permits.

The Project is not authorized, funded, or carried out by a federal agency and therefore PSE is not required to comply with Section 7 of FESA with regard to the Project.

## **7.0 RIGHTS AND OBLIGATIONS OF PSE**

### **7.1 Rights**

Upon the Conservancy's issuance of a Certificate of Inclusion to PSE, PSE may Take the Covered Species while carrying out the Project in the Permit Area, as further authorized by and subject to the conditions of this Agreement, the IA, the HCP/NCCP, and the Permits. The authority issued to PSE applies to all of its elected officials, officers, directors, employees, agents, subsidiaries, contractors, and subcontractors, and their officers, directors, employees and agents to the extent that they participate in the implementation of the Project. PSE shall periodically conduct an educational program to fully inform all such persons and entities of the terms and conditions of the Permits, and PSE shall be responsible for supervising their compliance with those terms and conditions. All contracts between PSE and such persons and entities shall require their compliance with the Permits.

### **7.2 General Obligations**

The PSE will fully and faithfully perform all obligations assigned to it under this Agreement, the IA, the HCP/NCCP, the Permits, including but not limited to the obligations assigned in the following chapters of the HCP/NCCP: Chapter 6.0 (Conditions on Covered Activities), Chapter 8.4 (Participating Special Entities), and Chapter 9.0 (Funding). PSE shall implement all measures and adhere to all standards included in the Application, and PSE shall reserve funding sufficient to fulfill its obligations under this Agreement, the IA, the HCP/NCCP and the Permits throughout the term of this Agreement. PSE will promptly notify the Conservancy of any material change in its financial ability to fulfill its obligations under this Agreement.

### **7.3 Obligations In The Event of Suspension or Revocation**

In the event that USFWS and/or CDFG suspend or revoke the Permits pursuant to Sections 19.0 and 21.0 of the IA, PSE will remain obligated to fulfill its mitigation, enforcement, management, and monitoring obligations, and its other HCP/NCCP obligations, in accordance with this Agreement and applicable statutory and regulatory requirements for all impacts resulting from implementation of the Project prior to the suspension or revocation.

### **7.4 Interim Obligations upon a Finding of Unforeseen Circumstances**

If the Wildlife Agencies make a finding of Unforeseen Circumstances with regard to a Federal Listed Covered Species, during the period necessary to determine the nature and location of additional or modified mitigation, PSE will avoid contributing to an appreciable reduction in the likelihood of the survival and recovery of the affected species. As described in Section 15.2.2 and Section 15.3.2 of the IA, the Wildlife Agencies shall be responsible for implementing such additional measures or modifications, unless PSE consents to do so.

### **7.5 Obligations In The Event Of Changed Circumstances**

Changed Circumstances, as described in 50 Code of Federal Regulations section 17.22(b)(5)(i), are adequately addressed in Chapter 7 and Chapter 10 of the HCP/NCCP,

and PSE shall implement any measures for such circumstances as called for in the HCP/NCCP, as described in Section 12.2 of the IA.

### **7.6 Obligation to Compensate Conservancy for Administrative Costs**

PSE shall compensate the Conservancy for its direct costs associated with this Agreement, including but not limited to, staff, consultant and legal costs incurred as a result of the review of the Application, drafting and negotiating this Agreement, monitoring and enforcement of this Agreement, and meetings and communications with PSE (collectively, Conservancy's "Administrative Costs"). Conservancy's Administrative Costs shall not exceed \$30,000 in the aggregate. Conservancy shall provide PSE with invoices detailing its Administrative Costs monthly or quarterly, at Conservancy's discretion. PSE shall remit payment of each invoice within thirty (30) days of receiving it.

This provision is not intended to, and shall not be construed to, limit PSE's duty to indemnify the Conservancy as provided in Section 7.7 of this Agreement.

### **7.7 Indemnification**

PSE agrees to defend, indemnify, and hold harmless the Conservancy and its board members, officers, contractors, consultants, attorneys, employees and agents from any and all claim(s), action(s), or proceeding(s) (collectively referred to as "Proceedings") brought against Conservancy or its board members, officers, contractors, consultants, attorneys, employees, or agents arising out of or resulting from any of the following.

- Decisions or actions of the Conservancy related to the Project, this PSE Agreement, or compliance with the California Environmental Quality Act of 1970, as amended ("CEQA") with regard to the Project; and
- The negligence, recklessness, or intentional misconduct of any representative, employee, or agent of PSE.

Notwithstanding the above, (i) PSE shall have no duty to defend, indemnify, or hold harmless the Conservancy to the extent damages are sought in a tort claim arising out of or resulting from the individual negligence, recklessness, or intentional misconduct of any representative, employee, or agent of the Conservancy and (ii) the indemnification obligations set forth above shall in no way limit the rights and remedies of PSE with respect to any breach of the terms and conditions of this PSE Agreement by the Conservancy.

PSE's duty to indemnify the Conservancy includes, but is not limited to, damages, fees and/or costs awarded against or incurred by Conservancy, if any, and costs of suit, claim or litigation, including without limitation attorneys' fees and other costs, liabilities and expenses incurred in connection with any Proceedings.

#### **7.7.1 Enforcement of Indemnification Provision**

PSE agrees to indemnify Conservancy for all of Conservancy's costs, fees, and damages incurred in enforcing the indemnification provisions of this Agreement.

### **7.7.2 Compliance Costs**

PSE agrees to defend, indemnify and hold harmless Conservancy, its officers, contractors, consultants, attorneys, employees and agents from and for all costs and fees incurred in additional investigation or study of, or for supplementing, redrafting, revising, or amending, any document (such as this Agreement or any document required for purposes of compliance with CEQA) if made necessary by any Proceedings.

### **7.7.3 Obligations in the Event of Litigation**

In the event that PSE is required to defend Conservancy in connection with any Proceedings, Conservancy shall have and retain the right to approve, which approval shall not be withheld unreasonably:

- the counsel to so defend Conservancy;
- all significant decisions concerning the manner in which the defense is conducted; and
- any and all settlements.

Conservancy shall also have and retain the right to decline to participate in the defense, except that Conservancy agrees to reasonably cooperate with PSE in the defense of the Proceedings. If Conservancy participates in the defense, all Conservancy fees and costs shall be paid by PSE.

PSE's defense and indemnification of Conservancy set forth herein shall remain in full force and effect throughout all stages of litigation including any and all appeals of any lower court judgments rendered in the Proceedings.

### **7.8 Fee Simple Owner of Project Site**

PSE owns an easement for the pipeline to be repaired during the Project but is not the fee simple owner of the land in the Project site. PSE is solely responsible for securing from the fee simple owner any authorization necessary to perform the Project and is solely responsible for complying with any conditions of such authorization.

## **8.0 REMEDIES AND ENFORCEMENT**

If PSE fails to comply with the terms of this Agreement, the IA, the HCP/NCCP, or the Permits, the Conservancy may withdraw the Certificate of Inclusion and terminate any Take authorization extended to PSE. The Conservancy shall also have all of the remedies available in equity (including specific performance and injunctive relief) and at law to enforce the terms of this Agreement, the IA, the HCP/NCCP and the Permits, and to seek redress and compensation for any breach or violation thereof. The Parties acknowledge that the Covered Species are unique and that their loss as species would be irreparable and that therefore injunctive and temporary relief may be appropriate in certain instances involving a breach of this Agreement.

## **9.0 FORCE MAJEURE**

In the event that a Party is wholly or partially prevented from performing obligations under this Agreement because of unforeseeable causes beyond the reasonable control of and without the fault or negligence of Party (“Force Majeure”), including, but not limited to, acts of God, labor disputes, sudden actions of the elements not identified as Changed Circumstances, or actions of non-participating federal or state agencies or local jurisdictions, the Party shall be excused from whatever performance is affected by such unforeseeable cause to the extent so affected, and such failure to perform shall not be considered a material violation or breach, provided that nothing in this section shall be deemed to authorize either Party to violate FESA, CESA or NCCPA, and provided further that:

- The suspension of performance is of no greater scope and no longer duration than is required by the Force Majeure;
- Within seven (7) days after the occurrence of the Force Majeure, the Party invoking this section shall give the other Party written notice describing the particulars of the occurrence;
- The Party shall use best efforts to remedy its inability to perform (however, this paragraph shall not require the settlement of any strike, walk-out, lock-out or other labor dispute on terms which in the sole judgment of the Party is contrary to its interest); and
- When the Party is able to resume performance of their obligations, it shall give the other Party written notice to that effect.

## **10.0 MISCELLANEOUS PROVISIONS**

### **10.1 Calendar Days**

Throughout this Agreement and the HCP/NCCP, the use of the term “day” or “days” means calendar days, unless otherwise specified.

### **10.2 Notices**

Any notice permitted or required by this Agreement shall be in writing, and delivered personally, by overnight mail, or by United States mail, certified and postage prepaid, return receipt requested. Notices may be delivered by facsimile or electronic mail, provided they are also delivered by one of the means listed above. Delivery shall be to the name and address of the individual responsible for each of the Parties, as follows:

John Kopchik  
East Contra Costa County Habitat Conservancy  
c/o Contra Costa County Department of Conservation and Development  
30 Muri Road  
Martinez, CA 94553  
Email: john.kopchik@dcd.cccounty.us  
Phone: 925-674-7819

Jeffrey Johnson  
HES Team Lead  
California Assest Management  
Chevron Pipe Line Company  
9525 Camino Media  
Bakersfield, CA 93311  
Email: johnsjw@chevron.com  
Phone: 661-654-7983

Notices shall be transmitted so that they are received within the specified deadlines. Notices delivered personally shall be deemed received on the date they are delivered. Notices delivered via overnight delivery shall be deemed received on the next business day after deposit with the overnight mail delivery service. Notice delivered via certified mail, return receipt requested, shall be deemed received as of the date on the return receipt or five (5) days after deposit in the United States mail, whichever is sooner. Notices delivered by facsimile or other electronic means shall be deemed received on the date they are received.

### **10.3 Entire Agreement**

This Agreement, together with the IA, the HCP/NCCP and the Permits, constitutes the entire agreement among the Parties. This Agreement supersedes any and all other agreements, either oral or in writing, between the Parties with respect to the subject matter hereof and contains all of the covenants and agreements among them with respect to said matters, and each Party acknowledges that no representation, inducement, promise of agreement, oral or otherwise, has been made by any other Party or anyone acting on behalf of any other Party that is not embodied herein.

### **10.4 Amendment**

This Agreement may only be amended with the written consent of both Parties.

### **10.5 Attorneys' Fees**

If any action at law or equity, including any action for declaratory relief is brought to enforce or interpret the provisions of this Agreement, the prevailing Party shall be able to recover its attorneys' fees and costs.

### **10.6 Governing Law**

This Agreement shall be governed by and construed in accordance with the laws of the United States and the State of California, as applicable.

### **10.7 Duplicate Originals**

This Agreement may be executed in any number of duplicate originals. A complete original of this Agreement shall be maintained in the official records of each of the Parties hereto.

### **10.8 Relationship to the FESA, CESA, NCCPA and Other Authorities**

The terms of this Agreement are consistent with and shall be governed by and construed in accordance with FESA, CESA, NCCPA and other applicable state and federal law.

### **10.9 No Third Party Beneficiaries**

Without limiting the applicability of rights granted to the public pursuant to FESA, CESA, NCCPA or other applicable law, this Agreement shall not create any right or interest in the public, or any member thereof, as a third party beneficiary thereof, nor shall it authorize anyone not a Party to this Agreement to maintain a suit for personal injuries or property damages under the provisions of this Agreement. The duties, obligations, and responsibilities of the Parties to this Agreement with respect to third party beneficiaries shall remain as imposed under existing state and federal law.

### **10.10 References to Regulations**

Any reference in this Agreement, the IA, the HCP/NCCP, or the Permits to any regulation or rule of the Wildlife Agencies shall be deemed to be a reference to such regulation or rule in existence at the time an action is taken.

### **10.11 Applicable Laws**

All activities undertaken pursuant to this Agreement, the IA, the HCP/NCCP, or the Permits must be in compliance with all applicable local, state and federal laws and regulations.

### **10.12 Severability**

In the event one or more of the provisions contained in this Agreement is held invalid, illegal or unenforceable by any court of competent jurisdiction, such portion shall be deemed severed from this Agreement and the remaining parts of this Agreement shall remain in full force and effect as though such invalid, illegal, or unenforceable portion had never been a part of this Agreement.

### **10.13 Due Authorization**

Each Party represents and warrants that (1) the execution and delivery of this Agreement has been duly authorized and approved by all requisite action, (2) no other authorization or approval, whether of governmental bodies or otherwise, will be necessary in order to enable it to enter into and comply with the terms of this Agreement, and (3) the person executing this Agreement on behalf of each Party has the authority to bind that Party.

### **10.14 No Assignment**

The Parties shall not assign their rights or obligations under this Agreement, the Permits, or the HCP/NCCP to any other individual or entity.

### **10.15 Headings**

Headings are using in this Agreement for convenience only and do not affect or define the Agreement's terms and conditions.

**IN WITNESS WHEREOF, THE PARTIES HERETO** have executed this Implementing Agreement to be in effect as of the date last signed below.

**EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY**

By: \_\_\_\_\_  
**JOHN KOPCHIK**, Executive Director

DATE: \_\_\_\_\_

**CHEVRON PIPE LINE COMPANY**

By: \_\_\_\_\_  
**ERIC MAY**, Vice President- California Asset

DATE: \_\_\_\_\_



East Contra Costa County  
Habitat Conservation Plan  
Natural Community  
Conservation Plan

City of Brentwood  
City of Clayton  
City of Oakley  
City of Pittsburg  
Contra Costa County  
ECCC Habitat Conservancy

Template prepared by the  
ECCC Habitat Conservancy

651 Pine Street, North Wing, 4th Floor  
Martinez, CA 94533-0095  
Phone: 925/335-1290  
Fax: 925/335-1299  
www.cocohcp.org

## County of Contra Costa Application Form and Planning Survey Report to Comply with and Receive Permit Coverage under the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan

### Project Applicant Information:

Project Name: Chevron Pipeline KLM Site 1357 Repair Project – U.S. DOT Required Maintenance

Project Applicant's Company/Organization: Chevron Pipe Line Company

Contact's Name: Eric May

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Contact's Email: ericmay@chevron.com

Mailing Address: Eric May, Vice President, Chevron Pipe Line Co.  
9525 Camino Media, E2052  
Bakersfield, CA 93311

### Project Description:

Lead Planner: Krystal Hinojosa

Project Location: Site 1357 lies along the Chevron Pipe Line Company Kettleman-Los Medanos (KLM) right-of-way (ROW) approximately 28 miles west of Stockton, CA and 20 miles south of Antioch, CA. Site 1357 is located in a rural pasture south of the Byron Airport. Access to the site is via a one-lane, rural, dirt road which is located off of Byron Hot Springs Rd., 1.2 miles southwest of the intersection of Byron Hot Springs Rd. and Holey Rd. The project vicinity is shown on Figure 1. Figure 2 shows the project site and the access routes.

Project APN(s) #: 001011037

Number of Parcels/Units: 1

Size of Parcel(s): 709.8 acres

Project Description/Purpose (Brief):

The Chevron Pipe Line Company (CPL) plans to perform required maintenance at Site 1357 on the KLM pipeline in eastern Contra Costa County just south of the Byron Airport and north of Byron Hot Springs Road. The KLM Site 1357 Maintenance Project is proposed as part of a pipeline integrity management (PIM) plan to enable CPL to comply with Department of Transportation (DOT) hazardous materials and safety

regulations, and to facilitate the continued safe transportation of petroleum products.

## **Biologist Information:**

Biological/Environmental Firm: URS Corporation

Lead Contact: Rosemary Laird

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Contact's Email: [rosemary.laird@urs.com](mailto:rosemary.laird@urs.com)

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# East Contra Costa County HCP/NCCP Planning Survey Report for KLM Site 1357 – U.S. DOT Required Maintenance Participating Special Entity

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## I. Project Overview

**Project proponent:** Chevron Pipe Line Company

**Project Name:** Chevron Pipeline KLM Site 1357 Repair Project – U.S. DOT Required Maintenance

**Application Submittal Date:** Submitted on March 22, 2013 and Updated on March 29, 2013

**Jurisdiction:**  Contra Costa County  Participating Special Entity<sup>1</sup>  
 City of Oakley  
 City of Pittsburg  
 City of Clayton  
 City of Brentwood

**Check appropriate Development Fee Zone(s):**  Zone I  Zone IV  
 Zone II  
 Zone III

See Figure 9-1 of the Final HCP/NCCP for a generalized development fee zone map. Detailed development fee zone maps by jurisdiction are available from the jurisdiction or at [www.cocohcp.org](http://www.cocohcp.org).

**Total Parcel Acreage:** 709.8 acres

**Acreage of land to be permanently disturbed<sup>2</sup>:** No permanent impacts will result from this project.

**Acreage of land to be temporarily disturbed<sup>3</sup>:** Direct temporary disturbance to 0.007 acres for the primary work area, 0.098 acre temporary access road, 0.04 acre soil stockpile area, 0.103 rural access road. Indirect temporary disturbance to 0.596 acre of downstream wetland.

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<sup>1</sup> *Participating Special Entities* are organizations not subject to the authority of a local jurisdiction. Such organizations may include school districts, water districts, irrigation districts, transportation agencies, local park districts, geologic hazard abatement districts, or other utilities or special districts that own land or provide public services.

<sup>2</sup> *Acreage of land permanently disturbed* is broadly defined in the HCP/NCCP to include all areas removed from an undeveloped or habitat-providing state and includes land in the same parcel or project that is not developed, graded, physically altered, or directly affected in any way but is isolated from natural areas by the covered activity. Unless such undeveloped land is dedicated to the Preserve System or is a deed-restricted creek setback, the development fee will apply. The development fees were calculated with the assumption that all undeveloped areas within a parcel (e.g., fragments of undisturbed open space within a residential development) would be charged a fee; the fee per acre would have been higher had this assumption not been made. See Chapter 9 of the HCP/NCCP for details.

<sup>3</sup> *Acreage of land temporarily disturbed* is broadly defined in the HCP/NCCP as any impact on vegetation or habitat that does not result in permanent habitat removal (i.e. vegetation can eventually recover).

## Project Description

**Concisely and completely describe the project and location.** Reference and attach a project vicinity map (Figure 1) and the project site plans (Figure 2) for the proposed project. Include all activities proposed for site, including those disturbing ground (roads, bridges, outfalls, runoff treatment facilities, parks, trails, etc.) to ensure the entire project is covered by the HCP/NCCP permit. Also include proposed construction dates. Reference a City/County application number for the project where additional project details can be found.

### **City/County Application Number:**

To Be Determined

### **Anticipated Construction Date:**

2 weeks between June 2013 and October 2013

### Project Description

CPL plans to address a maintenance issue at Site 1357 on the KLM pipeline in eastern Contra Costa County, south of the Byron Airport and north of Byron Hot Springs Road. The project vicinity is shown in Figure 1. Figure 2a shows the project site and the access routes that would be used to reach it. The KLM Site 1357 Maintenance Project would consist of a minor excavation to access the pipeline, a repair or maintenance improvement, and the replacement of the soil. The project is expected to take no more than 2 weeks to complete and would take place during the dry season (June-October) of 2013 to avoid and minimize impacts on sensitive natural resources. This action is proposed as part of a pipeline integrity management plan in order for CPL to comply with DOT hazardous materials and safety regulations, and to facilitate the continued safe transportation of petroleum products.

### Site Access and Maintenance Work

As shown on Figure 2a, access to the site would begin near a CPL access point located at a bend in Byron Hot Springs Road, 1.2 miles southwest of the intersection of Byron Hot Springs Rd. and Holey Rd. The project would include entry via an existing unpaved and unvegetated road that runs approximately 150 feet west and 500 feet north to a point just east of the planned maintenance location (**Figure 2a**). This existing road would not be widened, improved, or disturbed by this short-duration project. From this point, a 12-foot wide and approximately 250-foot long temporary access route would be created through alkali saltgrass grassland to reach the maintenance location. The temporary access route simply provides overland access and would not be graded or improved in any way. To minimize disturbances to the alkali saltgrass grassland and soils, vehicles would drive on temporary mats or heavy fabric that would be laid along the temporary access route path. The work area at the maintenance location would be limited to a rectangular area 30 feet long and 10 feet wide in seasonal alkali wetland, oriented in a northwest-southeast direction to match the alignment of the underground pipeline (**Figure 2a**). The access routes and work area will be fenced for safety and to demarcate the boundary of the work area.

Vehicles and equipment accessing the work area would be limited to those needed for the required scope of work. The final scope of work will be defined once the pipeline has been exposed by excavation and an inspection performed. Vehicles and equipment may include: a

rubber-tire backhoe/excavator and a crew truck. The work crew size would be approximately 4-6 people plus a biological monitor approved by California Department of Fish and Wildlife and U.S. Fish and Wildlife Service. The backhoe/excavator would be secured and left at the site at the end of each working day to reduce the noise, dust, and combustion emissions that would otherwise result from driving to and from the site each day. All staging, stockpiling, and vehicle parking would occur within the 30-foot by 10-foot perimeter around the pipeline work area or on the temporary access route or the existing unpaved road (**Figure 2a**). All staging, stockpiling and vehicle parking activities would be conducted in such a way as to minimize disturbance to alkali saltgrass grassland and seasonal alkali wetland habitat.

