

Initial Study/Proposed Mitigated Negative Declaration
**Sutter Slough Critical Erosion Repairs
Flood System Repair Project**



Prepared for:
Reclamation
District No. 999

January 2021

Prepared by:



Initial Study/Proposed Mitigated Negative Declaration

Sutter Slough Critical Erosion Repairs Flood System Repair Project

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January 2021

Project No. 2001792

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Reclamation District No. 999

NOTICE OF INTENT

TO ADOPT A MITIGATED NEGATIVE DECLARATION AND NOTICE OF PUBLIC HEARING

(Pursuant to CEQA Section 21092 and CEQA Guidelines Section 15072)

SUTTER SLOUGH CRITICAL EROSION REPAIRS FLOOD SYSTEM REPAIR PROJECT

Reclamation District No. 999 (RD No. 999 or District) proposes to adopt a Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (CEQA) (Section 15000 et seq., Title 14, California Code of Regulations) for the Sutter Slough Critical Erosion Repairs Flood System Repair Project (project or proposed project).

In January 2020, MBK Engineers (MBK), on behalf of the District, identified seven erosion sites along Sutter Slough based on observations from site reconnaissance, geometric analysis from a land survey of the levee, and a bank and bathymetric survey of the channel. The project would either address bank loss, toe scour, and erosion by flattening the waterside bank slope and placing approximately 18- to 24-inch riprap to reestablish the bank slope or monitor conditions within erosion sites. Erosion at the sites typically consists of toe scour within the channel causing erosion and slope instability that progresses into the bank and waterside levee toe. Project construction is anticipated to begin in 2022 and would occur between approximately August 1 to November 30 for 5 consecutive years.

RD No. 999 is the lead agency for the project, under CEQA, and has directed the preparation of an Initial Study (IS) on the proposed project in accordance with CEQA requirements and the State CEQA Guidelines. The IS describes the proposed project and assesses the proposed project's potentially significant adverse impacts on the physical environment. It concludes that the proposed project's potentially significant or significant adverse effects on the environment can be mitigated to less-than-significant levels; therefore, a proposed MND has been prepared. The project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code.

Agencies and members of the public are invited to provide written comments on the IS/MND. **The comment period is from January 25, 2020 to February 23, 2020.** The IS/MND can be reviewed at the RD No. 999 office at 38563 Netherlands Road Clarksburg, CA 95612 or on RD No. 999 web site at: <http://rd999.org/resources/>

Comments can be sent to Tina Anderson, MBK, at 38563 Netherlands Road Clarksburg, CA, or email at Anderson@mbkengeers.com. All comments must be received by 5:00 p.m. on February 23, 2020. For e-mailed comments, please include the project title in the subject line, attach comments in MS Word format, and include the commenter's name and U.S. Postal Service mailing address.

PROPOSED MITIGATED NEGATIVE DECLARATION

Project:	Sutter Slough Critical Erosion Repairs Flood System Repair Project
Lead Agency:	Reclamation District No. 999

PROJECT LOCATION

The Sutter Slough Critical Erosion Repairs Flood System Repair Project (project) area is located within Reclamation District No. 999 (RD 999 or District) in Yolo and Solano counties, south of the City of West Sacramento and northeast of Rio Vista. Like many areas in the Delta, the lands within the District are referenced in current and historic reports and maps by multiple names. The District is alternately known as “Netherlands” and “Holland District,” due to historical land ownership by the Netherlands Farming Company and later the Holland Land Company.

The District is comprised of five levee sections: the Deep Water Ship Channel Levee (Unit 1), Miner Slough Levee (Unit 2), Sutter Slough Levee (Unit 3), Sacramento River Levee (Unit 4), and Elk Slough Levee (Unit 5). The District is joined by Reclamation Districts 307 and 765 to form one contiguous hydrologic unit. State Route 84 and several significant county roads connect to Ryer Island and Highway 220 at the southern end of the District. The erosion repair sites addressed in this project’s Initial Study (IS) are located along Sutter Slough Levee (Unit 3). Seven sites would be repaired or monitored to address bank loss, toe scour, and erosion by flattening the waterside levee slope and placing riprap to reestablish the bank slope and channel.

PROJECT DESCRIPTION

The project would either address bank loss, toe scour, and erosion by flattening the waterside bank slope and placing approximately 18- to 24-inch riprap to reestablish the bank slope or monitor conditions within erosion sites. Erosion at the sites typically consists of toe scour within the channel causing erosion and slope instability that progresses into the bank and waterside levee toe.