Maintenance work would include sample pit digging (also referred to as potholing) to locate and mark the pipeline. Once the correct area is located, the backhoe/excavator would then remove the surface soil in layers and stockpile it within the designated stockpiling area. Soil will be stockpiled on temporary matting or heavy fabric. Work would proceed this way until a small (approximately 5 feet deep) trench had been excavated to expose the 30-foot stretch of pipeline for repair and maintenance (**Figure 2b**).

The maintenance work would include adding (or replacing) a weld-o-let, which is a metal collar placed around a section of pipeline to provide cathodic protection. The weld-o-let is designed to provide a location for electricity-related corrosion and thereby protect the rest of the segment of pipeline from corrosion. Once the weld-o-let is in place, it will be inspected and then manually coated with a small backfill of soil.

#### Project Footprint and Impact Areas

The project footprint is the total area of land that would be disturbed by the planned maintenance activities. The footprint is composed of a 30-foot by 10-foot (300 square foot [ft<sup>2</sup>] 0.007 ac) work area, which would occur in a seasonal alkali wetland and that includes the trench excavation for maintenance and repair of the pipe. The trench would be 30 feet long and 5 feet wide and 5 feet deep (area: 150 ft<sup>2</sup> or 0.0034 acre; volume: 750 cubic feet [ft<sup>3</sup>]). The remaining portion of the work area would be used for construction staging, stockpiling and vehicle parking. The 300-ft<sup>2</sup> work area will be fenced to clearly identify the boundary and to avoid impacts beyond this designated area. The footprint also includes a 12-foot-wide by 355.74-foot long access route covering 4,268.88 ft<sup>2</sup> (0.098 ac) and use of an existing rural access road (0.103 ac). There is also a 20-foot by 80-foot soil stockpile area covering 1,600 ft<sup>2</sup> (0.04 ac) located in the upland area immediately adjacent to the temporary access route. The total footprint area is 0.248 acres.

The project will result in temporary impacts to alkali saltgrass grassland and seasonal alkali wetland. Approximately 0.135 acre of alkali saltgrass grassland would be impacted by the temporary access route (0.095ac) and the stockpile area (0.04ac). While 0.003 acre of seasonal alkali wetland would be impacted by the temporary access route. Approximately 0.007 acre of seasonal alkali wetland would be directly impacted by the maintenance activities in the work area and 0.596 acre of downstream seasonal alkali wetland would be indirectly impacted by the project (Figure 5). No permanent impacts would result from this project.

#### Minimization of Impacts

During maintenance activities an approved biological monitor will be present during all ground disturbing activities. The monitor will survey the project area for special-status species and signs of their presence (e.g. active burrows, nests or dens) each day before the onset of activities and would be present on site during all ground disturbing activities. The biological monitor would

have the authority to stop activities in the event that a special-status species is observed. The trench will either be covered overnight or an escape ramp placed in the trench to provide means of escape for wildlife or livestock that have any potential to enter the area.

To reduce the potential for attracting sensitive wildlife species and their predators to the area, all trash would be properly contained and removed from the property area and disposed of regularly. All construction debris and trash would be removed from the site when work activities are complete.

In the event that a special-status species is encountered in the action area during preconstruction surveys or during construction, work activities in the project area would be halted immediately and the appropriate agency (i.e., USFWS, CDFW) would be contacted to discuss ways to proceed with the proposed action and avoid take. No handling or relocation of special-status species is proposed as part of the proposed action.

After the maintenance activities are completed, the trench will be backfilled with the material originally excavated from the trench. The backhoe/excavator will be used to fill the trench by replacing the dirt and topsoil and any vegetation. To the extent possible, the placement will be done in layers and strips that approximate their pre-construction orientation. After proper backfilling, the upper 4 inches of topsoil will be replaced and spread evenly over the trench. Spreading of topsoil will occur immediately following grading. Topsoil will not be mixed with subsoil or used to fill the trench.

Landform contours and slopes at the sites and along the access routes will be returned as close as possible to pre-disturbance conditions. The work area will be returned to approximate pre-construction grade such that the grade does not interrupt or alter the flow of surface hydrology.

Erosion control procedures will be implemented to prevent discharge of soil and backfill material into adjacent waterways or wetlands. These measures may include, but not be limited to silt fences and straw wattles, as needed.

All areas of natural vegetation disturbed by project construction will be revegetated following maintenance activities and pipeline right-of-way recontouring. Completion of maintenance related activities includes the backfilling of the trench, final grading, and removal of all construction materials, debris, and equipment. Once CPL has designated work in a specific site as complete, revegetation will occur. The preferred revegetation technique is passive revegetation from rootstock materials in the native topsoil (mulching) and from the existing seedbank. This would be accomplished by replacing the stored topsoil, with its seed bank and rootstock, and placing the salvaged vegetation over the topsoil.

Post-construction monitoring will take place to follow the conditions of the project site and determine whether the site returns to pre-construction conditions. A post-construction monitoring plan has been prepared which describes the success criteria that will be used to make this determination.

Additionally, avoidance and minimization measures listed under Conservation Measure 2.12 in the HCP/NCCP and described in Section IV of this Planning Survey Report will be implemented. Additional, site specific conditions to be implemented by CPL for the Byron Airport Lands can be found in the Site Specific Conditions document attached to this application.

## II. Existing Conditions and Impacts

### Land Cover Types

In completing the checklist in Table 1, click in the appropriate fields and type the relevant information. Please calculate acres of terrestrial land cover types to nearest tenth of an acre. Calculate the areas of all jurisdictional wetlands and waters land cover types to the nearest hundredth of an acre. If the field is not applicable, please enter N/A. The sum of the acreages in the *Acreage of land to be "permanently disturbed"* and *"temporarily disturbed" by project* column should equal the total impact acreage listed above.

Land cover types and habitat elements identified with an (a) in Table 1 require identification and mapping of habitat elements for selected covered wildlife species. In Table 2a and 2b below, check the land cover types and habitat elements found in the project area and describe the results. Insert a map of all land cover types present on-site and other relevant features overlaid on an aerial photo below as Figure 3.

Table 1. Land Cover Types on the Project Site as Determined in the Field and Shown in Figure 3.

Land Cover Type (acres, except where noted)	Acreage of Land to be "Permanently Disturbed" by Project <sup>b</sup>	Acreage of Land to be "Temporarily Disturbed" by Project <sup>b</sup>	Indirect Effects to Downstream Wetland (Temporary Impacts)	
<b>Grassland<sup>a</sup></b>				
<input type="checkbox"/> Annual grassland				
<input checked="" type="checkbox"/> Alkali grassland		0.135		
<input checked="" type="checkbox"/> Ruderal		0.103		
<input type="checkbox"/> Chaparral and scrub				
<input type="checkbox"/> Oak savanna <sup>a</sup>				
<input type="checkbox"/> Oak woodland				
<b>Jurisdictional wetlands and waters</b>				
<input type="checkbox"/> Riparian woodland/scrub				
<input type="checkbox"/> Permanent wetland <sup>a</sup>				
<input checked="" type="checkbox"/> Seasonal wetland <sup>a</sup>		(See alkali wetland)		
<input checked="" type="checkbox"/> Alkali wetland <sup>a</sup>	0.007	0.003	0.596	
<input type="checkbox"/> Aquatic (Reservoir/Open Water) <sup>a</sup>				
<input type="checkbox"/> Slough/Channel <sup>a</sup>				
<input type="checkbox"/> Pond <sup>a</sup>				
<input type="checkbox"/> Stream (acres) <sup>a, d</sup>				
<input type="checkbox"/> Total stream length (feet) <sup>a, d</sup>				

Land Cover Type (acres, except where noted)	Acreeage of Land to be "Permanently Disturbed" by Project <sup>b</sup>	Acreeage of Land to be "Temporarily Disturbed" by Project <sup>b</sup>	Indirect Effects to Downstream Wetland (Temporary Impacts)	
<b>Stream length by width category</b>				
<input type="checkbox"/> ≤ 25 feet wide				
<input type="checkbox"/> > 25 feet wide				
<b>Stream length by type and order<sup>e</sup></b>				
<input type="checkbox"/> Perennial				
<input type="checkbox"/> Intermittent				
<input type="checkbox"/> Ephemeral, 3 <sup>rd</sup> or higher order				
<input type="checkbox"/> Ephemeral, 1 <sup>st</sup> or 2 <sup>nd</sup> order				
<b>Irrigated agriculture<sup>a</sup></b>				
<input type="checkbox"/> Cropland				
<input type="checkbox"/> Pasture				
<input type="checkbox"/> Orchard				
<input type="checkbox"/> Vineyard				
<b>Other</b>				
<input type="checkbox"/> Nonnative woodland				
<input type="checkbox"/> Wind turbines				
<b>Developed</b>				
<input type="checkbox"/> Urban				
<input type="checkbox"/> Aqueduct				
<input type="checkbox"/> Turf				
<input type="checkbox"/> Landfill				
<b>Uncommon Vegetation Types (subtypes of above land cover types)</b>				
<input type="checkbox"/> Purple needlegrass grassland				
<input type="checkbox"/> Wildrye grassland				
<input type="checkbox"/> Wildflower fields				
<input type="checkbox"/> Squirreltail grassland				
<input type="checkbox"/> One-sided bluegrass grassland				
<input type="checkbox"/> Serpentine grassland				
<input checked="" type="checkbox"/> Saltgrass grassland (= alkali grassland)		0.135		
<input type="checkbox"/> Alkali sacaton bunchgrass grassland				
<input type="checkbox"/> Other uncommon vegetation types (please describe)				

Land Cover Type (acres, except where noted)	Acreeage of Land to be "Permanently Disturbed" by Project <sup>b</sup>	Acreeage of Land to be "Temporarily Disturbed" by Project <sup>b</sup>	Indirect Effects to Downstream Wetland (Temporary Impacts)	
<b>Uncommon Landscape Features or Habitat Elements</b>				
<input type="checkbox"/> Rock outcrop				
<input type="checkbox"/> Cave <sup>a</sup>				
<input type="checkbox"/> Springs/seeps				
<input type="checkbox"/> Scalds				
<input type="checkbox"/> Sand deposits				
<input type="checkbox"/> Mines <sup>a</sup>				
<input type="checkbox"/> Buildings (bat roosts) <sup>a</sup>				
<input type="checkbox"/> Potential nest sites (trees or cliffs) <sup>a</sup>				
<b>Total (Impact Acres)</b>	<b>0</b>	<b>0.248</b>	<b>0.596</b>	<b>0</b>

<sup>a</sup> Designates habitat elements that may trigger specific survey requirements and/or best management practices for key covered wildlife species. See Chapter 6 in the HCP/NCCP for details.

<sup>b</sup> See Section 9.3.1 of the HCP/NCCP for a definition of "permanently disturbed" and "temporarily disturbed." In nearly all cases, all land in the subject parcel is considered permanently disturbed.

<sup>c</sup> Dedication of land in lieu of fees must be approved by the local agency and the Implementing Entity before they can be credited toward HCP/NCCP fees. See Section 8.6.7 on page 8-32 of the Plan for details on this provision. Stream setback requirements are described in Conservation Measure 1.7 in Section 6.4.1 and in Table 6-2.

<sup>d</sup> Specific requirements on streams are discussed in detail in the HCP/NCCP. Stream setback requirements pertaining to stream type and order can be found in Table 6-2. Impact fees and boundary determination methods pertaining to stream width can be found in Table 9-5. Restoration/creation requirements in lieu of fees depend on stream type and can be found in Tables 5-16 and 5-17.

<sup>e</sup> See glossary (Appendix A) for definition of stream type and order.

## Field-Verified Land Cover Map

**Insert field-verified land cover map.** The map should contain all land cover types present on-site. The map should be representative of an aerial photo. Identify all pages of the field-verified land cover map as **(Figure 3a)**. **Please attach representative photos of the project site (Figure 3b).**

Please find attached **Figure 3a**, which shows the land cover types in the project area and **Figure 3b**, which presents representative photographs. The land cover types were verified in the field on July 5, 2012 during the planning survey.

## Jurisdictional Wetlands and Waters

Jurisdictional wetlands and waters are defined on pages 1-18 and 1-19 of the Final HCP/NCCP as the following land cover types: permanent wetland, seasonal wetland, alkali wetland, aquatic, pond, slough/channel, and stream. (It should be noted that definitions of these features differ for state and federal jurisdictions.) If you have identified any of these land cover types to be present on the project site in Table 1, complete the section below.

Indicate agency that certified the wetland delineation:

USACE,  RWQCB, or  the ECCC Habitat Conservancy.

Wetland delineation is attached (Jurisdictional Determination)

**Provide any additional information on Impacts to Jurisdictional Wetland and Waters below.**

The project would temporarily impact 0.606 acre of seasonal alkali wetland. Of this area, 0.003 acre would be directly impacted by the temporary access route, 0.007 would be directly impacted by the 300 ft<sup>2</sup> work area, and 0.596 acre of downstream seasonal alkali wetland would be indirectly impacted by the project. The attached Jurisdictional Determination Report summarizes the results of the delineation conducted on July 5, 2012 and includes a delineation map of the project area. **Figure 5** of this Planning Survey Report Application shows the project impacts and associated acreage.

## Species-Specific Planning Survey Requirements

Based on the land cover types found on-site and identified in Table 1, check the applicable boxes in Table 2a then provide the results of the planning surveys below. In Table 3 check corresponding preconstruction survey or notification requirements that are triggered by the presence of particular land cover types or species habitat elements as identified in Table 2a. The species-specific planning survey requirements are described in more detail in Section 6.4.3 of the HCP/NCCP.

Table 2a. Species-Specific Planning Survey Requirements Triggered by Land Cover Types and Habitat Elements in the project area based on Chapter 6 of the Final HCP/NCCP.

Land Cover Type in the project area?	Species	Habitat Element in the project area?	Planning Survey Requirement
<input checked="" type="checkbox"/> Grasslands, oak savanna, agriculture, ruderal	San Joaquin kit fox	Assumed if within modeled range of species	Identify and map potential breeding and denning habitat and potential dens if within modeled range of species (see Appendix D of HCP/NCCP).
	Western burrowing owl	Assumed	Identify and map potential breeding habitat.

Land Cover Type in the project area?	Species	Habitat Element in the project area?	Planning Survey Requirement
<input checked="" type="checkbox"/> Aquatic (ponds, wetlands, streams, slough, channels, & marshes)	Giant garter snake	<input type="checkbox"/> Aquatic habitat accessible from San Joaquin River	Identify and map potential habitat.
	California tiger salamander	<input checked="" type="checkbox"/> Ponds and wetlands in grassland, oak savanna, oak woodland <input type="checkbox"/> Vernal pools <input type="checkbox"/> Reservoirs <input type="checkbox"/> Small lakes	Identify and map potential breeding habitat. Document habitat quality and features. Provide Implementing Entity with photo-documentation and report.
	California red-legged frog	<input checked="" type="checkbox"/> Slow-moving streams, ponds, and wetlands	Identify and map potential breeding habitat. Document habitat quality and features. Provide Implementing Entity with photo-documentation and report.
<input checked="" type="checkbox"/> Seasonal wetlands	Covered shrimp	<input type="checkbox"/> Vernal pools <input type="checkbox"/> Sandstone rock outcrops <input type="checkbox"/> Sandstone depressions	Identify and map potential breeding habitat.
Any	Townsend's big-eared bat	<input type="checkbox"/> Rock formations with caves <input type="checkbox"/> Mines <input type="checkbox"/> Abandoned buildings outside urban areas	Map and document potential breeding or roosting habitat.
	Swainson's hawk	<input type="checkbox"/> Potential nest sites (trees within species' range usually below 200')	Inspect large trees for presence of nest sites.
	Golden eagle	<input type="checkbox"/> Potential nest sites (secluded cliffs with overhanging ledges; large trees)	Document and map potential nests.
<sup>a</sup> Vernal pool fairy shrimp, vernal pool tadpole shrimp, longhorn fairy shrimp, and midvalley fairy shrimp.			

# Results of Species-Specific Planning Surveys Required in Table 2a

**1. Describe the results of the planning survey conducted as required in Table 2a.** Planning surveys will assess the location, quantity, and quality of suitable habitat for specified covered wildlife species on the project site. Covered species are assumed to occupy suitable habitat in impact areas and mitigation is based on assumption of take.

**2. Reference and attach the Planning Survey Species Habitat Maps as required in Table 2a (Figure 4).**

The planning survey was conducted on July 5, 2012 to assess the location, quantity and quality of suitable habitat for covered wildlife species within the project footprint and the area within a 325-foot radius around the footprint. At the time of the survey, the planning survey area was completely dry and grazing cows were present. The survey area is composed of saltgrass grassland with an intermittent stream and alkali wetlands. The intermittent stream is a former tributary of Brushy Creek and one of a series of drainages that flows from the foothills west of the project footprint. It no longer has any hydrologic connectivity to Brushy Creek, but rather runs discontinuously west to east and fans out into a large seasonal alkali wetland as it reaches the project footprint. A series of discrete seasonal alkali wetlands were identified in depressions south of the tributary in the upland saltgrass grassland. Potential habitat was identified during the planning survey to support San Joaquin kit fox, western burrowing owl, California tiger salamander (CTS), California red-legged frog (CRLF) and covered shrimp.

The planning survey area was dominated by saltgrass grassland and is within the extent of suitable core habitat for San Joaquin kit fox, as provided in Appendix D of the HCP/NCCP. Therefore, its presence within the planning survey boundary is assumed, as stated in Table 2a. Documented occurrences of the species are known within 5 miles of the survey area and potential breeding and denning habitat was identified during the planning survey (**Figure 4a**). Numerous ground squirrel burrows were present throughout the survey area, though none were present in the actual work area. Several burrows were large enough to potentially serve as kit fox dens. However, no obvious keyhole-shaped dens were present, nor was there any evidence that any of the burrows were used by kit foxes. Representative photos of borrows observed during the planning survey are included in Figure 3b.

Because the planning survey area is within the winter and summer ranges of western burrowing owl and contains grassland habitat, the presence of this species is assumed, as stated in Table 2a. Documented occurrences of the species are known within 5 miles of the survey area and potential breeding habitat was identified during the planning survey (**Figure 4b**). Many of the ground squirrel burrows observed within the planning survey boundary were over four inches in diameter, which is large enough to support burrowing owls.

The planning survey area contains alkali wetlands that may provide suitable breeding habitat for covered shrimp (**Figures 4c**). The project is located within potential migration and aestivation habitat for CTS and CRLF, as identified in Appendix D of the HCP/NCCP. While dry at the time of the planning survey, the discrete alkali wetlands have distinct depressional topography and appear to hold water during the rainy season (**Figure 3b**). These features are outside the project footprint and provide better potential habitat than the more shallow alkali wetland within the project footprint (the 30 ft by 10 ft work area). The ground squirrel burrows may also provide habitat for CTS adults during the summer months. However, cattails or other tall emergent

vegetation that are often utilized by CRLF adults are not present in the stream or alkali wetlands. Documented occurrences of CTS, CRLF and covered shrimp are known within 5 miles of the survey area.

Though aquatic features are present within the planning survey boundary, the intermittent stream and alkali wetlands are not accessible from the San Joaquin River. Therefore, the planning survey area does not provide suitable potential habitat for giant garter snake.

## Covered and No-Take Plants

On suitable land cover types, surveys for covered and no-take plants must be conducted using approved CDFG/USFWS methods during the appropriate season to identify any covered or no-take plant species that may occur on the site (see page 6-9 of the Final HCP/NCCP). Based on the land cover types found in the project area and identified in Table 1, check the applicable boxes in Table 2b and provide a summary of survey results as required below. If any no-take plants are found in the project area, the provisions of Conservation Measure 1.11 must be followed (see *Avoidance and Minimization Measures* below).