Based on individual site characteristics, two possible repair types have been identified for implementation under the proposed project – Repair Type 1 for critical sites and Repair Type 2 for serious sites. Type 1 repairs would address sites with severe erosion where the bank slope has been eroded into the levee prism. This repair consists of placing riprap along the levee slope to the levee toe, at variable elevations, from approximately elevation 8 feet to elevation -15 feet. Type 2 repairs where the erosion is less severe, consist of repairing areas where erosion likely caused by boat wake, tidal action, and bank instability has created a cut into the levee toe near the water level. This repair would consist of placing a thin section of riprap, at variable elevations, from approximately elevation 8 feet to elevation 1 foot. Within erosion sites that exhibit less erosion than others conditions would be monitored as part of the proposed project.

Project construction is anticipated to begin in 2022 and would occur between approximately August 1 to November 30 for 5 consecutive years.

FINDINGS

An IS was prepared to assess the proposed project's potential effects on the environment and the significance of those effects. Based on the IS, it has been determined that the proposed project would not result in significant adverse effects on the physical environment after implementation of mitigation measures. This conclusion is supported by the following findings:

1. The proposed project would have no impacts on agriculture and forestry resources, land use and planning, mineral resources, population and housing, and wildfire.
2. The proposed project would have less-than-significant impacts on aesthetics, energy, greenhouse gas emissions, noise, public services, recreation, transportation, and utilities and service systems.
3. The proposed project would have potentially significant impacts on air quality, biological, Tribal and cultural resources, geology and soils, hazards and hazardous materials, and hydrology and water quality, but mitigation measures are proposed to avoid or reduce these effects to less-than-significant levels.
4. The proposed project would not have the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory.
5. The proposed project would not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
6. The proposed project would not have possible environmental effects that are individually limited but cumulatively considerable and contribute to a significant cumulative impact. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
7. The environmental effects of the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly.

Following are the proposed mitigation measures that would be implemented by RD 999 to avoid or minimize environmental impacts. Implementation of these mitigation measures would reduce the environmental impacts of the proposed project to less-than-significant levels.

Mitigation Measure AQ-1: Implement SMAQMD Basic Construction Emission Control Practices

The District or its contractor shall implement the following SMAQMD measures, if applicable and feasible, for all construction activities taking place within the boundaries of SMAQMD:

- Haul trucks transporting soil, sand, or other loose material on the site shall be covered or shall maintain at least 2 feet of free board space. Any haul trucks transporting aggregate material (as defined by California Public Resources Code Section 23114) that would be traveling along freeways or major roadways should be covered.
- Wet power vacuum street sweepers shall be used to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Dry power sweeping shall not be used.
- Haul truck speeds on unpaved roads shall be limited to 15 miles per hour.
- Idling time shall be minimized either by shutting equipment off when not in use or reducing the time of idling to 5 minutes in accordance with California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485. Clear signage that posts this requirement for workers at the entrances to the site shall be provided.
- All equipment shall have current certificate(s) of compliance for the California Air Resource Board's In-Use Off-Road Diesel-Fueled Fleets Regulation as set forth in California Code of Regulations, Title 13, Sections 2449 and 2449.1.
- All construction equipment shall be maintained in proper working condition according to manufacturer's specifications. The equipment shall be checked by a certified mechanic and shall be determined to be running in proper condition before it is operated.

Timing: Before and during construction

Responsibility: RD 999 or its construction contractor(s)

Mitigation Measure BIO-1: Conduct Worker Environmental Awareness Training

RD 999 shall conduct environmental awareness training before project activities begin to inform all construction personnel about measures to avoid and minimize potential effects on biological resources.

The program will be conducted by a qualified biologist and will address the following: biology and habitat needs for special-status species with potential to occur in the project vicinity, regulatory status and protection, measures required to reduce potential impacts during project construction, penalties for non-compliance, and benefits of compliance.

Timing: Before and during construction
Responsibility: RD 999

Mitigation Measure BIO-2: Limit Timing of In-water Work

In-water work will be completed between August 1 and November 30, the period designated by the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) and generally accepted by the National Marine Fisheries Service (NMFS) as when special-status fish are least vulnerable to impacts from in-channel activities (USFWS 2004, DFG 2005).

Timing: During construction
Responsibility: RD 999 or its construction contractor(s)

Mitigation Measure BIO-3: Minimize Turbidity and Monitor According to Permit Requirements

Rock material used for levee repairs below the mean high-water (MHW) mark shall be clean, hard, rock with no appreciable fines and shall be placed in a manner that limits resuspension of sediments. Turbidity measurements shall be taken in accordance with the project's Clean Water Act (CWA) 401 Water Quality Certification. If necessary to reduce turbidity levels, rock placement methods shall be modified, slowed, or suspended to comply with the terms and conditions of the Certification.