Table 2b. Covered and No-Take Plant Species, Typical Habitat Conditions, and Typical Blooming Periods

Land Cover Type in the project area?	Plant Species	Covered (C) or No-Take (N)?	Typical Habitat or Physical Conditions, if Known	Typical Blooming Period <sup>a</sup>
<input type="checkbox"/> Oak savanna	Diablo Helianthella ( <i>Helianthella castanea</i> )	C	Elevation above 650 feet <sup>b</sup>	Mar–Jun
	Mount Diablo fairy-lantern ( <i>Calochortus pulchellus</i> )	C	Elevation between 650 and 2,600 feet <sup>b</sup>	Apr–Jun
<input type="checkbox"/> Oak woodland	Brewer’s dwarf flax ( <i>Hesperolinon breweri</i> )	C		May–Jul
	Diablo Helianthella ( <i>Helianthella castanea</i> )	C	Elevation above 650 feet <sup>b</sup>	Mar–Jun
	Mount Diablo fairy-lantern ( <i>Calochortus pulchellus</i> )	C	Elevation between 650 and 2,600 feet <sup>b</sup>	Apr–Jun
	Showy madia ( <i>Madia radiata</i> )	C		Mar–May
<input type="checkbox"/> Chaparral and scrub	Brewer’s dwarf flax ( <i>Hesperolinon breweri</i> )	C		May–Jul
	Diablo Helianthella ( <i>Helianthella castanea</i> )	C	Elevation above 650 feet <sup>b</sup>	Mar–Jun
	Mount Diablo buckwheat ( <i>Eriogonum truncatum</i> )	N		Apr–Sep; uncommonly Nov–Dec.
	Mount Diablo fairy-lantern ( <i>Calochortus pulchellus</i> )	C	Elevation between 650 and 2,600 feet <sup>b</sup>	Apr–Jun

Land Cover Type in the project area?	Plant Species	Covered (C) or No-Take (N)?	Typical Habitat or Physical Conditions, if Known	Typical Blooming Period <sup>a</sup>
	Mount Diablo Manzanita ( <i>Arctostaphylos auriculata</i> )	C	Elevation between 700 and 1,860 feet; restricted to the eastern and northern flanks of Mt. Diablo <sup>b</sup>	Jan–Mar
<input checked="" type="checkbox"/> Alkali grassland	Brittlescale ( <i>Atriplex depressa</i> )	C	Restricted to soils of the Pescadero or Solano soil series; generally found in southeastern region of plan area <sup>b</sup>	May–Oct
	Caper-fruited tropidocarpum ( <i>Tropidocarpum capparideum</i> )	N		Mar–Apr
	Contra Costa goldfields ( <i>Lasthenia conjugens</i> )	N	Generally found in vernal pools	Mar–Jun
	Recurved larkspur ( <i>Delphinium recurvatum</i> )	C		Mar–Jun
	San Joaquin spearscale ( <i>Atriplex joaquiniana</i> )	C		Apr–Oct
<input checked="" type="checkbox"/> Alkali wetland	Alkali milkvetch ( <i>Astragalus tener</i> ssp. <i>tener</i> )	N		Mar–Jun
	Brittlescale ( <i>Atriplex depressa</i> )	C	Restricted to soils of the Pescadero or Solano soil series; generally found in southeastern region of plan area <sup>b</sup>	May–Oct
	San Joaquin spearscale ( <i>Atriplex joaquiniana</i> )	C		Apr–Oct
<input checked="" type="checkbox"/> Annual grassland	Alkali milkvetch ( <i>Astragalus tener</i> ssp. <i>tener</i> )	N		Mar–Jun
	Big tarplant ( <i>Blepharizonia plumosa</i> )	C	Elevation below 1500 feet <sup>b</sup>	Jul–Oct
	Brewer’s dwarf flax ( <i>Hesperolinon breweri</i> )	C	Restricted to grassland areas within a 500+ buffer from oak woodland and chaparral/scrub <sup>b</sup>	May–Jul
	Contra Costa goldfields ( <i>Lasthenia conjugens</i> )	N	Generally found in vernal pools	Mar–Jun

Land Cover Type in the project area?	Plant Species	Covered (C) or No-Take (N)?	Typical Habitat or Physical Conditions, if Known	Typical Blooming Period <sup>a</sup>
	Diamond-petaled poppy ( <i>Eschscholzia rhombipetala</i> )	N		Mar–Apr
	Large-flowered fiddleneck ( <i>Amsinckia grandiflora</i> )	N		Apr–May
	Mount Diablo buckwheat ( <i>Eriogonum truncatum</i> )	N		Apr–Sep; uncommonly Nov–Dec
	Mount Diablo fairy-lantern ( <i>Calochortus pulchellus</i> )	C	Elevation between 650 and 2,600 <sup>b</sup>	Apr–Jun
	Round-leaved filaree ( <i>California macrophylla</i> ) <sup>1</sup>	C		Mar–May
	Showy madia ( <i>Madia radiata</i> )	C		Mar–May
<input checked="" type="checkbox"/> Seasonal wetland	Adobe navarretia ( <i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i> )	C	Generally found in vernal pools <sup>b</sup>	Apr–Jun
	Alkali milkvetch ( <i>Astragalus tener</i> sp. <i>tener</i> )	N		Mar–Jun
	Contra Costa goldfields ( <i>Lasthenia conjugens</i> )	N	Generally found in vernal pools	Mar–Jun

<sup>a</sup> From California Native Plant Society. 2007. *Inventory of Rare and Endangered Plants* (online edition, v7-07d). Sacramento, CA. Species may be identifiable outside of the typical blooming period; a professional botanist shall determine if a covered or no take plant occurs on the project site.

<sup>b</sup> See Species Profiles in Appendix D of the Final HCP/NCCP.

## Results of Covered and No-Take Plant Species Planning Surveys Required in Table 2b

**Describe the results of the planning survey conducted as required in Table 2b.** Describe the methods used to survey the site for all covered and no-take plants, including the dates and times of all survey's conducted (see Tables 3-8 and 6-5 of the HCP/NCCP for covered and no-take plants). In order to complete all the necessary covered and no-take plant surveys, both spring and fall surveys are required, check species survey requirements below.

**If any covered or no-take plants were found, include the following information in the results summary:**

- Description and number of occurrences and their rough population size.

- Description of the “health” of each occurrence, as defined on pages 5-49 and 5-50 of the HCP/NCCP.
- A map of all the occurrences.
- Justification of surveying time window, if outside of the plant’s blooming period.
- The CNDDDB form(s) submitted to CDFG (if this is a new occurrence).

A description of the anticipated impacts that the covered activity will have on the occurrence and/or how the project will avoid impacts to all covered and no-take plant species. All projects must demonstrate avoidance of all six no-take plants (see table 6-5 of the HCP/NCCP).

Though habitats suitable for covered and no-take plant species were identified during the planning survey conducted on July 5, 2012 at 8:00 AM (as indicated in Table 2b), none of the covered or no-take plant species were observed. Covered and no-take species typically found in alkali wetland and alkali grassland land cover types were included in the survey along with plant species typically found in annual grassland and seasonal wetland. This survey occurred during the blooming period of the following five species: brittlescale (*Atriplex depressa*), San Joaquin sparscale (*Atriplex joaquiniana*), big tarplant (*Blepharizonia plumosa*), Brewer’s dwarf flax (*Hesperolinon breweri*), and Mount Diablo buckwheat (*Eriogonum truncatum*). Based on Appendix D of the HCP/NCCP, suitable habitat is present at the project site to support brittlescale and occurrences of San Joaquin sparscale are known in the Brushy Creek watershed. Low potential habitat is present to support big tarplant, and Brewer’s dwarf flax has no potential to occur as the project is not within 500-foot buffer from oak woodland or chaparral scrub. Mount Diablo buckwheat is not included in Appendix D.

The plant survey portion of the planning survey was conducted in accordance with the California Native Plant Society survey guidelines. A plant list was made of all identified species within the planning survey area. Because of the dry conditions of the site and the desiccated state of much of the vegetation, species that could not be identified in the field were collected and identified later using the Jepson manual. Whenever possible, plants were identified to the species level.

None of the five species were found during the July planning survey. Because the survey was conducted during the blooming period of these five species, it is appropriate to conclude that they are not present in the project footprint or the surrounding 325-foot buffer, which was also included in the planning survey.

A spring survey will be conducted in April 2013 to cover species with blooming periods that occur earlier in the year and thus could not be included in the July 2013 survey. These species include: caper-fruited tropidocarpum (*Tropidocarpum capparideum*), Contra Costa goldfields (*Lasthenia conjugens*), recurved larkspur (*Delphinium recurvatum*), alkali milkvetch (*Astragalus tener* var. *tener*), diamond-petaled poppy (*Eschscholzia rhombipetala*), large-flowered fiddleneck (*Amsinckia grandiflora*), Mount Diablo fairy-lantern (*Calochortus pulchellus*), round-leaved filaree (*California macrophylla*), showy madia (*Madia radiata*), and adobe navarretia (*Navarretia nigelliformis* ssp. *nigelliformis*).

A rare plant survey report shall be submitted to the East Contra Costa County Conservancy after the spring survey is conducted. If special-status plant species are identified on or within 325 feet of the repair areas and access areas, the applicant will be required to meet and confer with Conservancy staff to develop and implement a suitable plan to address Conservation Measure 3.10 “Plant Salvage when Impacts are Unavoidable,” Section 6.31. “Covered and No-Take

Plants,” and Table 5-20 “Protection Requirements for Covered Plants” in the HCP/NCCP as well as be required to comply with several additional measures to avoid and minimize impacts in order to ensure that this species is protected.

### III. Species-Specific Monitoring and Avoidance Requirements

This section discusses subsequent actions that are necessary to ensure project compliance with Plan requirements. Survey requirements and Best Management Practices pertaining to selected covered wildlife species are detailed in Section 6.4.3, *Species-Level Measures*, beginning on page 6-36 of the Final HCP/NCCP.

#### Preconstruction Surveys for Selected Covered Wildlife

If habitat for selected covered wildlife species identified in Table 2a was found to be present in the project area. In Table 3, identify the species for which preconstruction surveys or notifications are required based on the results of the planning surveys. Identify whether a condition of approval has been inserted into the development contract to address this requirement.

Table 3. Applicable Preconstruction Survey and Notification Requirements based on Land Cover Types and Habitat Elements Identified in Table 2a.

Species	Preconstruction Survey and Notification Requirements
<input type="checkbox"/> None	
<input checked="" type="checkbox"/> San Joaquin kit fox (p. 6-38)	Map all dens (>5 in. diameter) and determine status. Determine if breeding or denning foxes are in the project area. Provide written preconstruction survey results to FWS within 5 working days after surveying.
<input checked="" type="checkbox"/> Western burrowing owl (p. 6-40)	Map all burrows and determine status. Document use of habitat (e.g. breeding, foraging) in/near disturbance area (within 500 ft.)
<input type="checkbox"/> Giant garter snake (p. 6-44)	Delineate aquatic habitat up to 200 ft. from water’s edge. Document any sightings of garter snake.
<input type="checkbox"/> California tiger salamander (p. 6-46) (notification only)	Provide written notification to USFWS and CDFG regarding timing of construction and likelihood of occurrence in the project area.
<input type="checkbox"/> California red-legged frog (p. 6-47) (notification only)	Provide written notification to USFWS and CDFG regarding timing of construction and likelihood of occurrence in the project area.
<input checked="" type="checkbox"/> Covered shrimp species (p. 6-47)	Document and evaluate use of all habitat features (e.g., vernal pools, rock outcrops). Document occurrences of covered shrimp.
<input type="checkbox"/> Townsend’s big-eared bat (p. 6-37)	Determine if site is occupied or shows signs of recent occupation (guano).
<input type="checkbox"/> Swainson’s hawk (p. 6-42)	Determine whether nests are occupied.

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Golden eagle (p. 6-39) Determine whether nests are occupied.

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Note: Page numbers refer to the HCP/NCCP.

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## Preconstruction Surveys as Required for Selected Covered Wildlife in Table 3

**Describe the preconstruction survey's or notification conditions applicable to any species checked in Table 3.** All preconstruction surveys shall be conducted in accordance with the requirements set forth in Section 6.4.3, *Species-Level Measures*, and Table 6-1 of the HCP/NCCP.

Preconstruction surveys will be required for San Joaquin kit fox, western burrowing owl, and covered shrimp species. Prior to any ground disturbance related to covered activities, a USFWS/CDFG-approved biologist will conduct preconstruction surveys in areas identified in the planning survey as supporting suitable habitat for San Joaquin kit fox, western burrowing owl and covered shrimp species.

### San Joaquin kit fox

The preconstruction surveys will take place no more than 30 days prior to ground disturbance. On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens. Adjacent parcels under different land ownership will not be surveyed. The status of all dens will be determined and mapped. Written results of preconstruction surveys will be submitted to USFWS within 5 working days after survey completion and before the start of ground disturbance.

### Western burrowing owl

On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. Surveys will take place near sunrise or sunset, in accordance with CDFG guidelines. All burrows or burrowing owls will be identified and mapped. Surveys will take place no more than 30 days prior to construction. Surveys conducted during the breeding season (February 1-August 31) will document whether the burrowing owls are nesting in or directly adjacent to disturbances areas. Surveys conducted during the nonbreeding season (September 1-January 31) will document whether burrowing owls are using habitat in or directly adjacent to any disturbance area.

### Covered shrimp species

A mitigation strategy has been developed and prepared by the Conservancy in consultation with USFWS and CDFW. The mitigation strategy will allow CPL to mitigate the project impacts to covered shrimp through the HCP/NCCP and receive incidental take coverage based on conditions set forth in the mitigation strategy. The mitigation strategy includes a post project monitoring plan for the site. This document is included as an attachment to the application. (The mitigation strategy is outlined in Section V. Mitigation Measures of the Planning Survey Report Application.

# Construction Monitoring & Avoidance and Minimization Measures for Selected Covered Species

If preconstruction surveys for key covered wildlife species establish the presence of any such species, construction monitoring will be necessary. In Table 4, check the boxes for the species that will be assessed during the preconstruction surveys (see Table 3). A summary of the construction monitoring requirements for each species is provided in Table 4 and these measures must be implemented in the event that preconstruction surveys described in Table 3 detect the covered species. A summary of avoidance measures is also provided in Table 4 and these measures must be implemented if construction monitoring detects the species or its sign. These construction monitoring and avoidance requirements are described in detail in Section 6.4.3, Species-Level Measures, of the Final HCP/NCCP.

## Construction Monitoring Plan Requirements in Section 6.3.3, Construction Monitoring, of the Final HCP/NCCP:

- Before implementing a covered activity, the applicant will develop and submit a construction-monitoring plan to the Implementing Entity<sup>4</sup> for approval.**

Table 4. Applicable Construction Monitoring Requirements

Species Assessed by Preconstruction Surveys	Monitoring Action Required if Species Detected
<input type="checkbox"/> None	N/A
<input checked="" type="checkbox"/> San Joaquin kit fox (p. 6-38)	Establish exclusion zones (>50 ft) for potential dens. Establish exclusion zones (>100 ft) for known dens. Notify USFWS of occupied natal dens.
<input checked="" type="checkbox"/> Western burrowing owl (p. 6-40)	Establish buffer zones (250 ft) around nests. Establish buffer zones (160 ft) around burrows.
<input type="checkbox"/> Giant garter snake (p. 6-44)	Delineate 200-ft buffer around potential habitat. Provide field report on monitoring efforts. Stop construction activities if snake is encountered; allow snake to passively relocate. Remove temporary fill or debris from construction site. Mandatory training for construction personnel.
<input checked="" type="checkbox"/> Covered shrimp species (p. 6-47)	Establish buffer around outer edge of all hydric vegetation associated with habitat (50 feet of limit of immediate watershed supporting the wetland, whichever is larger). Mandatory training for construction personnel.
<input type="checkbox"/> Swainson's hawk (p. 6-42)	Establish 1,000-ft buffer around active nest and monitor compliance.
<input type="checkbox"/> Golden eagle (p. 6-39)	Establish 0.5-mile buffer around active nest and monitor compliance.

<sup>4</sup> The East Contra Costa County Habitat Conservancy and the local land use Jurisdiction must review and approve the plan **prior** to the commencement of all covered activities (i.e. construction).

# Construction Monitoring & Avoidance and Minimization Measures as Required for Selected Covered Wildlife in Table 4

**Describe the construction monitoring and avoidance and minimization measures applicable to any species checked in Table 4.** A summary of avoidance measures is provided in Table 4, these measures must be implemented if construction monitoring detects the presence of the species. The construction monitoring & avoidance and minimization measures requirements are described in detail in Section 6.4.3, Species-Level Measures, of the HCP/NCCP.

## **San Joaquin kit fox**

### *Construction monitoring*

For dens identified in the survey area outside the proposed disturbance footprint, exclusion zones around each den entrance or cluster of entrances will be demarcated. The configuration of exclusion zones will be circular, with a radius measured outward from the den entrance(s). No covered activities will occur within the exclusion zones. Exclusion radii for potential dens will be at least 50 feet and will be demarcated with four to five flagged stakes. Exclusion zone radii for known dens will be at least 100 feet and will be demarcated with staking and flagging that encircles each den or cluster of dens but does not prevent access to the den by kit fox.

### *Avoidance and minimization measures*

If a San Joaquin kit fox den is discovered in the proposed development footprint, the den will be monitored for 3 days for a USFWS/CDFG-approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used.

Unoccupied dens will be destroyed immediately to prevent subsequent use.

If a natal or pupping den is found, USFWS and CDFG will be notified immediately. The den will not be destroyed until the pups and adults have vacated and then only after further consultation with USFWS and CDFG.

If kit fox activity is observed at the den during the initial monitoring period, the den will be monitored for an additional 5 consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den will be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied it will be excavated under the direction of the biologist. Alternatively, if the animal is still present after 5 or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant (i.e., during the animal's normal foraging activities).

## **Western burrowing owl**

### *Construction monitoring and avoidance and minimization measures*

If burrowing owls are found during the breeding season (February 1-August 31), Chevron Pipe Line Company will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines

that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1-January 31), Chevron Pipe Line Company will avoid the owls and the burrows they are using, if possible. Avoidance will include the establishment of a buffer zone.

If occupied burrows for burrowing owls are not avoided, passive relocation will be implemented. Owls will be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors will be in place for 48 hours prior to excavation. The project area will be monitored daily for one week to confirm that the owl has abandoned the burrow. Whenever possible, burrows will be excavated using hand tools and refilled to prevent reoccupation. Plastic tubing or a similar structure will be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

### **Covered shrimp**

#### *Construction monitoring*

If suitable habitat for covered shrimp will be retained on site, construction personnel will be trained to avoid affecting shrimp. A qualified biologist approved by USFWS will inform all construction personnel about the life history of covered shrimp, the importance of avoiding their habitat, and the terms and conditions of the HCP/NCCP related to avoiding and minimizing impacts on covered shrimp.

#### *Avoidance and minimization measures*

Filling of seasonal wetlands, if unavoidable, will be delayed until the pools are dry and samples from the top 4 inches of wetland soils are collected. Soil collection will be sufficient to include a representative sample of plant and animal life present in the wetland by incorporating seeds, cysts, eggs, spores, and similar inocula. The amount of soil collected will be determined by the size of the wetland filled and the variation in physical and biological conditions within the wetland. The number and size of samples will be sufficient to capture this variation. For very small wetlands it may be most cost effective to simply collect all topsoil. These samples will be provided to the HCP/NCCP application review agency so that the soil can be translocated to suitable habitat within the inventory area unoccupied by covered shrimp or used to inoculate newly created seasonal wetlands on preserve lands.

Seasonal wetlands occupied by covered shrimp that are filled will be offset by preserving or acquiring seasonal wetlands occupied by the covered shrimp species and restoring habitat suitable for the covered shrimp species in accordance with Conservation Measure 3.8 of the HCP/NCCP. Such mitigation will supersede requirements for mitigation of impacts on wetland habitat when covered species are present.

## **IV. Landscape and Natural Community-Level Avoidance and Minimization Measures**

**Describe relevant avoidance and minimization measures required to address the conservation measures listed below. If a conservation measure is not relevant to the project, explain why.**

## For All Projects

### **HCP/NCCP Conservation Measure 1.10. Maintain Hydrologic Conditions and Minimize Erosion**

Briefly describe how the project complies with this measure. See page 6-21 of the Final HCP/NCCP for details.

This conservation measure is not relevant to the project. The project is for maintenance of an existing structure; no new development will occur. No sensitive fish populations occur in the survey area, and the intermittent stream will not be impacted by the project. The onsite wetlands and the stream will naturally be dry at the time of construction activities. No modifications to local or watershed hydrology will take place, nor will urban pollutants such as oil, grease, heavy metals, refuse, pesticides, nutrients, or pathogens be discharged by this project.

### **HCP/NCCP Conservation Measure 1.11. Avoid Direct Impacts on Extremely Rare Plants, Fully Protected Wildlife Species, or Covered Migratory Birds**

Briefly describe how the project complies with this measure. See page 6-23 of the Final HCP/NCCP for details.

A planning survey was conducted, and no-take plant species were found to be absent from the project footprint area and the greater survey area. If a no-take plant population is found during a pre-construction survey immediately prior to the onset of work, all direct and indirect impacts will be avoided.

The planning survey found no suitable habitat for white-tailed kite, peregrine falcon, golden eagle, and ringtail. Project activities will avoid any take of fully protected wildlife species as defined under the California Fish and Game Code. Chevron Pipe Line Company will not disturb or destroy nests of fully protected bird species. Project activities will comply with the provisions of the Migratory Bird Treaty Act and avoid killing or possessing covered migratory birds, their young, nests, feathers, or eggs.

## For Projects on or adjacent to Streams or Wetlands

### **HCP/NCCP Conservation Measure 1.7. Establish Stream Setbacks**

Briefly describe how the project complies with this measure. See page 6-15 and Table 6-2 of the Final HCP/NCCP for details. For questions on the stream setback requirements, please contact the Conservancy.

As per the comment letter from the Conservancy, dated March 12, 2013, the stream setback provision is not applicable to the intermittent stream within the project area.

## HCP/NCCP Conservation Measure 2.12. Wetland, Pond, and Stream Avoidance and Minimization

Briefly describe how the project complies with this measure. See page 6-33 of the Final HCP/NCCP for details.

The project would result 0.01 acre of temporary disturbance of a potentially jurisdictional alkali wetland (**Figure 5**). An application has been prepared and submitted to the U.S. Army Corps of Engineers to obtain a Section 404 permit for these impacts to waters of the U.S. in addition, the following avoidance and minimization measures will be implemented:

- The intermittent stream and all wetlands to be avoided will be temporarily staked in the field by a qualified biologist.
- No effects of urban development on downstream hydrology, streams, or wetland would result from this project.
- Fencing will be erected around the outer edge of the project footprint. The fencing will be temporary and removed after the project activity is complete.
- Trash generated by covered project activities will be promptly and properly removed from the site.
- No construction or maintenance vehicles will be refueled within 200 feet of the alkali wetlands or the intermittent stream.
- This project is not expected to result in any erosion or runoff of contaminants into the alkali wetlands or intermittent stream.
- Herbicide will not be used for this project.

Because this project would result in filling less than 3.0 acres of jurisdictional wetlands and waters, additional avoidance analysis beyond that in the HCP/NCCP is not necessary, as per Conservation Measure 2.12 of the HCP/NCCP.

## For Projects adjacent to Protected Natural Lands (existing and projected)

Covered activities adjacent to permanently protected natural lands will require a variety of special considerations to address issues associated with characteristics of the urban-wildland interface. These considerations are intended to minimize the impacts of development on the integrity of habitat preserved and protected under the terms of the Plan. Permanently protected natural lands are defined as any of the following (see the latest Preserve System map on the Conservancy web site, [www.cocohcp.org](http://www.cocohcp.org)).

- Publicly owned open space with substantial natural land cover types including but not limited to state and regional parks and preserves and public watershed lands (local and urban neighborhood parks are excluded).
- Deed-restricted private conservation easements.
- HCP/NCCP Preserve System lands.
- Potential HCP/NCCP Preserve System lands (see Figure 5-3 in the HCP/NCCP).

## **HCP/NCCP Conservation Measure 1.6. Minimize Development Footprint Adjacent to Open Space**

Briefly describe how the project complies with this measure. See page 6-14 of the Final HCP/NCCP for details.

The project is not adjacent to HCP/NCCP preserves and will temporarily impact 0.248 acre of land of that total, 0.103 acres is an existing dirt access road. The project footprint has been minimized to the full extent possible by selecting the access route to make use of an existing rural road and to minimize the amount of overland travel on grassland.

## **HCP/NCCP Conservation Measure 1.8. Establish Fuel Management Buffer to Protect Preserves and Property**

Briefly describe how the project complies with this measure. See page 6-18 of the Final HCP/NCCP for details.

This conservation measure is not relevant to the proposed project. The project site is not adjacent to HCP/NCCP preserves or existing public open space that is or will be linked to a HCP/NCCP preserve. Therefore, a fuel management buffer does not need to be established.

## **HCP/NCCP Conservation Measure 1.9. Incorporate Urban-Wildland Interface Design Elements**

Briefly describe how the project complies with this measure. See page 6-20 of the Final HCP/NCCP for details.

This conservation measure is not relevant to the proposed project. The project does not occur at the edge of an urban development area (UDA) and the project would result in only temporary disturbance to 0.248 acre of land, of that total, 0.103 acres is an existing dirt access road. The project will not result in any permanent roads, backyard fences, permanent access from public roads, urban runoff, lighting, or landscaping. Therefore, no urban-wildland interface design elements are necessary.

## **For Rural Infrastructure Projects**

Rural infrastructure projects provide infrastructure that supports urban development within the urban development area. Such projects are divided into three categories: transportation projects, flood protection projects, and utility projects. Most rural road projects covered by the Plan will be led by Contra Costa County. All flood protection projects covered by the Plan will be led by the County Flood Control District. Utility projects will likely be led by the private companies that own the utility lines. A complete discussion of rural infrastructure projects is presented in Section 2.3.2 of the Final HCP/NCCP beginning on page 2-18.

## **HCP/NCCP Conservation Measure 1.12. Implement Best Management Practices for Rural Road Maintenance**

Briefly describe how the project complies with this measure. See page 6-25 of the Final HCP/NCCP for details.

This conservation measure is not relevant to the proposed project. The project will not involve any rural road maintenance.

## **HCP/NCCP Conservation Measure 1.13. Implement Best Management Practices for Flood Control Facility Maintenance**

Briefly describe how the project complies with this measure. See page 6-26 of the Final HCP/NCCP for details.

This conservation measure is not relevant to the proposed project. The project will not involve flood control facility maintenance.

## **HCP/NCCP Conservation Measure 1.14. Design Requirements for Covered Roads outside the Urban Development Area**

Briefly describe how the project complies with this measure. See page 6-27 of the Final HCP/NCCP for details.

This conservation measure is not relevant to the proposed project. The project would not involve creating new roads or improving existing roads. A 12-foot-wide by 355.74-foot long access route covering 4,268.88 ft<sup>2</sup> (0.098 ac) would be established to reach the project work area. As described in the project description, no grading, vegetation removal, or other modification to the grassland access route would occur. Further, the route has been selected to minimize the total length of overland travel and thus reduce the extent of temporary impact. This access route would be used only during project activities, which would take place for up to 5 days, after which the route would be allowed to revert back to natural landscape.

## V. Mitigation Measures

### **Complete and Attach Exhibit 1 (Permanent Impact Fees) and/or Exhibit 2 (Temporary Impact Fees) Fee Calculator(s) for Permanent and Temporary Impacts.**

- Briefly describe the amount of fees to be paid and when.
- See Section 9.3.1 of the HCP/NCCP for details. If land is to be dedicated in lieu of fees or if restoration or creation of jurisdictional wetlands or waters is to be performed in lieu of fees, summarize these actions here and attach written evidence that the Conservancy has approved these actions in lieu of fees.

The Conservancy in consultation with the Wildlife Agency staff from USFWS and CDFW have jointly prepared a mitigation strategy to allow the applicant to assume presence of covered shrimp and further offset the impacts to the wetland complex. The proposed mitigation strategy is outlined the below.

### **The mitigation strategy consists of the following components (A-E):**

- A. The work area and maintenance site resulting in 300 square foot (0.007 acres) of temporary impact shall be counted as a permanent impact to covered shrimp and wetlands. The applicant will pay the permanent impact development and wetland fees.
- B. The wetland complex downstream from the work area and maintenance site, as depicted in Figure 5 to the PSR (0.596 acres), will be subject a five year temporary impact development and wetland fee. This area will be considered a temporary impact area, subject to meeting certain performance criteria as outlined in a post project construction monitoring plan. If the feature does not meet the performance criteria established in the post project monitoring plan by the established timeline, the applicant is required to meet and confer with Conservancy staff and the Wildlife Agencies to develop and implement a suitable plan to address the remedial action necessary to try again to restore the wetland to pre-project conditions. The applicant will be subject to temporary impact fees in the interim until such time as the success criteria has been met.
- C. The applicant shall develop and implement a 5 year post-project performance monitoring plan in order to demonstrate that the wetland has fully recovered from the impacts. The plan will outline the performance criteria and document post project performance which will be used to determine if by year 5 the site has at minimum been restored to pre-project conditions. This plan will be submitted to and approved by the Conservancy and the Wildlife Agencies.
- D. The temporary access route which is proposed to be 12-foot-wide by 355.74-foot-long and 0.098 acres of temporary impact shall be counted as a temporary impact. The rural access road (0.103 acres) will be counted as a temporary impact. These two areas will be considered temporary impacts, but will be subject to the permanent development fee rate (in accordance with Section 9.3.1 "Activities outside the UDA with Soil Disturbance" of the HCP/NCCP).
- E. To the extent feasible all staging and vehicle parking should occur outside of the 300 square foot work area and on the temporary access road. All staging, stockpiling or vehicle parking

outside the 300 square foot work area will be located outside of wetland areas. The stockpiling of soils within the 300 square foot work area should be placed on temporary mats in a manner consistent with keeping the vegetation and seedbank intact, and the soil replaced on site. Any staging and vehicle parking outside the 300 square foot work area shall be counted as a temporary impact subject to the conditions identified in the section below. This area will be considered a temporary impact area, although it will be subject to the permanent development fee rate (in accordance with Section 9.3.1 “Activities outside the UDA with Soil Disturbance” of the HCP/NCCP).

A breakdown of how mitigation fees will be applied is provided in the table below. Also refer to Exhibit 1 and 2, the fee calculators. The applicant understands that fees are subject to change pending the adoption of the 2012 periodic fee audit by the Conservancy’s Governing Board. If the Conservancy Board approves changes to the fees based on the periodic fee audit on April 4, 2013 the fees will be adjusted to match the Board-approved fees. If the periodic audit is not adopted then fees will be as shown in the table below and in Exhibits 1 and 2.

Feature	Acres	Permanent		Temporary		Total Fees
		Wetland	Development	Wetland	Development	
Work Area	0.007	\$1,679.26	\$152.94			1,832.20
Access Road-Upland	0.095		\$2,075.59			2,075.59
Access Road-Wetland	0.003	\$719.68	\$65.54			\$785.22
Soil Stockpile-Upland	0.04		\$873.93			\$873.93
Wetland-Downstream	0.596			\$23,829.50	\$2,170.26	25,999.76
Rural Access Road	0.103		\$2,250.37			\$2,250.37
<b>TOTAL</b>	<b>0.844</b>	<b>2,398.94</b>	<b>5,418.37</b>	<b>23,829.50</b>	<b>2,170.26</b>	<b>33,817.08</b>

**Attachments:**

- **Exhibit 1 and Exhibit 2, the Fee Calculators**
- **Site Specific Conditions**
- **Post Project Monitoring Plan**
- **Figures 1-5**
- **Preliminary Jurisdictional Determination**
- **Wetland Delineation Report**

# Exhibit 1: HCP/NCCP FEE CALCULATOR WORKSHEET

## PROJECT APPLICANT INFO:

Project Applicant: Chevron Pipeline Company

Project Name: Chevron Pipeline Repair Project KLM Site 1357

APN (s): 001-011-037

Date: March 29, 2013

Jurisdiction: Participating Special Entity

### DEVELOPMENT FEE (see appropriate ordinance or HCP/NCCP Figure 9-1 to determine Fee Zone)

**Acreage of land to be  
permanently disturbed (from  
Table 1)<sup>1</sup>**

	Full Development Fee		Fee per Acre (subject to change on 3/15/14 <sup>2</sup> )	
Fee Zone 1		x	\$10,924.14 =	\$0.00
Fee Zone 2	0.248	x	\$21,848.28 =	\$5,418.37
Fee Zone 3		x	\$5,462.53 =	\$0.00
Fee Zone 4 <sup>3</sup>		x	\$16,386.21 =	\$0.00
<b>Development Fee Total =</b>				<b>\$5,418.37</b>

### \*\*WETLAND MITIGATION FEE

	Acreage of wetland		Fee per Acre (subject to change on 3/15/14 <sup>2</sup> )	
Riparian woodland / scrub		x	\$71,547.41 =	\$0.00
Perennial Wetland		x	\$123,103.63 =	\$0.00
Seasonal Wetland		x	\$257,781.10 =	\$0.00
Alkali Wetland	0.010	x	\$239,894.25 =	\$2,398.94
Ponds		x	\$123,103.63 =	\$0.00
Aquatic (open water)		x	\$61,025.73 =	\$0.00
Slough / Channel		x	\$130,468.80 =	\$0.00
<b>Linear Feet</b>				
<b>Streams</b>				
Streams 25 Feet wide or less (Fee is per Linear Foot)		x	\$428.23 =	\$0.00
Streams greater than 25 feet wide (Fee is per Linear Foot)		x	\$644.98 =	\$0.00
<b>Wetland Mitigation Fee Total =</b>				<b>\$2,398.94</b>

### FEE REDUCTION

Development Fee reduction (authorized by Implementing Entity) for land in lieu of fee	_____
Development Fee reduction (up to 33%, but must be approved by Conservancy) for permanent assessments	_____
Wetland Mitigation Fee reduction (authorized by Implementing Entity) for wetland restoration/creation performed by applicant	_____
<b>Reduction Total =</b>	
<b>\$0.00</b>	

### CALCULATE FINAL FEE

Development Fee Total	\$5,418.37
Wetland Mitigation Fee Total	+ \$2,398.94
<b>Permanent Impact Fee Subtotal</b>	<b>= \$7,817.32</b>
<b>Temporary Impact Fee Total (From Exhibit 2)</b>	<b>+ \$25,999.76</b>
<b>Contribution to Recovery</b>	<b>+ \$16,908.54</b>
<b>TOTAL AMOUNT TO BE PAID</b>	<b>= \$50,725.62</b>

#### Notes:

1 City/County Planning Staff will consult the land cover map in the Final HCP/NCCP and will reduce the acreage subject to the Development Fee by the acreage of the subject property that was identified in the Final HCP/NCCP as urban, turf, landfill or aqueduct land cover.

2 The Conservancy is currently conducting the periodic fee audit required by the HCP/NCCP which could result in further adjustment to some or all fees in 2013. If the Conservancy Board approves changes to the fees based on the periodic fee audit on April 4, 2013 the fees will be adjusted to match the Board-approved fees. If the periodic audit is not adopted then fees will be as shown above.

3 "Fee Zone 4" is not shown on Figure 9.1 of the HCP/NCCP but refers to the fee applicable to those few covered activities located in northeastern Antioch (see page 9-21 of the HCP).

**Template date: March 15, 2013**

# Exhibit 2: TEMPORARY IMPACT FEE CALCULATOR WORKSHEET

## PROJECT APPLICANT INFO:

Project Applicant: Chevron Pipeline Company

Project Name: Chevron Pipeline Repair Project KLM Site 1357

APN (s): 001-011-037

Date: March 29, 2013

Jurisdiction: Participating Special Entity

### TEMPORARY DEVELOPMENT IMPACT FEE (see appropriate ordinance or HCP/NCCP Figure 9-1 to determine Fee Zone)

	Acreage of land to be temporarily disturbed (from Table 1) <sup>1</sup>		Years of Disturbance (2 years is the minimum for ground-disturbing)		Fee per Acre (subject to change on 3/15/14 <sup>2</sup> )	
Fee Zone 1		X		/30	\$10,924.14	\$0.00
Fee Zone 2	0.596	X	5	/30	\$21,848.28	\$2,170.26
Fee Zone 3		X		/30	\$5,462.53	\$0.00
Fee Zone 4 <sup>3</sup>		X		/30	\$16,386.21	\$0.00
<b>Temporary Impact Fee Total =</b>						<b>\$2,170.26</b>

### \*\*TEMPORARY WETLAND MITIGATION FEE

	Acreage of wetland		Yrs. Of Disturbance (minimum shown)		Fee per Acre (subject to change on 3/15/14 <sup>2</sup> )	
Riparian woodland / scrub			5.00	x	\$71,547.41	\$ -
Perennial Wetland			2.00	x	\$123,103.63	\$ -
Seasonal Wetland			2.00	x	\$257,781.10	\$ -
Alkali Wetland	0.596		5.00	x	\$239,894.25	\$ 23,829.50
Ponds			2.00	x	\$123,103.63	\$ -
Aquatic (open water)			2.00	x	\$61,025.73	\$ -
Slough / Channel			2.00	x	\$130,468.80	\$ -
<b>Linear Feet</b>						
<b>Streams</b>						
Streams 25 Feet wide or less (Fee is per Linear Foot)			2.00	x	\$428.23	\$0.00
Streams greater than 25 feet wide (Fee is per Linear Foot)			2.00	x	\$644.98	\$0.00
<b>Wetland Mitigation Fee Total =</b>						<b>\$ 23,829.50</b>

### FEE REDUCTION

Development Fee reduction (authorized by Implementing Entity) for land in lieu of fee	
Development Fee reduction (up to 33%, but must be approved by Conservancy) for permanent assessments	
Wetland Mitigation Fee reduction (authorized by Implementing Entity) for wetland restoration/creation performed by applicant	
<b>Reduction Total =</b>	<b>\$0.00</b>

### CALCULATE FINAL TEMPORARY IMPACT FEES

Development Fee Total	\$	2,170.26
Wetland Mitigation Fee Total	+	\$ 23,829.50
<b>Fee Subtotal =</b>	<b>\$</b>	<b>25,999.76</b>
<b>TOTAL TEMPORARY IMPACT FEES TO BE PAID =</b>		<b>\$25,999.76</b>

#### Notes:

1 City/County Planning Staff will consult the land cover map in the Final HCP/NCCP and will reduce the acreage subject to the Development Fee by the acreage of the subject property that was identified in the Final HCP/NCCP as urban, turf, landfill or aqueduct land cover.

2 The Conservancy is currently conducting the periodic fee audit required by the HCP/NCCP which could result in further adjustment to some or all fees in 2013. If the Conservancy Board approves changes to the fees based on the periodic fee audit on April 4, 2013 the fees will be adjusted to match the Board-approved fees. If the periodic audit is not adopted then fees will be as shown above.

3 "Fee Zone 4" is not shown on Figure 9.1 of the HCP/NCCP but refers to the fee applicable to those few covered activities located in northeastern Antioch (see page 9-21 of the HCP).

**Template date: March 15, 2013**

# **Site Specific Conditions**

**CHEVRON PIPE LINE  
KLM SITE 1357 MAINTENANCE PROJECT  
Byron, CA**

**March 29, 2013**

## Site Specific Conditions

In addition to the conditions set forth in the Application Form and Planning Survey Report, including all appendices and attachments thereto (“Application”) for the KLM PIM Site 1357 Pipeline Repair Project (“Project”), Chevron Pipe Line Company (“Chevron”) specifically agrees to the following site-specific requirements:

- a. To protect the Byron Airport Habitat Management Lands (“HML”) Licensee livestock and Chevron workers, a fencing plan will be developed, as further described in the Application. All fencing materials and a plot plan of the fence alignment will be submitted to the Byron Airport and Conservancy at least two weeks in advance of the proposed fence construction. Temporary fencing will be removed after project construction and materials will be removed from the site in agreement with the terms included in the permit application. The portion of the temporary fencing around the excavation area will remain in place to protect plant recovery until success criteria are met.
- b. A minimum of 30 days advanced notice will be provided to Byron Airport and the East Contra Costa County Habitat Conservancy (“Conservancy”) prior to the start of any work related this project.
- c. Chevron agrees to communicate the scope of work to the Byron Airport and Conservancy including the days, work hours, type of equipment to be utilized, parties who will be on HML and contacts for emergency purposes. Chevron will check-in with the Byron Airport and Conservancy the day before work commences to confirm the work schedule. A schedule of activities will be provided to the primary points of contact. As discussed during a meeting on Wednesday, March 20, 2013, the final scope of work will be known at the time the KLM line is exposed, and if at that time a change in the scope of work is required the schedule will be updated and submitted to Byron Airport and Conservancy.
- d. Chevron agrees to share with airport staff any and all regulatory approvals, permits, and reports for the Project in advance of construction when such documents are released and agrees to include airport staff in permit related communications.
- e. As more particularly set forth in the Application, Chevron will perform a number of avoidance and minimization measures to reduce the environmental impacts of the Project, including but not limited to the following:
  - No manholes will be installed within the wetland habitat within the HML.

- The site will be restored to pre-project conditions. The Post-Construction Monitoring Plan in the Application defines performance criteria and contingency measures.
  - The project will be executed in a way to limit the numbers of vehicles and vehicle trips accessing the HML to the greatest extent possible
  - Temporary mats/heavy fabric shall be laid down over the vehicle access routes
  - Excavated soils shall be placed on temporary mats/heavy fabric and the soil replaced onto the site upon project completion
  - All equipment that would enter the HML will be cleaned with a 2,000-PSI pressure washer before leaving the contractor's facility or at another site at least 1000 feet from any HML lands to remove mud, dirt, plant parts, etc. from the equipment before entering the HML.
  - No other excavation can occur on-site during the proposed Project, without notification to and written approval from the Byron Airport. Any modification to the project area footprint would also require an amendment to the Participating Special Entity ("PSE") Agreement with the Conservancy in order to extend permit coverage to the additional areas of impact. If an unplanned emergency requiring excavation is encountered Chevron will conduct the work as necessary but will seek an amendment to the PSE Agreement to update the permit accordingly.
- f. Consistent with FAA requirements, Chevron will comply with the following:
- All equipment will have orange and white checkered flags (consistent with FAA guidelines);
  - Any tall equipment exceeding 10 feet in height will be pre-approved by the Federal Aviation Administration (FAA) through the Form 7460 process in advance of the start of the field work. A copy of that approval will be kept with the equipment and a copy will be submitted to Byron Airport in advance of the commencement of any work;
  - All work, equipment and contractors will be instructed to stay within the fenced area and at least 1,000 feet away from all Airport runways and taxiways (paved surfaces).
  - Any proposed project lighting, if necessary, will be reviewed and approved by Byron Airport in advance of proposed use;
  - All gates on HML Property will be kept closed and locked at all times;
- g. Chevron will notify the Byron Airport and Conservancy after the project is complete and all project equipment, supplies, and other related project materials have been removed from the site.
- h. The Byron Airport must be notified immediately in the event of any emergency including fires and releases. Emergencies will be

communicated to Byron Airport on duty staff (between the hours of 9:00 am to 5:00 pm Monday through Friday): office phone #: (925) 634-0147, Byron Airport cell phone #: (925) 383-1390. In addition, Chevron's third party biologist will be onsite supervising the Chevron crew to ensure permit conditions are met and will notify all involved parties (Airport Staff and Chevron) if any listed species are encountered during field work.