Timing: During construction
MH

Mitigation Measure BIO-4: Implement Compensatory Aquatic Habitat Mitigation

The District will implement the measures described below to minimize impacts on aquatic habitat and compensate for loss of aquatic habitat, such that there is no net loss of aquatic function and values:

- An acreage of impact and mitigation ratios will be developed in coordination with resource agencies during project permitting and the Section 7 Endangered Species Act consultation process.
- Mitigation may include onsite enhancements, offsite habitat acquisition, and/or the purchase of credits at an accredited mitigation bank to compensate for any permanent loss of habitat.

Timing: Before and during construction
Responsibility: RD 999

Mitigation Measure BIO-5: Protect Riparian Habitat, Obtain and Comply with Necessary State Permits/Authorizations, and Develop and Implement a Mitigation Plan, if Necessary.

The District will implement the measures described below to minimize impacts on riparian habitat and compensate for loss of riparian habitat, such that there is no net loss of riparian functions and values:

- Removal of native woody vegetation will be avoided to the extent feasible. When feasible, the root system of shrubs shall be retained so that woody vegetation may re-sprout.
- Prior to removal of riparian vegetation, a CDFW streambed alteration agreement shall be obtained under Section 1602 of the California Fish and Game Code. Mitigation, if required, may be accomplished through habitat replacement, enhancement of degraded habitat (i.e., removal of invasive trees along Sutter Slough at Site 1), offsite mitigation at an established mitigation bank, contribution of in-lieu fees, or other methods acceptable to CDFW. Conditions of issuance of the streambed alteration agreement, including minimization and compensation measures, shall be implemented as part of the project, such that there is no net loss of riparian functions and values.
- If compensation is provided through permittee-responsible mitigation, a mitigation plan shall be developed to detail appropriate compensation measures determined through consultation with CDFW, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails.

Timing: Before and during construction

Responsibility: RD 999

Mitigation Measure BIO-6: Minimize Potential Impacts on Valley Elderberry Longhorn Beetle

The District shall implement the following measures to minimize potential for significant adverse effects on valley elderberry longhorn beetle during project activities at erosion repair sites along Sutter Slough:

- All elderberry shrubs within 165 feet of project activities shall be identified and marked by a qualified biologist prior to construction.
- Impacts on elderberry shrubs will be avoided and/or minimized by considering the location of elderberry shrubs and avoiding them when feasible during erosion site repairs. If feasible on the steep levee slope, elderberry shrubs to be avoided will be protected with

high-visibility fencing; at a minimum, elderberry shrubs will be marked with a high visibility marker, such as flagging tape.

- A minimum 20-foot protective buffer will be maintained around elderberry shrubs with a stem greater than 1 inch in diameter at ground level. If this is not feasible, the District will request technical assistance from USFWS regarding potential additional minimization and avoidance measures and will implement all feasible measures recommended by USFWS to minimize adverse impacts on and avoid take of valley elderberry longhorn beetle. Such measures may include, but not necessarily be limited to, restoring any areas within 100 feet of elderberry shrubs that are disturbed by project activities, prohibiting use of herbicides and fertilizers within the dripline and insecticides within 100 feet of elderberry shrubs, and implementing dust control measures when working near elderberry shrubs.
- If removing elderberry shrubs cannot be avoided, an incidental take permit may be required. If necessary, an appropriate and feasible mitigation plan will be developed and provided to USFWS for approval, prior to implementation by the District. The plan may include, but will not necessarily be limited to, transplanting shrubs to a conservation area and planting additional seedlings or cuttings at a ratio up to 3:1 (USFWS 2017). If transplanting shrubs to be removed and planting elderberry seedlings is not feasible, purchasing credits at a USFWS-approved mitigation bank may be used as alternative mitigation.
- If shrub transplantation and seedling planting will occur, the mitigation plan will specify how to manage the elderberry transplant area to ensure that the appropriate habitat conditions are provided. At a minimum, the plan will describe requirements for transplanting shrubs that require removal, specify the number of replacement elderberry shrubs and associated native plants to be established and associated success criteria, specify remedial measures to be undertaken if survival success criteria are not met, and describe short- and long-term maintenance and management, including funding.
- If off-site mitigation includes dedicating conservation easements, purchasing mitigation credits, or implementing other off-site conservation measures, the details of these measures will be included in the mitigation plan. The plan will list responsible parties for long-term management, conservation easement holders, and long-term management requirements as appropriate to target long-term habitat viability and preservation.