- i. Should Airport or Conservancy staff need to contact Chevron, Chevron's contacts are as follows:
- Mark D Veit, Chevron's Project Manager [MVeit@chevron.com](mailto:MVeit@chevron.com) Phone: +1 661-654-7622; cell phone: +1 (713) 305-0308
  - Rand Reynolds, Chevron Pipeline Land Representative [ynld@chevron.com](mailto:ynld@chevron.com) Phone: +1 (661) 753-2002, cell phone: +1 (925) 766-5185
  - Ana Wauthion-Melgar, Chevron Assets Environmental Specialist [AWMelgar@chevron.com](mailto:AWMelgar@chevron.com) Phone: +1 (661) 654-7433, cell phone: (661)282-0866
- j. All notifications to the Byron Airport and Conservancy mentioned herein shall be issued to the personnel listed below:

The Byron Airport:

- Keith Freitas, Contra Costa Byron Airport Director: Phone: (925) 646-5722, Email: [keith.freitas@airport.cccounty.us](mailto:keith.freitas@airport.cccounty.us)
- Beth Lee, Assistant Airports Director: [beth.lee@airport.cccounty.us](mailto:beth.lee@airport.cccounty.us) Phone: (925) 646-5722 with cc: to Natalie Olesen [natalie.olesen@airport.cccounty.us](mailto:natalie.olesen@airport.cccounty.us) Phone: (925) 646-5722
- Steve Callahan, Lead Airport Operations Specialist: [steve.callahan@airport.cccounty.us](mailto:steve.callahan@airport.cccounty.us)

The East Contra Costa County Habitat Conservancy:

- John Kopchik, Executive Director, East Contra Costa County, Habitat Conservancy: Phone: (925) 674-7819, Email: [john.kopchik@dcd.cccounty.us](mailto:john.kopchik@dcd.cccounty.us)
- Krystal Hinojosa, Permitting Program Coordinator, East Contra Costa County Habitat Conservancy: Phone: (925) 674-7818, Email: [krystal.hinojosa@dcd.cccounty.us](mailto:krystal.hinojosa@dcd.cccounty.us)

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POST-CONSTRUCTION  
MONITORING PLAN  
CHEVRON PIPE LINE  
KLM SITE 1357  
MAINTENANCE PROJECT  
BYRON, CA



*Prepared for*

Chevron Pipe Line  
9525 Camino Media, E2010  
Bakersfield California 93311  
March 29, 2013

**URS**

URS Corporation  
1333 Broadway, Suite 800  
Oakland, California 94612

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This document describes the proposed Post-construction Monitoring Plan for the Chevron Pipe Line KLM Site 1357 Maintenance Project (Monitoring Plan) in Byron, CA. Chevron Pipe Line Company (CPL) plans to address a maintenance issue at Site 1357 on the KLM pipeline in eastern Contra Costa County, south of the Byron Airport and north of Byron Hot Springs Road. This action is proposed as part of a pipeline integrity management plan in order for CPL to comply with DOT hazardous materials and safety regulations, and to facilitate the continued safe transportation of petroleum products.

## **PROJECT AREA AND VICINITY**

Site 1357 is located in a rural pasture south of the Byron Airport, approximately 28 miles west of Stockton, CA and 20 miles south of Antioch, CA. Access to the site is via a one-lane, rural, dirt road which is located off of Byron Hot Springs Road, 1.2 miles southwest of the intersection of Byron Hot Springs Road and Holey Road. The project vicinity is shown on Figure 1. Figure 2 shows the project site and the access routes that would be used to reach it.

## **PROJECT DESCRIPTION**

The proposed Project would consist of minor excavation to access the pipeline, repair or maintenance, replacement of the soil, and revegetation. The project is expected to take no more than two (2) weeks to complete and would take place during the dry season (June-October) of 2013 to avoid and minimize impacts to sensitive natural resources.

As shown on Figure 2, access to the site would begin near a CPL access point located at a bend in Byron Hot Springs Road. At the access point an existing rural, unpaved and unvegetated road runs approximately 150 feet west and 500 feet north to a point just east of the planned maintenance site (Figure 2). From this point, a 12-foot wide and approximately 250-foot long temporary access route would be designated through alkali grasslands to reach the maintenance site. All other access routes to the site are existing, unpaved, and unvegetated roads that would not be widened, improved, or disturbed by this short-duration project. The work area at the maintenance site would be limited to a rectangular area approximately 30 feet long and 10 feet wide, oriented in a northwest-southeast direction to parallel the alignment of the underground pipeline.

A pre-construction survey, recording vegetation cover and composition, will occur prior to equipment mobilization and/or ground disturbing activity to establish baseline conditions. The survey will include photographic documentation.

Vehicles and equipment accessing the work area would be limited to those needed for the required scope of work. The final scope of work will be defined once the pipeline has been exposed by excavation and an inspection performed. Vehicles and equipment may include: a rubber-tire backhoe/excavator and a crew truck. All staging, stockpiling, and vehicle parking

would occur within the 30-foot by 10-foot perimeter around the pipeline work area, the designated stockpile area or on the temporary access route or existing rural access road (Figure 2).

Maintenance work would include potholing to locate and mark the pipeline and then excavating to remove the surface soil in layers and stockpiling it within the designated stockpiling area. The excavation is expected to be a small (approximately 5 feet deep) trench to expose the pipeline for repair and maintenance.

Once maintenance work is completed, replacement of the removed soil would begin immediately. The backhoe/excavator would be used to replace the dirt and topsoil and any vegetation. To the extent possible, the placement would be done in layers that approximate their pre-construction orientation. The topsoil would be replaced last. The site would be restored to pre-project topography. For a more detailed project description please see the application and planning survey report submitted to the East Contra Costa County Habitat Conservancy (Conservancy) and provided under separate cover.

This section describes the activities that will take place to prepare and revegetate the project area following completion of maintenance activities.

### **EXISTING CONDITIONS**

The proposed pipeline maintenance site (Site 1357) and access road are located on the KLM right-of-way (ROW) within a seasonal alkali wetland and adjacent alkali grassland habitats (see Figure 2). The seasonal alkali wetland has depressional topography and is dominated by saltgrass (*Distichlis spicata*), foxtail barley (*Hordeum murinum*), and rattail sixweeks grass (*Festuca myuros*). The seasonal alkali wetland is the terminus of an intermittent stream that flows from the hills west of the project footprint. As the drainage enters the proposed maintenance site, it fans out into a seasonal alkali wetland. The surrounding upland alkali grassland is also dominated by saltgrass and foxtail barley, as well as soft chess (*Bromus hordeaceus*). Alkali heath (*Frankenia salina*), common tarweed (*Centromadia pungens*), gumplant (*Grindelia* sp.) and Italian ryegrass (*Festuca perennis*) are also common in the site vicinity.

### **SITE PREPARATION**

After the maintenance activity is completed, inspected, and approved, the trench will be backfilled with the material originally excavated from the trench. Subsoil will be replaced in the trench and compacted with machinery. To the extent possible, the placement would be done in layers that approximate their pre-construction orientation. After proper backfilling, the upper 4 inches of topsoil will be replaced and spread evenly over the trench. Spreading of topsoil will occur immediately following grading. Topsoil will not be mixed with subsoil or used to fill the trench. The original contours of the site will be restored as closely as possible.

Topsoil replacement will assist in the rapid recovery of the vegetative communities. The surface materials contained in the topsoil include seeds, rhizomes, nutrients, and microorganisms necessary for recovery of vegetation in these areas.

If topsoil must be removed because it is contaminated or because it contains the vegetative portions of invasive, non-native weeds, the Contractor will provide clean topsoil as replacement material. Based on planning surveys, it is anticipated the on-site topsoil can be reused. Landform contours and slopes at the site and along the access route will be returned as close as possible to pre-disturbance conditions. The ROW will be returned to approximate pre-construction grade such that the grade does not interrupt or alter the flow of surface hydrology.

Erosion control procedures will be implemented if a rain event is predicted, or as directed by a qualified biological monitor, to prevent discharge of soil and backfill material into adjacent

waterways, or wetlands within 50 feet. These measures may include, but will not be limited to silt fences and straw wattles, as needed.

**REVEGETATION**

All areas of natural vegetation disturbed by project construction will be revegetated following maintenance activities and ROW recontouring. Completion of maintenance related activities includes the backfilling of the trench, final grading, and removal of all construction materials, debris, and equipment. Once CPL has designated work in the site as complete, revegetation will occur. Pre-existing vegetation types would be re-established by replacing the topsoil and removed vegetation, which contains the seedbank and rhizomes of the pre-existing vegetation.

Contra Costa County holds a Conservation Easement Grant from the State of California Wildlife Conservation Board (dated April 18, 1997) that includes a grazing management plan. Because the project site is located in an area used for cattle grazing, over which CPL has no control, CPL reserves the right to enclose the revegetated area (a rectangular area 30 feet long and 10 feet wide) within temporary fencing to protect it from grazing while the vegetation is becoming re-established.

**POST-CONSTRUCTION MONITORING**

Upland sites in the project area (including access routes) will be visually inspected during the first and second growing seasons following completion of maintenance activities (in April through June of [expected] 2014-2015).

The revegetated wetland area will be monitored in each of the first 3 to 5 years following revegetation (expected 2014 to 2016 or to 2018), with a provision that cessation of monitoring may be requested by CPL at the end of the first 3 years, if restoration has met the final performance criteria. In addition, an undisturbed reference site adjacent to the maintenance site, that is representative of seasonal alkali wetlands on the property, will also be monitored annually. The reference site will allow the post-project maintenance site to be compared to an adjacent area undisturbed by the project.

Fixed monitoring points will be established by recording the location coordinates of the restored and reference sites using a Global Positioning System (GPS) receiver. Monitoring will include photographic documentation, as well as measures of vegetation cover, composition and condition, and observations of hydrologic conditions. Photographs will be taken from the same point each year to document changes. Because the area is currently leased for grazing, signs of any potential disturbance will also be recorded, if present.

Restoration of alkali wetland vegetation can require a recovery period of 2 to 4 years. Therefore, the area of alkali wetland should equal pre-construction acreage within 3 to 5 growing seasons after construction is completed.

*Hydrologic conditions*

The topography of the project area will be restored so that there will be no adverse effect on wetland hydrology caused by altered grades or soil compaction levels. Adverse effects on hydrology would include changes in the duration or depth of inundation that would alter the vegetation of the wetland. Wetland hydrology will be monitored annually to confirm that the restored wetlands in the construction area and the downstream of the construction area continue to support a depth and duration of saturation or inundation that is comparable to the pre-project conditions. Adjacent wetland areas will be used as a reference for pre-project conditions. Indicators of wetland hydrology will be evaluated including observation of surface saturation, inundation, or evidence of standing or flowing water such as drift lines, vegetation matting or sediment deposits. Annual monitoring will be conducted after a substantial rain event when ponding or pooling could reasonably be expected to occur.

*Vegetation Cover and Composition*

In addition to measuring the overall plant cover and composition within both the post-construction restored wetland and reference site, biologists will also note the presence and cover of non-native invasive species. Non-native invasive species are those recognized by the

California Invasive Plant Council (Cal-IPC) as having limited, moderate or high ecological impacts.

The final goal of restoring wetlands vegetation is that the vegetation will not be visibly different from that of immediately adjacent undisturbed wetlands and will be similar to or better than pre-project vegetation conditions. Pre-project conditions will be documented prior to onset of maintenance activities.

**PERFORMANCE CRITERIA**

*Revegetation in wetland areas will be deemed successful if 3 to 5 years after revegetation, total plant cover is greater than 80% of adjacent undisturbed areas, at least 1-3 dominant species in the adjacent reference site are present in the restored wetlands, and percent cover of invasive, non-native species is less or comparable to that found in the reference site.*

Table 1. Performance Criteria for Wetland Restoration

Wetland Type	Representative Plant Species	Monitoring Schedule	Performance Criteria by Year <sup>1</sup>
Alkali Wetland with clonal species	<i>Distichlis spicata</i>	May-June Annually	<p><b>Year 1:</b></p> <ul style="list-style-type: none"> <li>• At least 1-3 dominant<sup>2</sup> species in the adjacent undisturbed wetlands are present in the restored wetlands.</li> <li>• No change in wetland topography that would adversely affect the hydrology (e.g. berms or depressions due to construction activities)</li> </ul> <p><b>Year 2:</b></p> <ul style="list-style-type: none"> <li>• All year 1 criteria are met, and</li> <li>• Total plant cover is &gt;30% of adjacent undisturbed area</li> <li>• Percent invasive, non-native species cover does not exceed that of the reference site or surrounding area by more than 10%.</li> </ul> <p><b>Year 3 &amp; 4:</b></p> <ul style="list-style-type: none"> <li>• All year one and two criteria are met.</li> <li>• At least 1 dominant plant species is a native wetland species (e.g. FAC, FACW, OBL).</li> </ul> <p><b>Year 5:</b></p> <ul style="list-style-type: none"> <li>• Previous success criteria apply, and</li> </ul> <p>Total plant cover is &gt;80% of adjacent undisturbed</p>
<p><b>Notes:</b></p> <p><sup>1</sup> Performance criteria for vegetation must be met at the end of the growing season; Year 1 is 2014.</p> <p><sup>2</sup> Dominant species are defined here as the species or group of species that collectively contribute more than 50 percent of the total cover in a wetland area.</p>			

Generally, revegetation in upland areas will be considered successful if upon visual survey the cover of invasive plant species is similar to adjacent undisturbed areas.

**REPORTING**

CPL or their Contractor will maintain records that identify the following information:

1. Dates of backfilling and revegetation;
2. Revegetation method;
3. Acreage revegetated;
4. Any problem areas and how they were addressed.

Monitoring results and any post-construction problems will be included in annual reports. Post-construction reports will document the revegetation conditions relative to each of the performance criteria in Table 1. The report will be submitted annually by December 31 to the Conservancy. The report will also include color photo-documentation, and any prescribed remedial measures.

**COMPLETION OF REVEGETATION**

If at the end of Year 3, revegetation has met the Year 5 performance criteria and is performing nominally, CPL may request cessation of further monitoring and reporting from the Conservancy. Following the completion of the final year of monitoring, CPL will submit a final monitoring report and notify the Conservancy if the Project has successfully met the final performance criteria. This report will clearly describe how and when all performance criteria were met and will request a confirmation of Project completion from the Conservancy.

**CONTINGENCY MEASURES**

Contingency measures shall be implemented when performance criteria are not being met. These measures may include collecting and planting seeds or plant material from species that are native to the project vicinity and appropriate to the site. Contingency measures will be used as needed based on the type of issue encountered and its underlying cause. If the restoration continues to fall short of the performance criteria following such remedial actions, CPL will provide additional temporary mitigation fees for any delay in recovery as required by the Conservancy, until the criteria are met. Additional mitigation would be provided at the same ratios applied to the original impacts as presented in this plan.

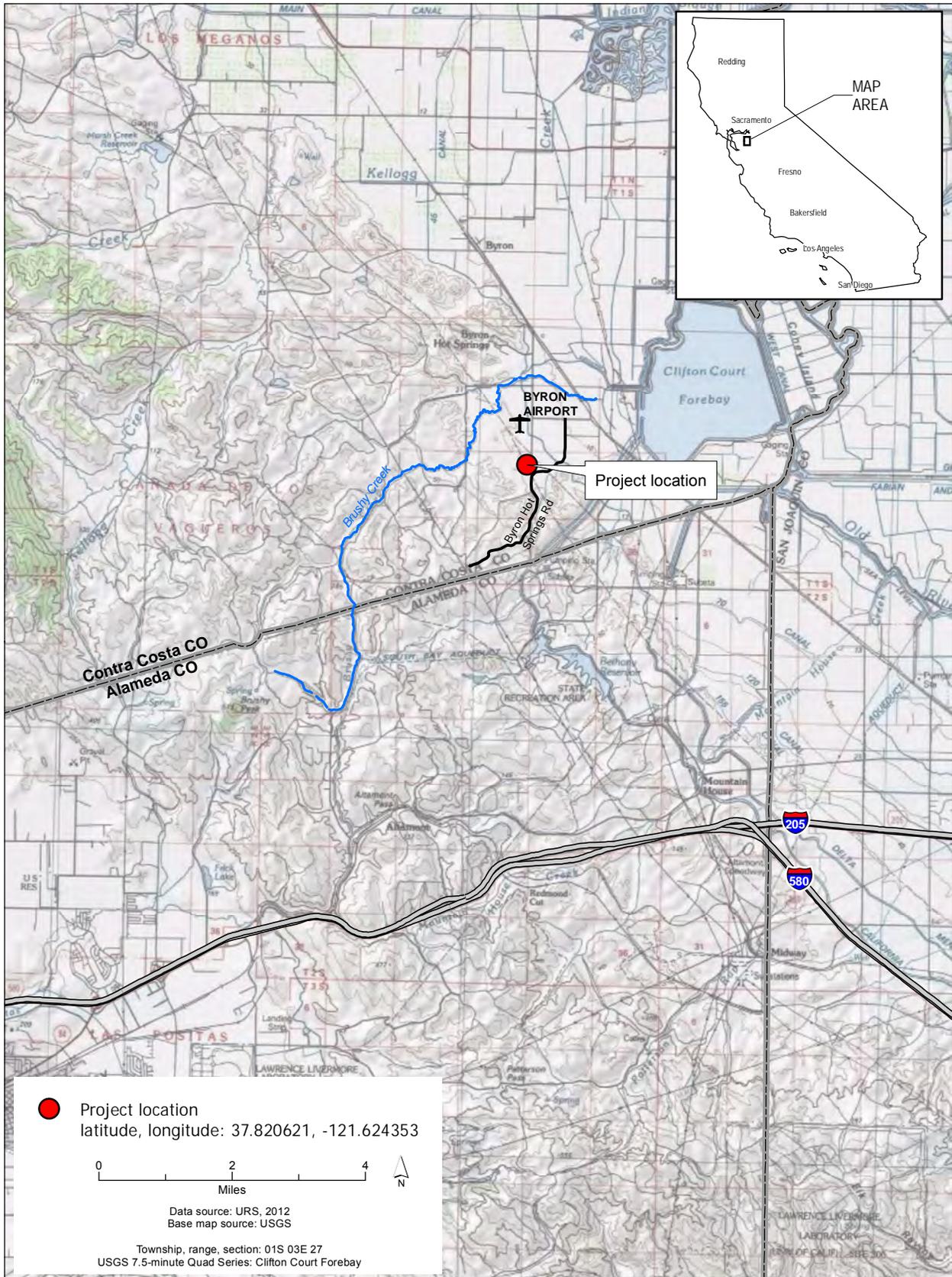
If maintenance activities interrupt the hydraulic surface flow, re-grading or compaction of the affected areas may be recommended. If the remedial actions involve any significant reworking of the site, such as grading, the recommendations will be submitted to the relevant agencies prior to implementation. Additional clean topsoil may be added to raise the elevation of the backfilled area if it subsides to an elevation lower than the immediately surrounding area. In the event that it is necessary to correct the contours of the site, the impacted area will be replanted using the same methods as the original restoration.

If monitoring identifies an increase in non-native invasive vegetation species within the restored site that is not present in the reference site, remedial measures appropriate to the identified species will be implemented to control the invasive species.

At any time CPL and the Conservancy may, by mutual agreement, adapt or modify these contingency measures to facilitate successful restoration of the site. If success criteria are not being met following implementation of the contingency measures described above, CPL and the Conservancy will meet and confer to determine what additional mitigation measures and steps can be taken to address the shortfall.