Timing: Before ground-disturbing activities adjacent to elderberry shrubs

Responsibility: RD 999 and its construction contractor(s)

Mitigation Measure BIO-7: Minimization Measures for Giant Garter Snake

The District will implement the measures described below to minimize impacts on giant garter snake:

- A qualified biologist shall complete a preconstruction survey for giant garter snake no more than 24 hours in advance of ground-disturbing activities. If there is a lapse in greater than 14 days in project-related ground disturbance, the areas which provide suitable upland habitat shall be re-surveyed by a qualified biologist.
- Initial ground disturbing project activities in areas of suitable upland habitat would be conducted during the giant garter snake active period—before October 1.
- A biologist shall be present when conducting initial ground-disturbing activities in areas of suitable upland habitat before October 1.

Timing: Before and during construction

Responsibility: RD 999

Mitigation Measure BIO-8: Minimize Disturbance of Active Raptor and Song Sparrow Nests and Avoid Take of Individuals.

The District and its contractor(s) will implement the following measures to reduce effects of the project on nesting raptors and song sparrows:

- All vegetation removal along the banks of Sutter Slough will be conducted between September 16 and January 31 (outside of the nesting season), to the extent feasible.
- If project activity is scheduled to occur during the nesting season (February 1–September 15), focused surveys for nesting raptors and song sparrows will be conducted. Surveys for Swainson’s hawk will follow methodology developed by the Swainson’s Hawk Technical Advisory Committee (2000).
- Nesting surveys will be conducted by a qualified biologist before the start of project construction to identify active nests on the project site and in the vicinity. At least one survey will be conducted no more than 14 days before project activities commence. Surveys for Swainson’s hawk nests will include all accessible areas of suitable nesting habitat within 0.25 mile of the project site. Surveys for other raptors and song sparrows will include accessible suitable nesting habitat located within 500 feet of the project site. A letter report documenting the survey methods and results will be prepared and submitted to CDFW. If no active nests are found, no further mitigation is required.
- If active nests are identified, appropriate buffers around the active nest sites will be established to avoid nest failure resulting from project activities. No project activity shall commence within the buffer areas until a qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer

would not result in nest abandonment. CDFW guidelines recommend implementing 0.25- or 0.5-mile-wide buffers for Swainson's hawk (depending on local conditions) and 500-foot buffers for other raptor species. The size of the buffer may be adjusted if a qualified biologist determines it would not be likely to adversely affect the nest. If reduced buffers are implemented, a qualified biologist will monitor the nest during construction activities to ensure that the reduced buffers do not adversely affect the adults or their young. If construction activities cause the nesting birds or their young to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, the buffer will be adjusted to ensure project activities are far enough from the nest to avoid such agitation.

Timing: Before ground disturbing activities
Responsibility: RD 999 and its construction contractor(s)

Mitigation Measure BIO-9: Protect Jurisdictional Waters, Obtain and Comply with Necessary Federal and State Permits/Authorizations, and Develop and Implement a Mitigation Plan, if Necessary.

The District will implement the measures described below to minimize impacts on jurisdictional waters:

- Before beginning project activities, high-visibility markers, such as fencing or flagging, shall be installed to delineate the work limits of the erosion repair site. The fencing or flagging shall be inspected before the start of each workday and shall be removed when construction is completed. Sensitive habitat information shall be incorporated into project bid specifications, along with a requirement for contractors to avoid these areas.
- Prior to disturbing jurisdictional waters, authorization for impacts on jurisdictional waters shall be secured – a CWA Section 404 permit from the U.S. Army Corps of Engineers (USACE) and a water quality certification pursuant to CWA Section 401 from the Central Valley Regional Water Quality Control Board (RWQCB) – before starting project activities. Any measures determined necessary during the 404 and 401 permitting processes shall be implemented, such that there is no net loss of functions and values of jurisdictional waters.
- Mitigation, if required by agencies with permit authority over aquatic resources, may be accomplished through habitat replacement, enhancement of degraded habitat, offsite mitigation at an established mitigation bank, contribution of in-lieu fees, or other method acceptable to the regulatory agencies, such that there is no net loss of functions and values.

Timing: During project activities
Responsibility: RD 999 and its construction contractor(s)

Mitigation Measure CR-1: Address Previously Undiscovered Historic Properties, Archaeological Resources, and Tribal Cultural Resources.

RD 999 shall implement the following:

- Before project activities begin, environmental awareness training will be presented to all project personnel working on the project site. The training will inform all construction personnel about measures to avoid and minimize potential effects on historic, cultural, and Tribal Cultural Resources. The program will be conducted by qualified staff and will address the following: potential for resources to occur in the project vicinity, regulatory status and protection, measures required to reduce potential impacts during project construction, the protocols to be implemented in the event resources are encountered during construction, penalties for non-compliance, and benefits of compliance.
- If buried or previously unidentified historic properties, archaeological resources, or Tribal Cultural Resources are discovered during project activities, all work within a 100-foot radius of the find shall cease. The District shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeologists to assess the discovery and recommend what, if any, further treatment or investigation is necessary for the find. Interested Native American Tribes will also be contacted. Any necessary treatment/investigation shall be developed with interested Native American Tribes providing recommendations and shall be coordinated with the State Historic Preservation Officer and RD 999, if necessary, and shall be completed before project activities continue in the vicinity of the find.

Timing: Before and during construction

Responsibility: RD 999

Mitigation Measure CR-2: Avoid Potential Effects on Undiscovered Burials.

The District shall implement the following measures to reduce or avoid impacts related to undiscovered burials. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all potentially damaging ground-disturbance in the area of the burial and within a 100-foot radius, shall halt and the Yolo County Coroner shall be notified immediately. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]).

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. RD 999 shall ensure that the procedures for the treatment of

Native American human remains contained in California Health and Safety Code Sections 7050.5 and 7052 and Public Resources Code Section 5097 are followed.

Timing: During construction
Responsibility: RD 999

Mitigation Measure GEO-1: Implement a Stormwater Pollution Prevention Plan and Associated BMPs.

The District shall prepare and implement the appropriate Stormwater Pollution Prevention Plan (SWPPP), or Stormwater Management Plan (SWMP), as required by Federal and State laws for projects with ground disturbance greater than 1 acre, to prevent and control pollution and to minimize and control runoff and erosion. The SWPPP or SWMP shall identify the activities that may cause pollutant discharge (including sediment) during storms or strong wind events, techniques to control pollutant discharge, and an erosion control plan. Regardless of the need for a SWPPP or SWMP, construction techniques and Best Management Practices (BMPs) will be identified and implemented, as appropriate to reduce the potential for runoff and exposure to hazardous materials.

Construction techniques will include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. BMPs that specify erosion and sedimentation control measures to be implemented may include: silt fences, staked straw bales/wattles, silt/sediment basins and traps, geofabric, soil stabilizers, and re-seeding with native species to revegetate disturbed areas.

The SWPPP or SWMP shall also include a spill prevention, control, and countermeasure plan, and applicable hazardous materials business plans. The SWPPP or SWMP shall identify the types of materials used for equipment operation (including fuel and hydraulic fluids), measures to prevent hazardous material and waste spills, and materials available to clean up hazardous material and waste spills. The SWPPP or SWMP shall also identify emergency procedures for responding to spills. No refueling, storage, servicing, or maintenance of equipment shall take place on land within 100 feet of the ordinary high-water mark of Sutter Slough.

The SWPPP shall also include dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. The BMPs presented in either document shall be clearly identified and maintained in good working condition throughout the construction process. The construction contractor shall retain a copy of the approved SWPPP or SWMP on the construction site and modify it as necessary to suit specific site conditions.

The District and all contractors will abide by regulations governing hazardous materials transport included in CCR Title 22, the California Vehicle Code (CCR Title 13), and the State Fire Marshal Regulations (CCR Title 19). Transport of hazardous materials can only be conducted under a registration issued by the California Department of Toxic Substances

Control. Construction contractors shall be required to use, store, and transport hazardous materials in compliance with Federal, State, and local regulations.

Timing: Before and during construction

Responsibility: RD 999 and construction contractor(s)

TCR-1: Implement Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures

The District shall implement the following measures:

- Culturally affiliated Tribes will be further consulted concerning Tribal Cultural Resources that may be impacted if these types of resources are discovered during construction. Further consultation with culturally affiliated Tribes will focus on identifying measures to avoid or minimize impacts on any such resources discovered during construction.
- Interested Tribes will be invited to have Tribal representatives monitor project related ground disturbing activities including vegetation removal.
- Should a Tribal Cultural Resource be identified in the project area during construction, the following performance standards shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of a Tribal Cultural Resource:
 - Each identified Tribal Cultural Resource will be evaluated for CRHR eligibility through application of established eligibility criteria (CCR 15064.636), in consultation with consulting Native American Tribes.
 - If a Tribal Cultural Resource is determined to be eligible for listing on the CRHR, RD 999 will avoid damaging effects to the Tribal Cultural Resource in accordance with California PRC Section 21084.3, if feasible.