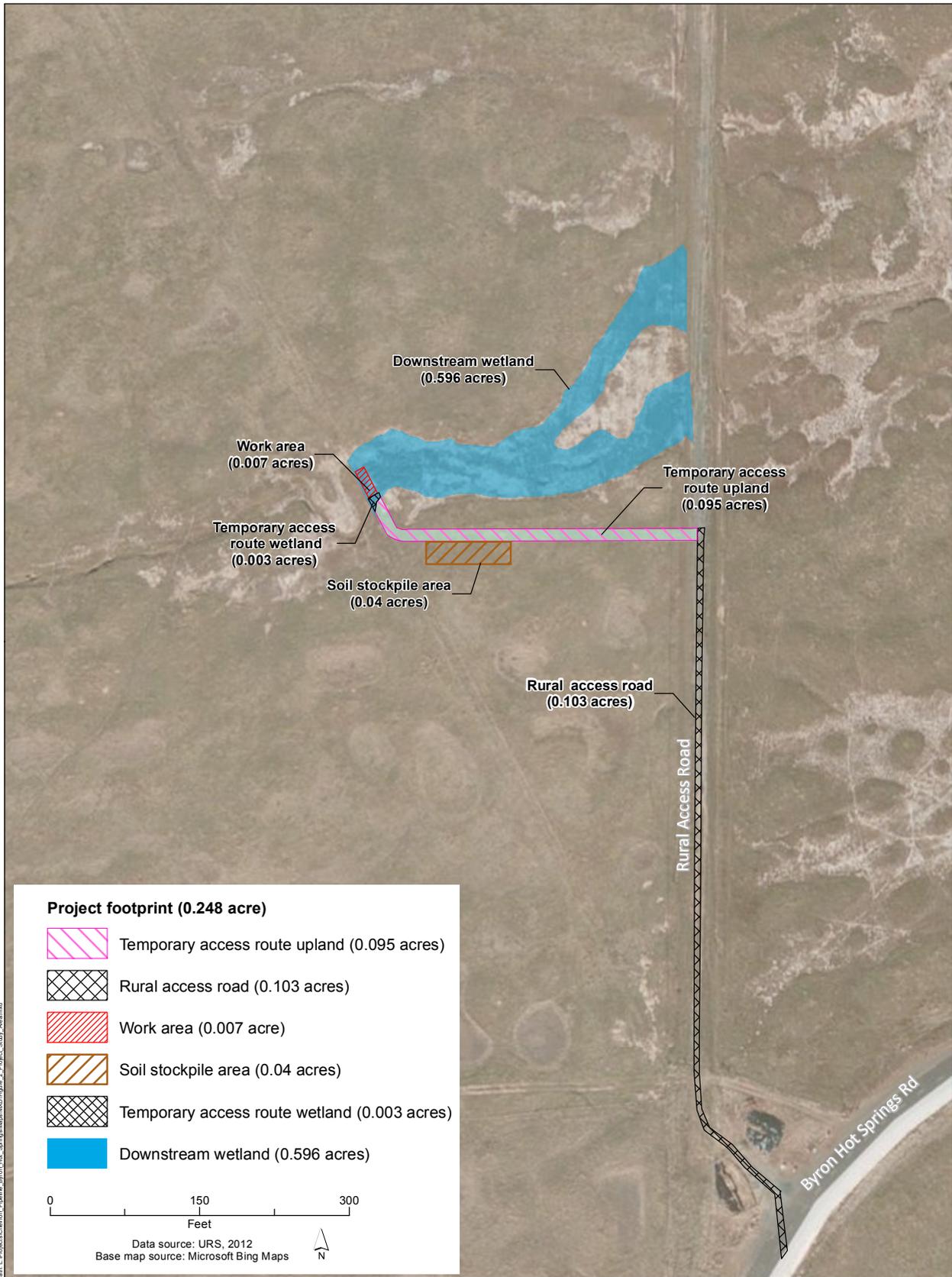
In the event that CPL is wholly or partially prevented from performing obligations under this Monitoring Plan because of unforeseeable causes beyond the reasonable control of and without the fault or negligence of CPL ("Force Majeure"), including, but not limited to, acts of God, unforeseeable climate or weather events, or actions of third parties, CPL and the Conservancy will meet and confer to determine the extent to which CPL will be excused from obligations affected by such unforeseeable cause.

# Figures



Chevron Pipe Line Company  
 KLM Site 1357 - U.S. DOT Required Maintenance

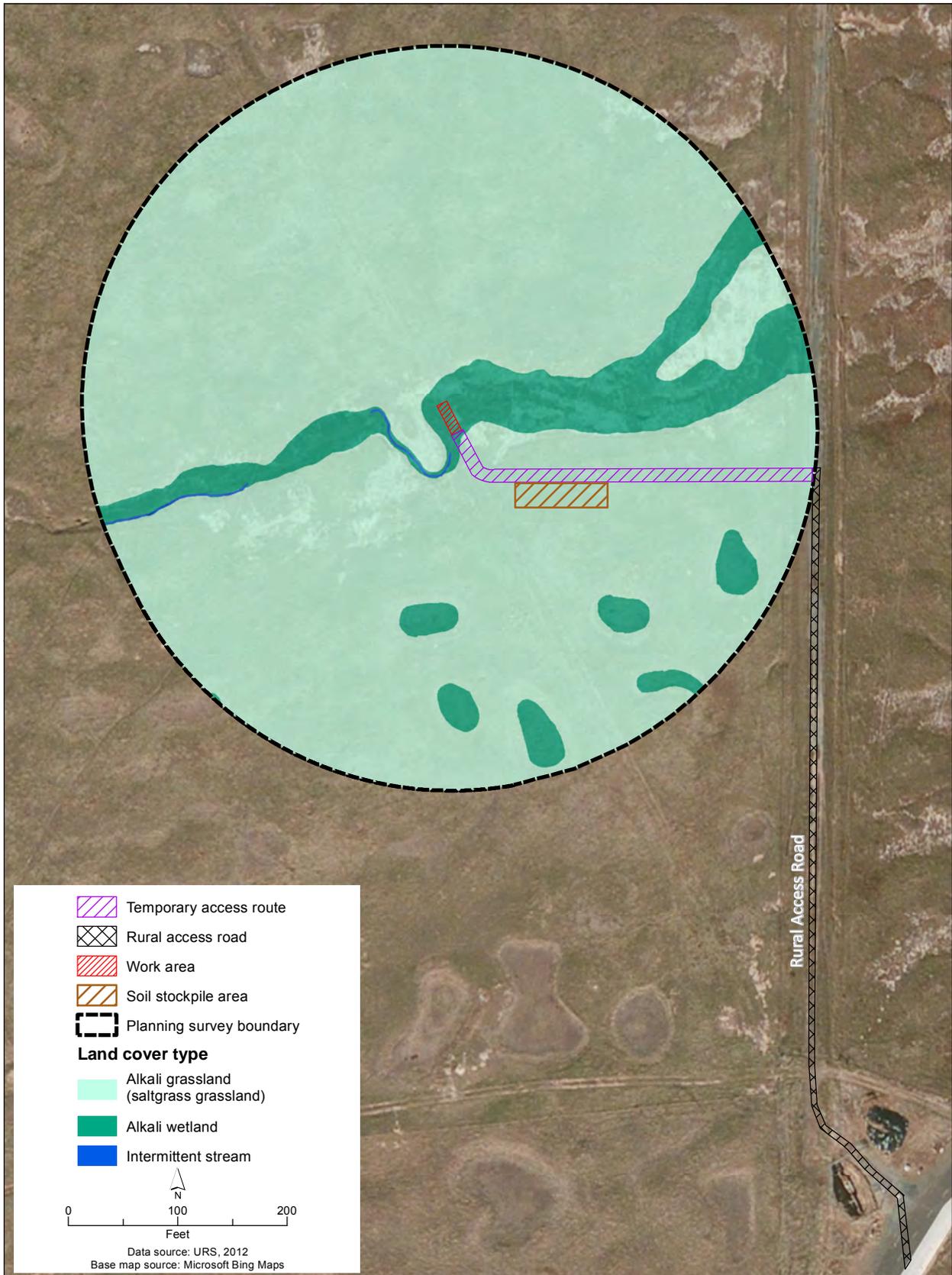
**Figure 1**  
 Project vicinity map



Chevron Pipe Line Company  
KLM Site 1357 - U.S. DOT Required Maintenance

**Figure 2a**  
Project site plan





Chevron Pipe Line Company  
KLM Site 1357 - U.S. DOT Required Maintenance

**Figure 3a**  
Land cover types

**Figure 3b.** Representative Photographs of KLM Site 1357 – U.S. DOT Required PIM Maintenance Project



(1) Approximate location of potential access hatch



(2) Facing north from the potential access hatch



(3) Facing south from the potential access hatch



(4) Facing east from the potential access hatch

**Figure 3b.** Representative Photographs of KLM Site 1357 – U.S. DOT Required PIM Maintenance Project (cont'd)



(5) Facing west from the potential access hatch



(6) Large alkali wetland connected to intermittent stream



(7) Large alkali wetland connected to intermittent stream



(8) Intermittent stream

**Figure 3b.** Representative Photographs of KLM Site 1357 – U.S. DOT Required PIM Maintenance Project (cont'd)



(9) Intermittent stream



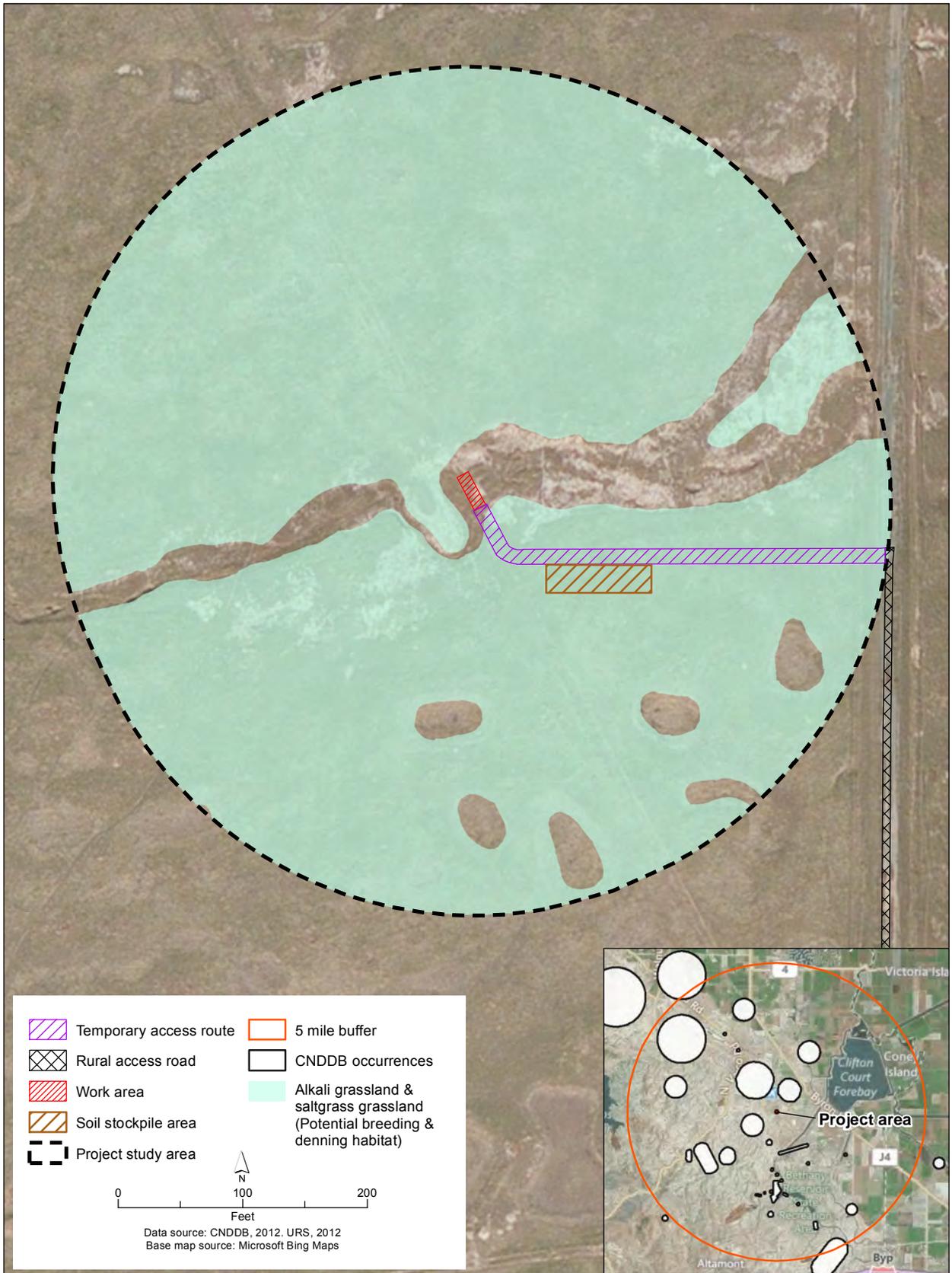
(10) Discrete alkali wetland



(11) Burrows in upland saltgrass grassland, outside project footprint

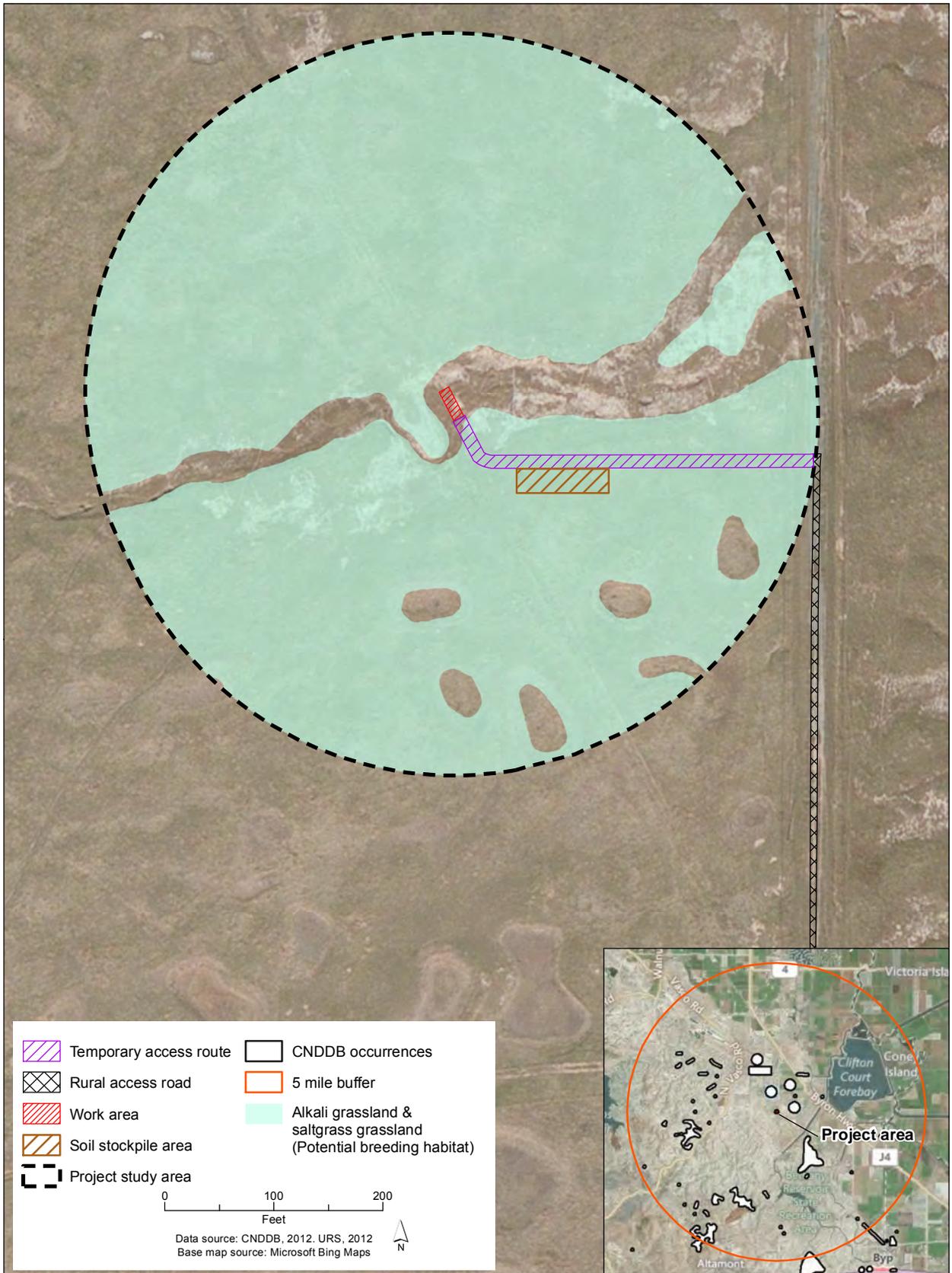


(12) Burrows in upland saltgrass grassland, outside project footprint



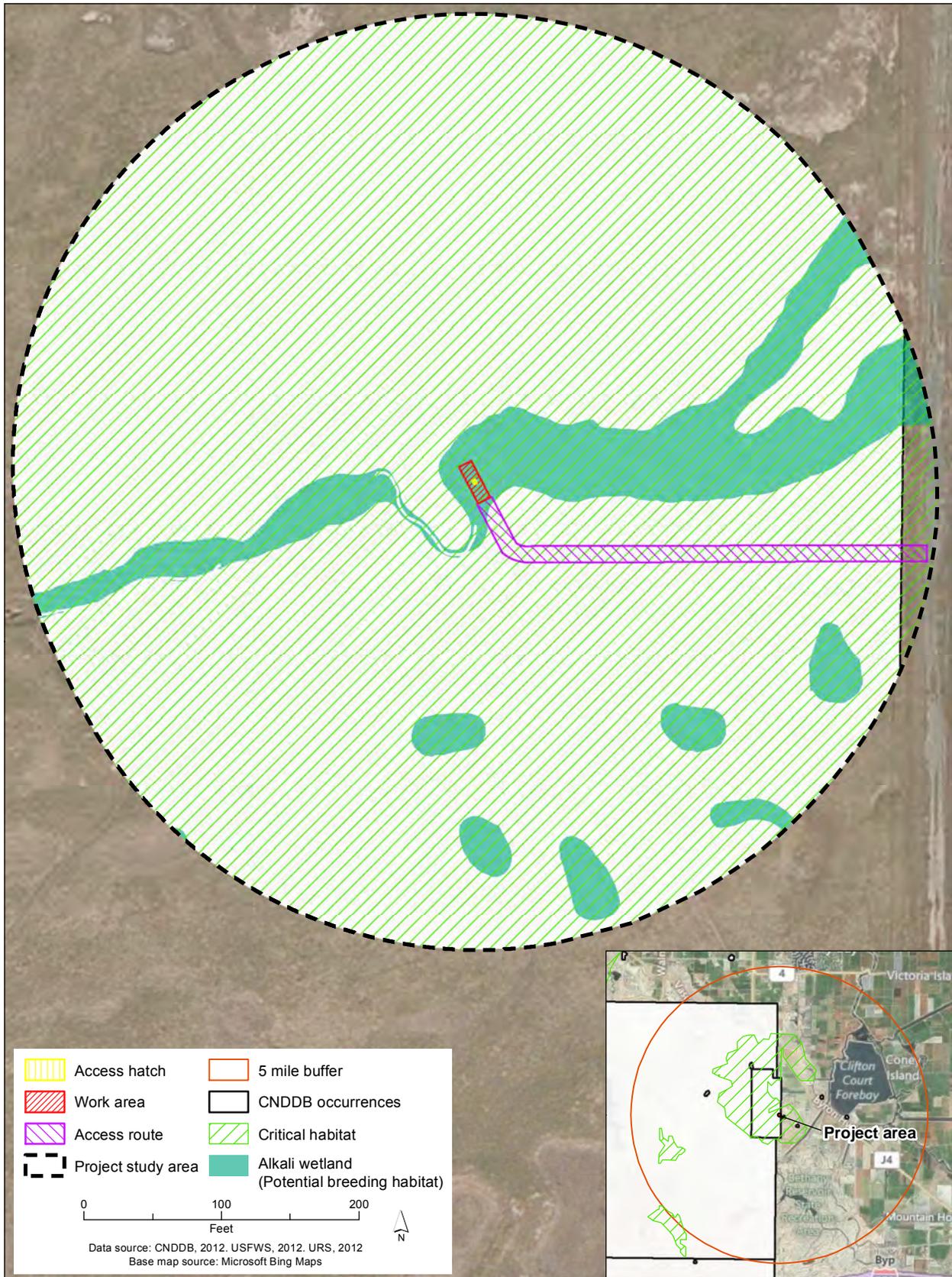
Chevron Pipe Line Company  
KLM Site 1357 - U.S. DOT Required Maintenance

**Figure 4a**  
Planning survey species habitat map for San Joaquin kit fox



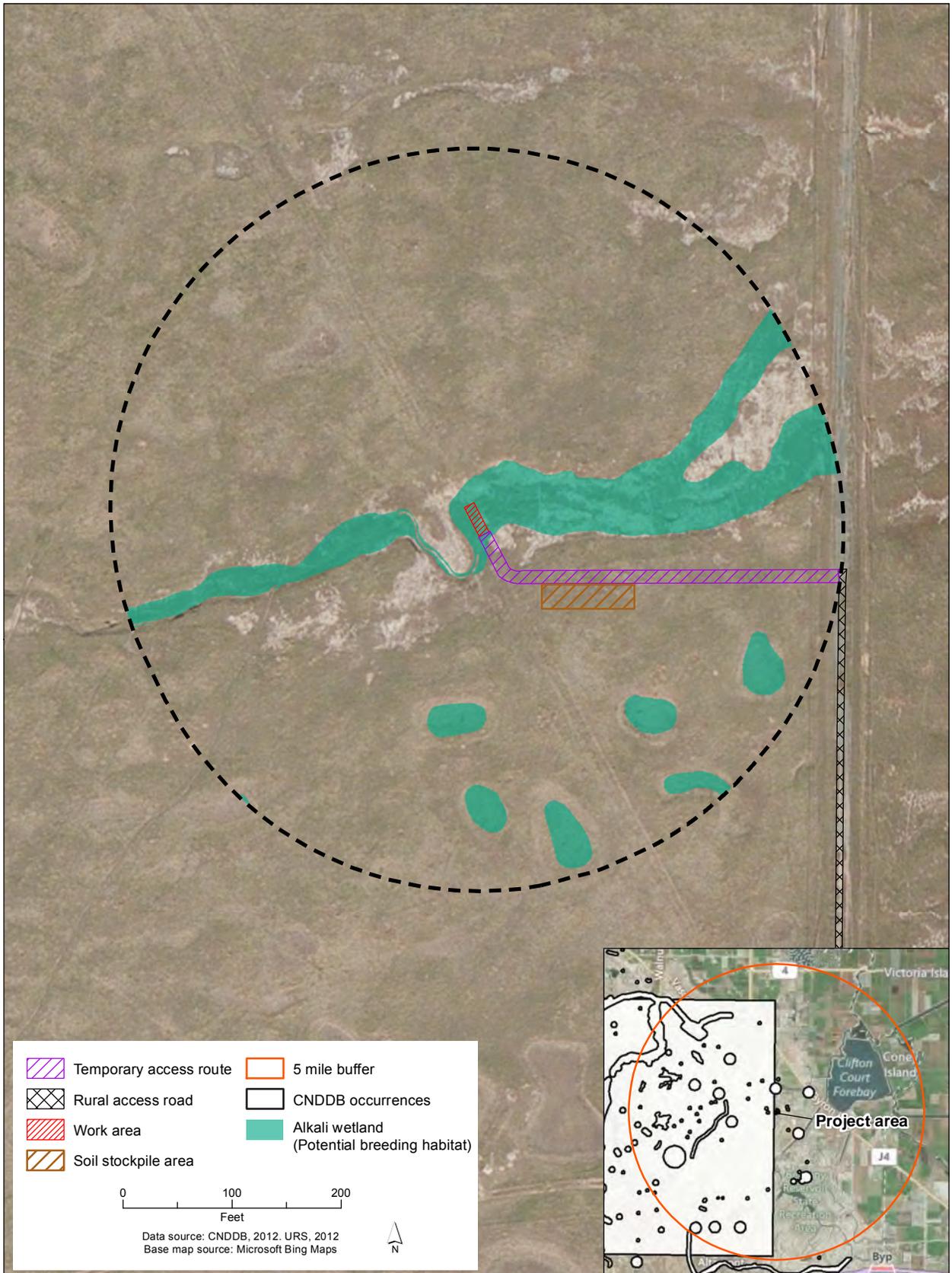
Chevron Pipe Line Company  
KLM Site 1357 - U.S. DOT Required Maintenance