Timing: Before and during construction

Responsibility: RD 999 and construction contractor(s)

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Abbreviations and Acronyms

A-80	Exclusive Agriculture 80 acres
A-N	Intensive Agriculture
AB	Assembly Bill
B.C.E	Before Common Era
BMPs	best management practices
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CALFIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
C.E.	Common Era
CIC	Central California Information Center
CCAPCD	Calaveras County Air Pollution Control District
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geological Survey
CNPS	California Native Plant Society
CRHR	California Register of Historical Resources
CV	Central Valley
CO	carbon monoxide
CO ₂ e	Carbon dioxide equivalent
CWA	Clean Water Act
dBA	Decibel
dbh	diameter at breast height
District or RD 999	Reclamation District No. 999
DO	Dissolved oxygen
DOC	California Department of Conservation
DPS	Distinct Population Segment

DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ESA	Federal Endangered Species Act
ESU	Evolutionary Significant Unit
FGC	California Fish and Game Code
FPD	Fire Protection District
FSRP	Flood System Repair Project
GEI	GEI Consultants, Inc.
GHG	greenhouse gas
HCP/NCCP	Habitat Conservation Plan/Natural Community Conservation Plan
IEP	Interagency Ecological Program
IS	Initial Study
kWh	kilowatts per hour
lbs/day	pounds per day
L _{dn}	day/night average sound level
L _{eq}	equivalent continuous sound level
LMA	Local Maintaining Agency
MBK	MBK Engineers
MHW	mean high water
mm	millimeter
MND	Proposed Mitigated Negative Declaration
MT	metric tons
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NMFS	National Marine Fisheries Service
No.	number
NO _x	nitrogen oxides
NWIC	Northwest Information Center
PFA	Project Funding Agreement
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter

Ppt	parts per thousand
PRC	California Public Resources Code
proposed project or project	Sutter Slough Critical Erosion Repairs Flood System Repair Project
Reclamation	U.S. Bureau of Reclamation
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SPFC	State Plan of Flood Control
SRA	shaded riverine aquatic
SRFCP	Sacramento River Flood Control Project
SWPPP	Storm Water Pollution Prevention Plan
SWMP	Stormwater Management Plan
SWRCB	State Water Resource Control Board
USACE	U.S. Army Corps of Engineers
UBC	Uniform Building Code
VMT	vehicle miles traveled
YSAQMD	Yolo-Solano Air Quality Management District

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Chapter 1. Introduction

Reclamation District Number (No.) 999 (RD 999 or District) has prepared this Initial Study (IS) and a proposed Mitigated Negative Declaration (MND) in compliance with the California Environmental Quality Act (CEQA) to address the potentially significant environmental impacts of the proposed Sutter Slough Critical Erosion Repairs Flood System Repair Project (proposed project or project) in Yolo and Solano counties, California. The District is the lead agency under CEQA.

The District has completed the following documents, as required by CEQA:

- an intent to adopt an MND for the proposed project
- a proposed MND
- an IS

After the required public review of this document is complete, the District will consider adopting the proposed MND, adopting a Mitigation Monitoring and Reporting Program (MMRP), and approving the proposed project.

1.1 Purpose of the Initial Study

This document is an IS prepared in accordance with CEQA (California Public Resources Code [PRC], Section California Code of Regulations [CCR] 21000 et seq.) and the State CEQA Guidelines (Title 14, Section 15000 et seq. of the CCR). The purpose of this IS is to (1) determine whether proposed project implementation would result in potentially significant or significant impacts on the physical environment; and (2) incorporate mitigation measures into the proposed project design, as necessary, to eliminate the proposed project's potentially significant or significant project impacts or reduce them to a less-than-significant level. An MND is prepared if the IS identified one or more potentially significant impacts, and: (1) revisions in the proposed project mitigate the potentially significant impacts to less-than-significant levels; and (2) there is no substantial evidence, in light of the whole record before the lead agency, that the proposed project, as revised, may have a potentially significant or significant impact on the physical environment.

An IS presents environmental analysis and substantial evidence in support of its conclusions regarding the significance of environmental impacts. Substantial evidence may include expert opinion based on facts, technical studies, or reasonable assumptions based on facts. An IS is neither intended nor required to include the level of detail provided in an Environmental Impact Report (EIR).

CEQA requires that all State and local government agencies consider the potentially significant and significant environmental impacts of projects they propose to carry out or over which they

have discretionary authority, before implementing or approving those projects. The public agency that has the principal responsibility for carrying out or approving a proposed project is the lead agency for CEQA compliance (State CEQA Guidelines, CCR Section 15367). The District has principal responsibility for carrying out the proposed project and is therefore the CEQA lead agency for this IS/MND.

If there is substantial evidence (such as the findings of an IS) that a proposed project, either individually or cumulatively, may have a significant or potentially significant impact on the physical environment, the lead agency must prepare an EIR (State CEQA Guidelines, CCR Section 15064[a]). If the IS concludes based on substantial evidence that impacts would be less-than-significant, or that mitigation measures committed to by the project proponent (the District) would reduce impacts to a less-than-significant level, a Negative Declaration or MND may be prepared.

The District has prepared this IS to evaluate the potential environmental impacts of the proposed project and has incorporated mitigation measures to eliminate or reduce any potentially significant project-related impacts. Therefore, an MND has been prepared for this project.

1.2 Summary of Findings

Chapter 3, “Environmental Checklist,” of this document contains the analysis and discussion of potential environmental impacts of the proposed project. Based on the issues evaluated in that chapter, it was determined that:

The proposed project would result in no impacts on the following issue areas:

- Agriculture and forestry resources
- Land use and planning
- Mineral resources
- Population and housing
- Wildfire

The proposed project would result in less-than-significant impacts on the following issue areas:

- Aesthetics
- Energy
- Greenhouse gas emissions
- Noise
- Public services
- Recreation
- Transportation
- Utilities and service systems

The proposed project would result in less-than-significant impacts *after* mitigation implementation on the following issue areas:

- Air quality
- Biological resources
- Cultural resources
- Geology and soils
- Hazards and hazardous materials
- Hydrology and water quality
- Tribal Cultural Resources
- Mandatory findings of significance

1.3 Document Organization

This document is divided into five key sections:

Chapter 1 - Introduction describes the purpose of the IS/MND, summarizes findings, and describes the organization of this IS.

Chapter 2 - Project Description describes the project location and background, project objectives, project components and characteristics, construction activities, project operations, and discretionary actions and approvals that may be required.

Chapter 3 - Environmental Checklist presents an analysis of environmental issues identified in the CEQA Environmental Checklist and determines whether project implementation would result in a beneficial impact, no impact, less-than-significant impact, less-than-significant impact with mitigation incorporated, potentially significant impact, or significant impact, on the physical environment in each issue area. Should any impacts be determined to be potentially significant or significant with mitigation incorporated, an EIR would be required. For the proposed project, however, mitigation measures have been incorporated as needed to reduce all potentially significant and significant impacts to less-than-significant levels.

Chapter 4 - References Cited lists the references used to prepare this IS.

Chapter 5 - Report Preparers identifies individuals who helped prepare or review this document.

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Chapter 2. Project Description

2.1 Project Location

The project is located within Reclamation District No. 999 (RD 999 or District) in Yolo and Solano counties, south of the City of West Sacramento and northeast of Rio Vista, as shown in **Figure 2-1**. Like many areas in the Delta, the lands within RD 999 are referenced in current and historic reports and maps by multiple names. RD 999 is alternately known as “Netherlands” and “Holland District,” due to historical land ownership by the Netherlands Farming Company and later the Holland Land Company.

The District is comprised of five U.S. Army Corps of Engineers (USACE) Project levee¹ sections: the Deep Water Ship Channel Levee (Unit 1), Miner Slough Levee (Unit 2), Sutter Slough Levee (Unit 3), Sacramento River Levee (Unit 4), and Elk Slough Levee (Unit 5). The District is joined by Reclamation Districts 307 and 765 to form one contiguous hydrologic unit. State Route 84 and several significant county roads connect to Ryer Island and Highway 220 at the southern end of the District.

The erosion repair sites addressed in this IS are located along the Sutter Slough Levee (Unit 3), as shown in **Figure 2-2**. Seven sites would either be monitored or repaired to address bank loss, toe scour, and erosion by flattening the waterside levee slope and placing riprap to reestablish the bank slope and channel.

2.2 Project Background

Formed in 1913, the District is the Local Maintaining Agency (LMA) for Units 1 through 5. Under several different programs, the California Department of Water Resources (DWR) is authorized to make funds available to LMAs to repair, rehabilitate, reconstruct, or replace levees, weirs, bypasses, channels, and other facilities within the State Plan of Flood Control (SPFC). In summary, the SPFC includes the State and Federal flood control works, lands, programs, plans, conditions, and mode of maintenance and operations of the Sacramento River Flood Control Project described in Section 8350 of the California Water Code, and of flood control projects in the Sacramento River and San Joaquin River watersheds for which the State (DWR or Central Valley Flood Protection Board) has provided assurances of non-Federal cooperation to the United States. In addition to other flood management facilities, the SPFC includes USACE Project levees. The Sutter Slough Levee (Unit 3) that would be repaired by the project is a USACE Project levee. The State has generally passed on the responsibility for routine maintenance of Project levees to LMAs.