Figure 4b  
Planning survey species habitat map for western burrowing owl



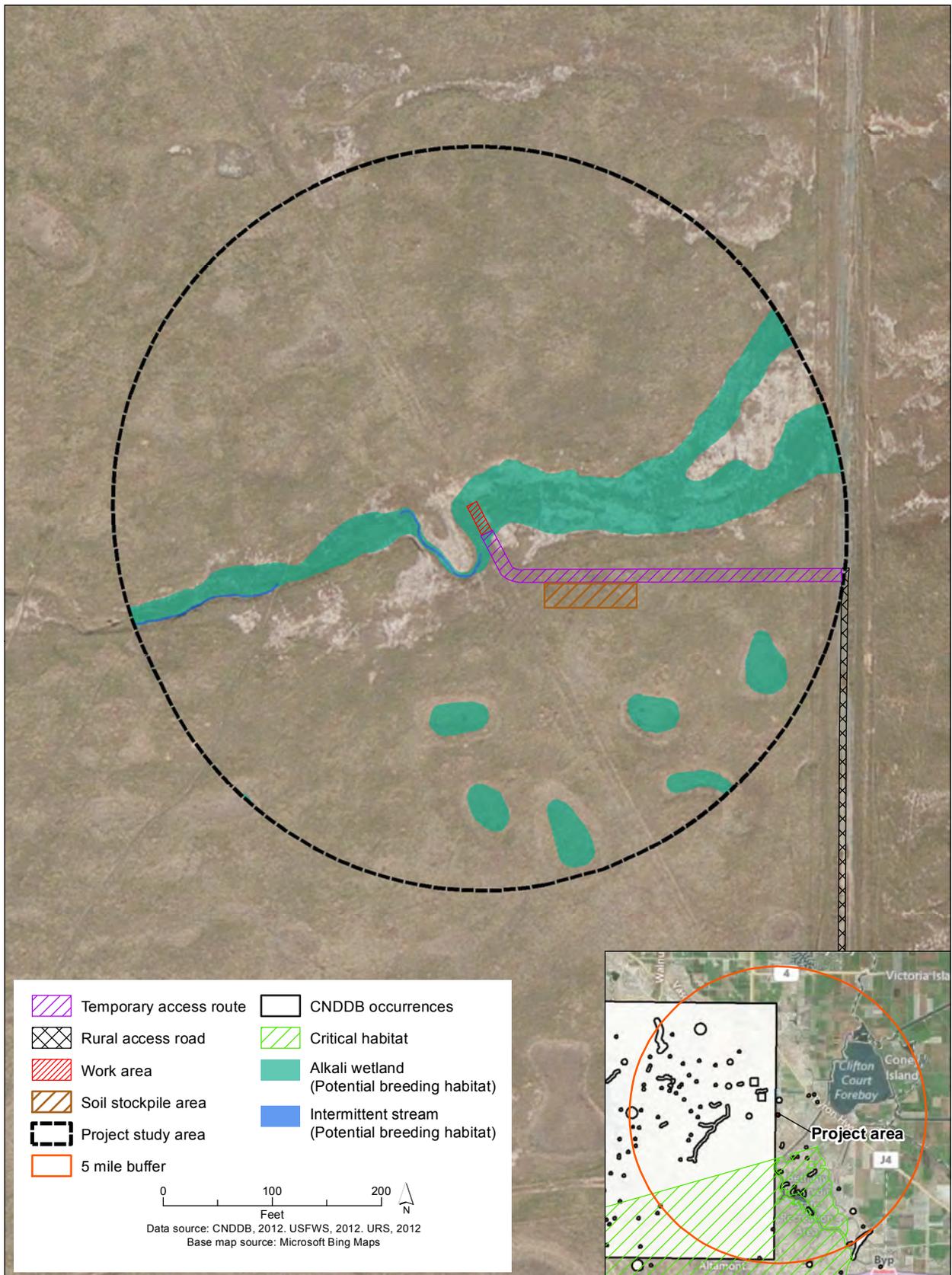
Chevron Pipe Line Company  
KLM Site 1357 - U.S. DOT Required Maintenance

**Figure 4c**  
Planning survey species habitat map for covered shrimp



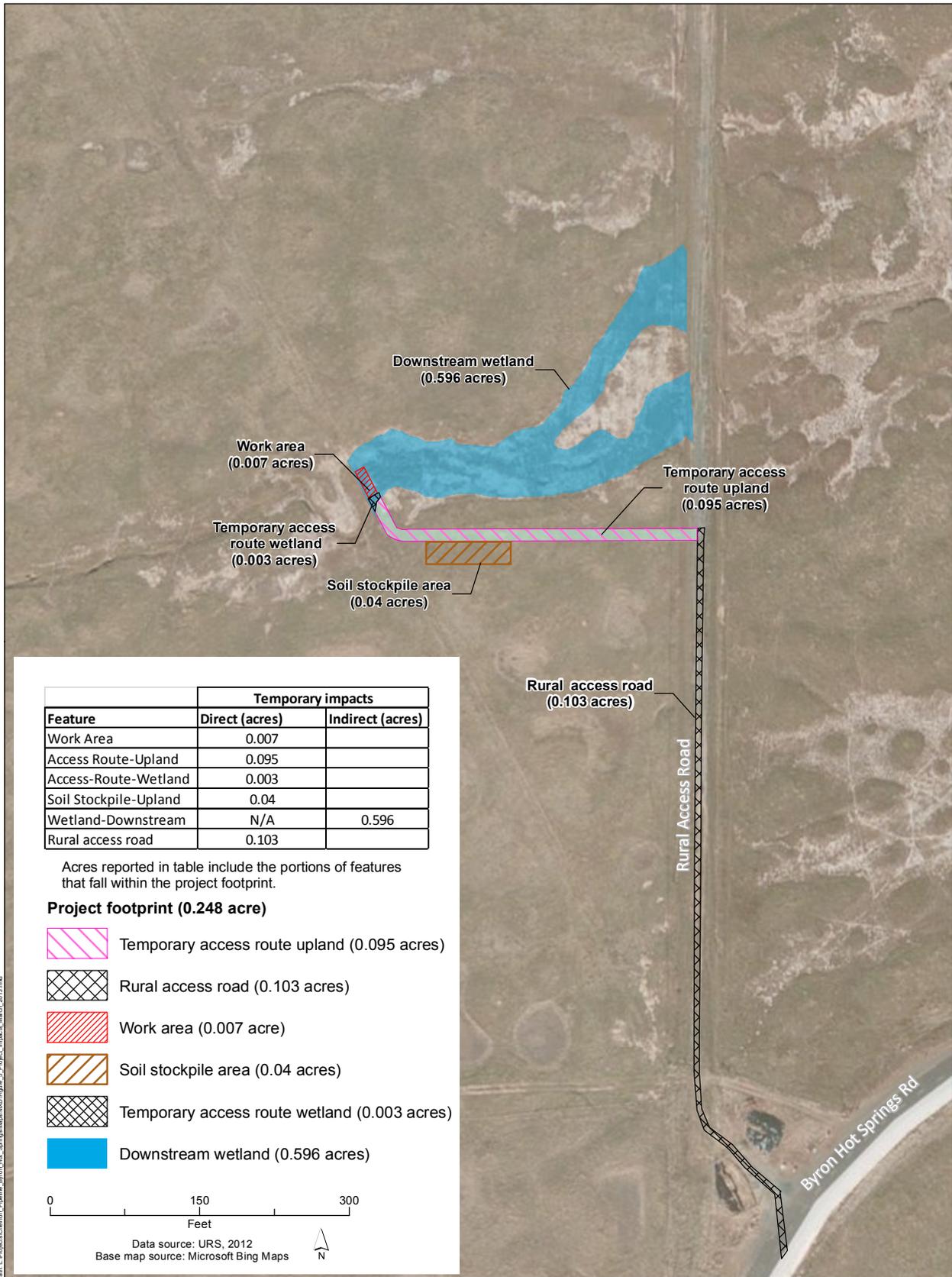
Chevron Pipe Line Company  
 KLM Site 1357 - U.S. DOT Required Maintenance

Figure 4d  
 Planning survey species habitat map for California tiger salamander



Chevron Pipe Line Company  
 KLM Site 1357 - U.S. DOT Required Maintenance

**Figure 4e**  
 Planning survey species habitat map for California red-legged frog



Chevron Pipe Line Company  
KLM Site 1357 - U.S. DOT Required Maintenance

**Figure 5**  
Project Impacts

# **Preliminary Jurisdictional Determination**



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

REPLY TO  
ATTENTION OF

September 13, 2012

Regulatory Division SPK-2012-00895

Mr. Joseph Lopez  
Chevron Pipe Line Company  
9525 Camino Media, E2052  
Bakersfield, California 93311

Dear Mr. Lopez:

We are responding to your August 9, 2012 request for a preliminary jurisdictional determination (JD), in accordance with our Regulatory Guidance Letter (RGL) 08-02, for the KLM Site 1357 - US DOT Required PIM Maintenance site. The approximately 0.10-acre site is located near the Byron Airport in Section 26, Township 1 South, Range 3 East, Mount Diablo Meridian, Latitude 37.820486°, Longitude -121.62384°, Contra Costa County, California.

Based on available information, we concur with the amount and location of wetlands and other water bodies on the site as depicted on the enclosed September 11, 2012 "Figure 5: Wetlands and waters in the project study area" drawing prepared by URS. The approximately 0.974 acres of wetlands and intermittent stream present within the survey area are potential waters of the United States regulated under Section 404 of the Clean Water Act.

A copy of our RGL 08-02 Preliminary Jurisdictional Determination Form for this site is enclosed. Please sign and return a copy of the completed form to this office. Once we receive a copy of the form with your signature we can accept and process a Pre-Construction Notification or permit application for your proposed project.

You should not start any work in potentially jurisdictional waters of the United States unless you have Department of the Army permit authorization for the activity. You may request an approved JD for this site at any time prior to starting work within waters. In certain circumstances, as described in RGL 08-02, an approved JD may later be necessary.

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

This preliminary determination has been conducted to identify the potential limits of wetlands and other water bodies which may be subject to Corps of Engineers' jurisdiction for the particular site identified in this request. A Notification of Appeal Process and Request for Appeal form is enclosed to notify you of your options with this determination. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are U.S. Department of Agriculture (USDA) program participants,

or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

We appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey*.

Please refer to identification number SPK-2012-00895 in any correspondence concerning this project. If you have any questions, please contact Mary Pakenham-Walsh at U.S. Army Corps of Engineers Regulatory Division, California Delta Branch, 1325 J Street, Room 1350, Sacramento, CA 95814, e-mail *Mary.R.Pakenham-Walsh@usace.army.mil*, or telephone 916-557-7718. For more information regarding our program, please visit our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx*.

Sincerely,



Kathleen A. Dadey, Ph.D  
Chief, California Delta Branch

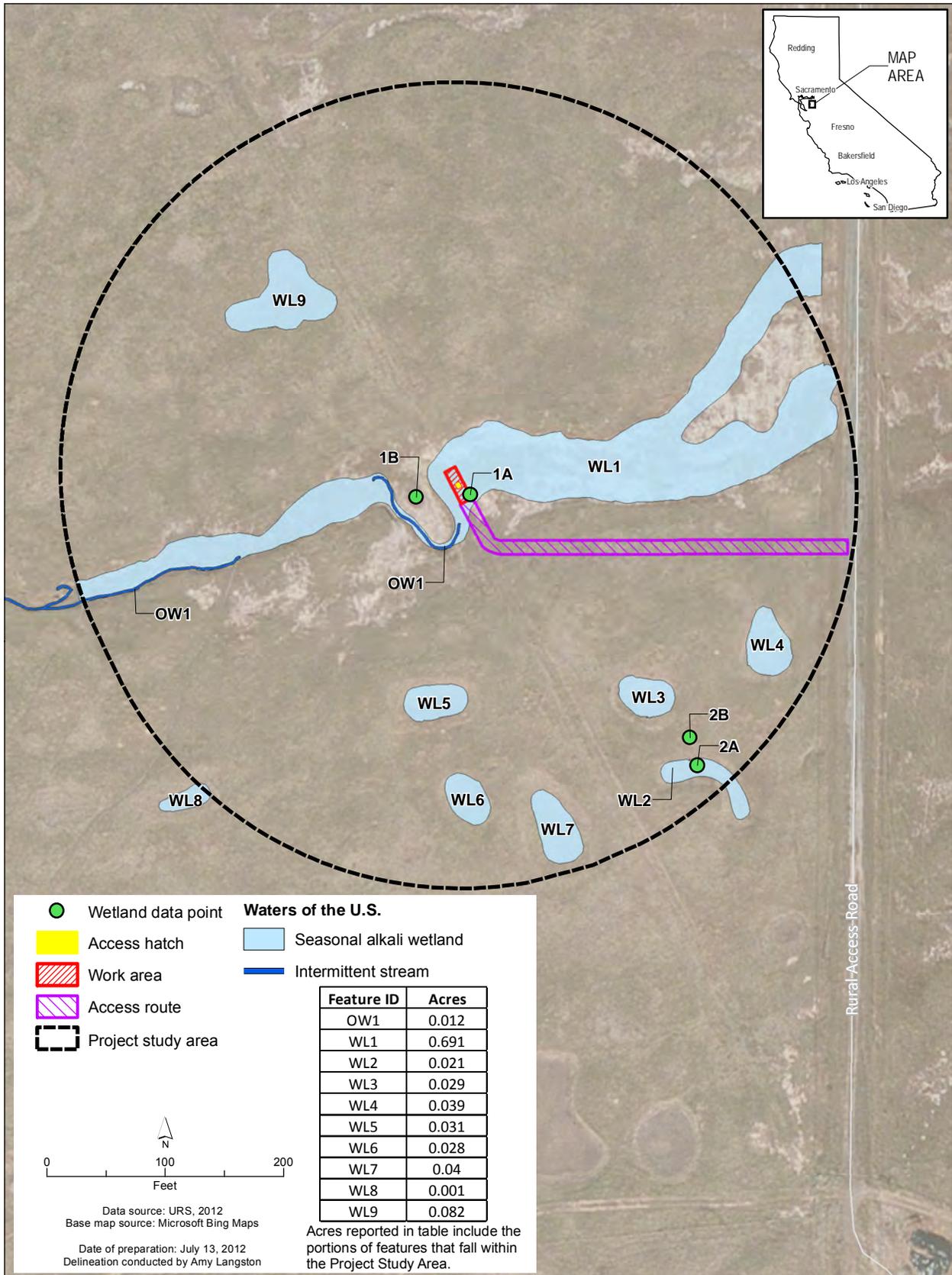
Enclosures

Copy Furnished without enclosures:

Paul Jones (W-8), United States Environmental Protection Agency, 75 Hawthorne Street, San Francisco, CA 94105

John Kopchik, Contra Costa County Dept. of Conservation and Development, 30 Muir Road, Martinez, CA 94553

Rosemary Laird, URS Corporation, 1333 Broadway Ste. 800, Oakland, CA 94612



**Figure 5**  
Wetlands and waters in the project study area  
Revised on 9/11/2012

**PRELIMINARY JURISDICTIONAL DETERMINATION FORM**

**Sacramento District**

**This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:**

Regulatory Branch: <b>California Delta</b> File/ORM #: <b>SPK-2012-00895</b> PJD Date: <b>September 13, 2012</b>	
State: <b>CA</b> City/County: <b>Contra Costa County</b> Nearest Waterbody: <b>Brushy Creek</b>  Location (Lat/Long): <b>37.82048°, -121.62384°</b>  Size of Review Area: <b>0.10 acres</b>	Name/Address <b>Joseph E. Lopez</b> Of Property <b>Chevron Pipe Line Company</b> Owner/ <b>9525 Camino Media, E2052</b> Potential <b>Bakersfield, California 93311</b> Applicant
<b>Identify (Estimate) Amount of Waters in the Review Area</b> <b>Non-Wetland Waters:</b> <b>255 linear feet</b> ft wide <b>0.012 acre(s)</b> Stream Flow: <b>Intermittent</b>  <b>Wetlands: 0.962 acre(s)</b> Cowardin <b>Palustrine, emergent</b> Class:	Name of any Water Bodies      Tidal: <b>N/A</b> on the site identified as Section 10 Waters:      Non-Tidal: <b>N/A</b>  <input checked="" type="checkbox"/> Office (Desk) Determination <input type="checkbox"/> Field Determination: Date(s) of Site Visit(s):

**SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply – checked items should be included in case file and, where checked and requested, appropriately reference sources below)**

Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:  
 Data sheets prepared/submitted by or on behalf of the applicant/consultant.  
 Data sheets prepared by the Corps.  
 Corps navigable waters' study.  
 U.S. Geological Survey Hydrologic Atlas:  
 USGS NHD data.  
 USGS HUC maps.  
 U.S. Geological Survey map(s). Cite scale & quad name: **1:24K; CA-CLIFTON COURT FOREBAY**  
 USDA Natural Resources Conservation Service Soil Survey.  
 National wetlands inventory map(s).  
 State/Local wetland inventory map(s).  
 FEMA/FIRM maps.  
 100-year Floodplain Elevation (if known):  
 Photographs:       Aerial  
 Other  
 Previous determination(s). File no. and date of response letter:  
 Other information (please specify):

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

*Mary R. Paddenham - W&A*      9/13/12

Signature and Date of Regulatory Project Manager (REQUIRED)      Signature and Date of Person Requesting Preliminary JD (REQUIRED, unless obtaining the signature is impracticable)

**EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:**

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

# **Wetland Delineation Report**

# WETLAND DELINEATION REPORT

## KLM SITE 1357 – U.S. DOT REQUIRED PIM MAINTENANCE



*Prepared for*

Chevron Pipe Line Company  
9525 Camino Media, E2052  
Bakersfield, CA 93311

August 8, 2012

# URS

URS Corporation  
1333 Broadway, Suite 800  
Oakland, California 94612

26817174

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Figure 3. Soils in the Project Study Area

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Figure 5. Wetlands and Other Waters in the Project Study Area

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Appendix A. Arid West Wetland Delineation Data Sheets

Appendix B: Project Study Area Photographs

Appendix C: Project Study Area Plant List

## Acronyms

## 1.1 INTRODUCTION

This report provides the results of a delineation of waters of the U. S. at Site 1357 on the Chevron Pipe Line Company Kettleman to Los Medanos (KLM) pipeline, near Byron, CA. Chevron Pipe Line Company plans to perform U.S. Department of Transportation required maintenance at this site to address a pipeline anomaly. This report was prepared, in part, to support a request by Chevron Pipe Line Company for a Preliminary Jurisdictional Determination (PJD) from the United States Army Corps of Engineers (Corps) per Regulatory Guidance Letter No. 08-02 (June 26, 2008). The applicant, Chevron Pipe Line Company (CPL), has chosen to concede federal regulatory jurisdiction and to waive or set aside questions regarding Clean Water Act (CWA) jurisdiction within the boundaries of the project. The objective of the delineation is to locate, delineate, and map the portions of the project that qualify as wetlands and/or non-wetland waters of the U.S. under federal jurisdiction, pursuant to Section 404 of the CWA. In order to clearly report on the methods and results of the delineation, this report is organized into three primary sections:

- Introduction;
- Methods;
- Results and Discussion

Section One introduces the planned project, the project purpose, and the need for a wetland delineation. Section Two presents the jurisdictional delineation methods. Section Three presents the results of the jurisdictional delineation, including a description of the wetlands observed in the project area

### 1.1.1 Project Description

CPL plans to address a pipeline integrity management (PIM) maintenance issue at Site 1357 on the KLM pipeline in eastern Contra Costa County, south of the Byron Airport and north of Byron Hot Springs Road. The project vicinity is shown in Figure 1. Figure 2 shows the project site and the access routes that would be used to reach it. The KLM Site 1357 Maintenance Project would consist of a minor excavation to access the pipeline, a repair or maintenance improvement, and the replacement of the soil and a ground covering. The project is expected to take no more than 5 working days to complete and would take place during the dry season (May-October) of 2013 to avoid and minimize impacts on sensitive natural resources. This action is proposed as part of a PIM plan so CPL complies with Department of Transportation (DOT) hazardous materials and safety regulations, and to facilitate the continued safe transportation of petroleum products.

#### **Site Access and Maintenance Work**

As shown on Figure 2, access to the site would begin near a CPL access point located at a bend in Byron Hot Springs Road, 1.2 miles southwest of the intersection of Byron Hot Springs Rd. and Holey Rd. At the access point an existing unpaved and unvegetated road runs approximately 150 feet west and 500 feet north to a point just east of the planned maintenance site (Figure 2). From this point, a 12-foot wide and approximately 250-foot long temporary access road would be created through alkali grasslands to reach the maintenance site. All other access routes to the site are existing, unpaved, and unvegetated roads that would not be widened, improved, or disturbed by this short-duration project. The work area at the

maintenance site would be limited to a rectangular area 30 feet long and 10 feet wide, oriented in a northwest-southeast direction to match the alignment of the underground pipeline.

Vehicles and equipment accessing the work area would be limited to work vehicles: a rubber-tire backhoe/excavator and a crew truck. The work crew size would be 4-6 people plus a biological monitor. The backhoe/excavator would be secured and left at the site at the end of each working day to reduce the noise, dust, and combustion emissions that would otherwise result from driving to and from the site each day. All staging, stockpiling, and vehicle parking would occur within the 30-foot by 10-foot perimeter around the pipeline work area or on the temporary access road.

Maintenance work would include sample pit digging (also referred to as potholing) to locate and mark the pipeline. Once the correct area is located, the backhoe/excavator would then remove the surface soil in layers and stockpile it within the designated stockpiling area. Work would proceed this way until a small (approximately 5 feet deep) pit had been excavated to expose the pipeline for repair and maintenance.

The maintenance work would add (or replace) a weld-o-let, which is a metal collar placed around a section of pipeline to provide cathodic protection. The weld-o-let is designed to provide a location for electricity-related corrosion and thereby protect the rest of the segment of pipeline from corrosion. Once the weld-o-let is in place, it will be inspected and then manually coated with a small backfill of soil. At that point, if there is no valve present in that section of pipeline, replacement of the removed soil would begin immediately. The backhoe/excavator would be used to replace the dirt and topsoil and any vegetation. To the extent possible, the placement would be done in layers and strips that approximate their pre-construction orientation.

If a valve is present in the section of pipeline that is exposed, a small access hatch or portal, much like a manhole, would be left in place for future maintenance access to the valve. The cylinder would be constructed so that the top of this hatch would be at grade or up to 1 foot above it. The access hatch would be a 2- to 3-foot diameter metal cylinder with a secure and lockable covering. Replacement of previously removed dirt and topsoil would then proceed as described above.

### **Project Footprint and Impact Areas**

The project footprint is the total area of land that would be disturbed by the planned maintenance activities. The footprint is composed of a 300 square foot (ft<sup>2</sup>) work area plus a 12-foot-wide access route covering 4,122 ft<sup>2</sup> (0.09 acre). The total footprint area is less than 0.10 acre (4,422 ft<sup>2</sup>). Of the total area, almost all would be a temporary impact. The only possible permanent impact would occur if the access hatch is placed, and the surface area of this hatch would not exceed 8 square feet.

## 2.1 METHODS

This section describes the methods used to delineate wetlands and other waters in the Project Study Area (Project Footprint and vicinity).

### 2.1.1 Background Research

Prior to the field investigation, a desktop analysis of the site was performed using appropriate reference materials and maps. Background material was assembled to inform the methods and findings presented in the delineation. The primary reference material sources were:

- Aerial photographs of the project site and vicinity (Microsoft Bing Maps)
- Standard biological references and field guides including the Jepson Manual (Hickman 1996)
- Clifton Court Forebay USGS topographic 7.5 minute quadrangle map
- The National Wetland Inventory (NWI) dataset (USFWS 2009)
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (USACE 2008)
- Army Corps of Engineers Wetlands Delineation Manual, online edition (Environmental Laboratory 1987)
- A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley 2008)
- North American Digital Flora: National Wetland Plant List, version 2.4.0 (Lichvar and Kartesz 2009)
- Natural Resource Conservation Service online soil survey within the immediate project area (NRCS 2012b).

### 2.1.2 Field Delineation

Potential wetlands and other waters of the U.S. were formally delineated on July 5, 2012 by URS wetland scientist, Amy Langston. Wetlands were delineated in accordance with the routine on-site methodology described in the Corps of Engineers' (Corps) Wetlands Delineation Manual (Environmental Laboratory 1987). This method uses a three-parameter approach to determine if an area is a jurisdictional wetland. The three parameters are soil, vegetation, and hydrology. Under normal circumstances (undisturbed conditions), a potential jurisdictional wetland must have positive wetland indicators of hydric soils, wetland hydrology, and a dominance of hydrophytic vegetation. Positive wetland indicators include field indicators and published data such as United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) lists of hydric soils. The following sections describe the general diagnostic characteristics and some of the typical positive wetland indicators for each parameter.

- **Hydric Soils:** Soils are considered hydric if the soil is classified as hydric by the NRCS or if field indicators that are associated with reducing soil conditions are present. The NRCS defines a hydric soil as a soil that formed where conditions of saturation, flooding, or ponding occurred long enough during the growing season to develop anaerobic conditions in the upper portion of the soil profile. Local and national soil surveys published by the NRCS are used to determine the types of soil present

in an area. Field indicators of hydric soils are identified in the “Field Indicators of Hydric Soils in the United States, Guide for Identifying and Delineating Hydric Soils” published by the U.S. Department of Agriculture Natural Resources Conservation Service (USDA 2010). Field indicators may also include organic hydric soils (or histisols), histic epipedons, sulfidic material, aquic or peraquic moisture regimes, reduced soil conditions indicated by oxidized rhizospheres, soil color, including gleyed soils, soils with mottles and/or low-matrix chroma, and iron and manganese concretions.

- **Wetland Hydrology:** Wetland hydrology is defined as inundation or saturation in the upper 12 inches of the soil for at least five percent of the growing season in most years (Environmental Laboratory 1987). The growing season in the project area is approximately 260 days based on “frost-free days (NRCS 2012a, Soil Conservation Service 1977). Five percent of the growing season is approximately 13 days. Factors that influence hydrology include precipitation, topography, soil permeability, and plant cover. Primary indicators of wetland hydrology include inundation or saturation in the upper 12 inches, drift lines, sediment deposits, and drainage patterns. Secondary indicators include oxidized rhizospheres, water-stained leaves, local soil survey data, and the FAC-neutral test of the vegetation.
- **Hydrophytic Vegetation:** Jurisdictional wetlands are typically dominated by hydrophytic plant species (e.g. more than 50 percent of the dominant plant species have an indicator status of facultative [FAC], facultative wetland [FACW], or obligate wetland [OBL]) (Reed 1988). Hydrophytic vegetation is “the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present,” as defined by the Corps (Environmental Laboratory 1987).

Pairs of wetland and upland data points were recorded at representative locations in each of the wetland types in the Project Study Area, and the wetland boundaries were extrapolated based upon similar variations in vegetation, hydrology, and topography. The boundaries of all waters, including wetlands, were mapped in the field onto 1:2,400 scale aerial photographs of the Project Study Area provided by Microsoft Corporation’s Bing maps. All potential boundaries within the Project Study Area were mapped. The locations of all data points and the wetland boundaries were mapped using a Trimble Geo-XT Global Positioning System (GPS) receiver. All GPS data were differentially corrected to achieve a horizontal accuracy of 1 to 3 meters. Mapped boundaries were digitized and projected onto current 1:2,400 (1 inch equals 200 feet) aerial photograph maps. Copies of the delineation data forms and photographs of representative locations are provided in Appendices A and B. The delineation map is provided as Figure 5.

### 2.1.3 Project Footprint and Project Study Area

The Project Footprint is defined as the area that may be disturbed during maintenance of KLM Site 1357, which includes a ten-foot by thirty-foot area around the pipeline, and a 12-foot wide and approximately 340-foot long access route connecting an unnamed rural access road to the maintenance site. The Project Footprint is approximately 0.10 acre in size. The Project Study Area includes the Project Footprint plus the additional area within a 300-foot-wide buffer centered on the anticipated maintenance point on the pipeline (Figure 2).

The project footprint and buffer are located on land owned by Contra Costa County, assessor’s parcel number (APN) 001-011-037-7. The project footprint is in the Clifton Court Forebay USGS 7.5 minute

quadrangle, in Section 27, Township 1 South, Range 3 East. The approximate coordinates of the anticipated maintenance point on the pipeline is latitude 37.820, and longitude -121.624.

#### 2.1.4 Driving directions from the USACE, Sacramento Office, to the project site:

- Head East on J St. towards 14<sup>th</sup> St.
- Take Left onto 14<sup>th</sup> St.
- Take Left onto I St.
- Take slight right toward CA-99 S/I-5 S
- Merge onto CA-99 S/I-5 S via ramp on left
- Slight left onto I-5 S
- Take exit 471 to merge onto CA-4 W/W Charter Wat
- Turn left onto Byron Hwy
- Slight left onto Byron Hwy/Co Rd. J4
- Turn right onto Holey Rd.
- Take first left onto Byron Hot Springs Rd and travel 1.2 miles to paved access road on right
- Travel 500 feet on unnamed rural access road and park on shoulder.

(The one way trip is approximately 75.6 miles)

### 3.1 RESULTS

The results section provides a description of the physical setting of the Project Study Area and vicinity as well as the results of a delineation of wetlands and other waters within the Project Study Area.

#### 3.1.1 Physical Setting

The physical setting of the Project Study Area is described below in terms of the climate, hydrology and topography present in the project area and vicinity, the soils found in the project footprint, and the vegetation communities that characterize the Project Study Area.

##### *Climate, Hydrology, and Topography*

The Project Study Area is located in the northern San Joaquin Valley. In this region, average temperatures in July and January (in Stockton) are 75 degrees F and 45 degrees F, respectively. Average annual precipitation in Stockton is 14.3 inches, and dense winter fogs, lasting a week or more, are common in the winter (UC Davis 2012). The Project Study Area is located within a gently sloping to flat plain at the eastern base of the Mount Diablo foothills. The project Study Area is within the San Joaquin Delta Watershed which drains 938 square miles of land area into the San Joaquin Delta. Brushy Creek, which originates west of the Project Study Area in the Mt. Diablo foothills, is the largest hydrologic feature in the immediate vicinity. A small intermittent tributary to Brushy Creek flows west to east into the Project Study Area, and although the tributary may have flowed in a continuous channel to an outlet east of the Project Study Area historically, it does not do so now. Instead, the tributary enters the project study area in a channel and soon after turns to sheet flow. The channel reestablishes a bed and bank temporarily just west of the project footprint but loses the bed and bank before reaching the project footprint and turns into a dispersed wash after it crosses under the rural access road in a culvert. Clifton Court Forebay is the closest potentially navigable water, but aerial imagery and site reconnaissance suggests that waters flowing through the Project Study Area are prevented from reaching Clifton Court Forebay by a series of channels and an infiltration basin that direct water away from the Byron Airport.

##### *Soils*

Soils in the project area are mapped by the National Resource Conservation Service (NRCS) Soil Survey as the Solano Loam map unit. This unit is composed of 85% Solano Series and 10% minor components. The minor components are specified as the San Ysidro Series. Solano Series soils are found on nearly level low terraces and in valley plains with slightly irregular or hummocky surface at elevation of less than 100 feet. The soils formed in mixed, moderately fine textured, sedimentary alluvium. Soils in the Solano Series are somewhat poorly drained, exhibit very slow or slow runoff, and have very slow permeability. Of note, the B horizon in the Solano Series, starting around 9 inches and extending down to 21 inches, is a clay loam that is considered extremely hard, firm, sticky, and plastic with very few fine roots. (NRCS 2012a). Figure 3 shows the extent of the Solano Loam map unit in the vicinity of the Project Study Area.

##### *Vegetation*

The project site lies at the intersection of alkali grassland and alkali wetland land cover types as mapped in the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (HCP) (Jones & Stokes 2006). Field surveys of the Project Footprint and surrounding study area confirmed the mapping in the HCP and refined the boundaries of the land cover types in the Project Study

Area. All of the plants identified during the July 2012 survey in the Project Study Area are listed in Appendix C with their wetland indicator status. Figure 4 shows the locations of alkali grassland and alkali wetland vegetation within the Project Study Area.

Alkali grasslands generally occur on alkaline soil units within the Marcuse, Pescadero, Sacramento, and Solano Soil Series. Dominant grasses in alkali grassland include saltgrass (*Distichlis spicata*) and wild barley (*Hordeum* spp.). The associated herb cover consists of halophytes, including saltbush (*Atriplex* spp.), alkali heath (*Frankenia salina*), alkali weed (*Cressa truxillensis*), alkali mallow (*Malvella leprosa*), and common spikeweed (*Centromadia pungens*) (Jones & Stokes 2006).

Alkali Wetland vegetation is supported by ponded or saturated soil conditions. The vegetation occurs within perennial or seasonally wet wetlands on alkali soils. Alkali wetland vegetation is often found within an alkali grassland mosaic in localized depressions and swales. Alkali wetland vegetation is composed of halophytic plant species adapted to both wetland conditions and high salinity levels. Typical species include those common to both seasonal and alkali wetlands, such as salt grass, alkali heath, and common spikeweed (Jones & Stokes 2006).

### 3.1.2 Delineation Results

The field survey identified **0.892** acre of waters of the U.S. in the Project Study Area. There are **0.880** acre of wetlands and **0.012** acre of other waters of the U.S. (Table 3-1) The acres of waters of the U.S. are comprised of a dry intermittent stream feature. The acres of wetlands are comprised of a large seasonal alkali wetland immediately surrounding the stream and a series of discrete seasonal alkali wetlands in topographic depressions. The Cowardin classification for the wetlands identified in the Project Study Area is Palustrine vegetated unconsolidated shore (Cowardin et al. 1979). The features identified during the field visit are described in the following section.

#### 3.1.2.1 Seasonal Alkali wetlands.

##### *WL 1*

Seasonal alkali wetland WL 1 appears to form from the channel of intermittent stream (OW 1) that runs through the Project Study Area. The channel dissipates as it flows into the Project Study Area from the west, fanning out into a seasonal alkali wetland. This wetland occupies the floodplain of the channel and is identified by depressional topography and vegetation that is growing more densely than the surrounding, upland alkali grassland. WL 1 is dominated by saltgrass, Mediterranean barley (*Hordeum marinum*) and foxtail barley (*Vulpia myuros*). Though soil pits could not be dug due to pipeline safety rules, hydric soil (Solano loam) is mapped for this area (NRCS 2012b, and 2012c). Drainage patterns, depressional topography, and the generation of the wetland from the intermittent stream provide evidence of wetland hydrology. Hydrology is provided by precipitation events and subsequent surface flow from the intermittent stream.

##### *WL 2 through WL 7*

A series of depressional seasonal alkali wetlands were identified south of the intermittent stream (OW 1) and WL 1. These wetlands are similar in plant composition to WL 1 but differ in their topography and hydrologic connectivity. WL 2 through WL 7 are located in distinct, rounded, topographic depressions. Topographically, they resemble vernal pools. However, no vernal pool plant species were identified in any of the depressions at the time of the survey. Dominant vegetation included soft chess (*Bromus hordeaceus*), Mediterranean barley and saltgrass. Other common species included woolly marbles

(*Psilocarphus brevissimus*) and Italian rye grass (*Festuca perennis*). As with WL 1, WL 2 through WL 7 occur on a hydric soil, Solano loam. The primary hydrologic indicator observed during the delineation was surface soil cracks. Hydrology for these features appears to be provided by precipitation events and surface run-off from the surrounding upland alkali grassland. The wetlands appear to be isolated from one another and from any other waters of the U.S. The presence of painted PVC pipes in the middle of most of these wetlands suggests that they hold water in the rainy season, the levels of which are measured by the pipes.

### 3.1.2.2 Intermittent Stream

#### OW 1

An intermittent stream (OW 1), approximately two feet wide, runs west to east through the Project Study Area. The stream is a former tributary to Brushy Creek, one of a series of drainages that flow from the foothills west of the Project Study Area. OW 1 no longer has any hydrologic connectivity to Brushy Creek. OW 1 becomes a discontinuous drainage by the time it reaches the Project Study Area, defined only in segments where there is a defined bed and bank. Erosion along the banks is evidenced by undercutting and lack of vegetation. The bed of the channel is vegetated with annual grasses. As OW 1 reaches the project footprint, it levels out in the landscape into a seasonal alkali wetland (WL 1). The channel was completely dry at the time of the delineation. Evidence of hydrology was indicated by the presence of bank erosion and some matted down vegetation.

### 3.1.3 Summary of Findings

Field surveys identified the presence of seven wetlands and one other water in the Project Study Area. Figure 5 shows the location and extent of these features. Table 3-1 summarizes the area and extent of each feature within the Project Study Area Boundary.

**Table 3-1**  
**Extent of wetlands and other waters in the Project Study Area<sup>1</sup>**

Feature ID	Area (ac.)	Area (ft <sup>2</sup> )	Linear extent (ft)
OW 1	0.012	522.55	12' x 255'
WL 1	0.691	30116.12	n/a
WL 2	0.021	920.16	n/a
WL 3	0.029	1282.32	n/a
WL 4	0.039	1679.54	n/a
WL 5	0.031	1353.32	n/a
WL 6	0.028	1199.99	n/a
WL 7	0.040	1733.60	n/a
WL 8	0.001	41.90	n/a
Total	0.892	38,849.5	

<sup>1</sup> All calculations were made in ArcGIS 10.

## 4.1 REFERENCES

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**Appendix A**  
**Arid West Wetland Delineation Data Sheets**

**Appendix A**  
**Arid West Wetland Delineation Datasheets**

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**Appendix B**  
**Project Study Area Photographs**



**Wetland Point 1A, located within feature “WL 1”**



**Wetland Point 1B, located in uplands adjacent to “WL 1”**



**Wetland Point 2A, located in feature “WL 2”**



**Wetland Point 2A, located in feature “WL 2”**



**Wetland Point 2B, located in uplands adjacent to “WL 2”**



**Wetland Point 2B, located in uplands adjacent to “WL 2”**

**Appendix B**  
**Project Study Area Photographs**

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**View of the Project Footprint, facing west. Photographer is standing at the center stake and standing within seasonal alkali wetland feature “WL 1”**



**View of the Project Footprint, facing east. Photographer is standing at the center stake and standing within seasonal alkali wetland feature “WL 1”**

**Appendix B**  
**Project Study Area Photographs**

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**Seasonal WL 3**



**View of OW 1, west of project footprint**

**Appendix B**  
**Project Study Area Photographs**

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**View from WL 1 facing south, looking at uplands within temporary upland access route**

**Appendix C**  
**Project Study Area Plant List**

**Appendix C**  
**Project Study Area Plant List**

**Table C-1. Plant List from Site Visits<sup>1</sup>**

Species Name	Common Name	Family	Indicator Status <sup>2</sup>
<i>Aira sp.</i>	hairgrass	Poaceae	n/a
<i>Atriplex fruticulosa</i>	Ball saltbush	Chenopodiaceae	FACW
<i>Avena barbata</i>	Slender wild oats	Poaceae	UPL
<i>Bromus hordeaceus</i>	Soft brome	Poaceae	FACU
<i>Centaurea solstitialis</i>	Yellow star thistle	Asteraceae	NL
<i>Centromadia fitchii</i>	Fitch's False Tarplant	Asteraceae	FACU
<i>Distichlis spicata</i>	saltgrass	Poaceae	FACW
<i>Erodium cicutarium</i>	Red-stemmed filaree	Geraniaceae	NL
<i>Frankenia salina</i>	Alkali heath	Frankeniaceae	FACW
<i>Grindelia camporum</i>	Great Valley gumweed	Asteraceae	FACU
<i>Hordeum marinum</i>	Seaside barley	Poaceae	FAC
<i>Lolium perenne</i>	Perennial Rye Grass	Poaceae	FAC
<i>Polypogon monspeliensis</i>	Annual rabbit's-foot grass	Poaceae	FACW
<i>Psilocarphus brevissimus</i>	Dwarf Woollyheads	Asteraceae	FACW
<i>Spergularia sp.</i>	Sand spurry	Caryophyllaceae	n/a
<i>Vulpia myuros</i>	Rattail six weeks grass	Poaceae	FACU

<sup>1</sup> This table includes all plants observed during the July 2012 planning field survey and includes some species that were too far past their blooming period to identify to specific epithet.

<sup>2</sup> Indicator Status was determined using the online *North American Digital Flora: National Wetland Plant List, version 2.4.0* accessed at: [https://wetland\\_plants.usace.army.mil](https://wetland_plants.usace.army.mil) on July 10, 2012. (Lichvar and Kartesz 2009)