¹ “Project levees” were constructed by USACE as part of Federal-State flood control projects and were turned over to the State for operations and maintenance.

Figure 2-1: Regional Location

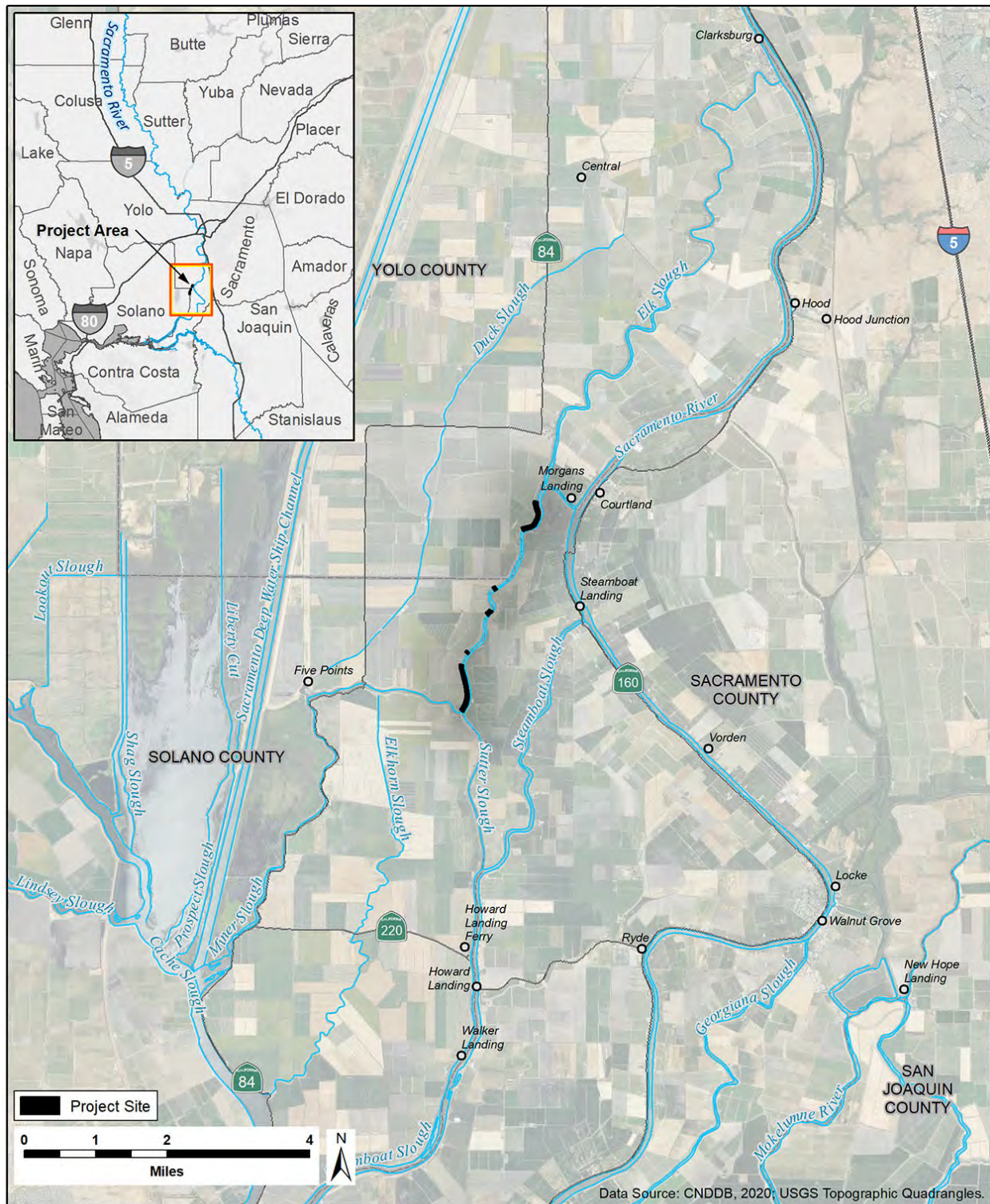


Figure Source: GEI Consultants, Inc. 2020.

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Figure 2-2: Project Site Locations

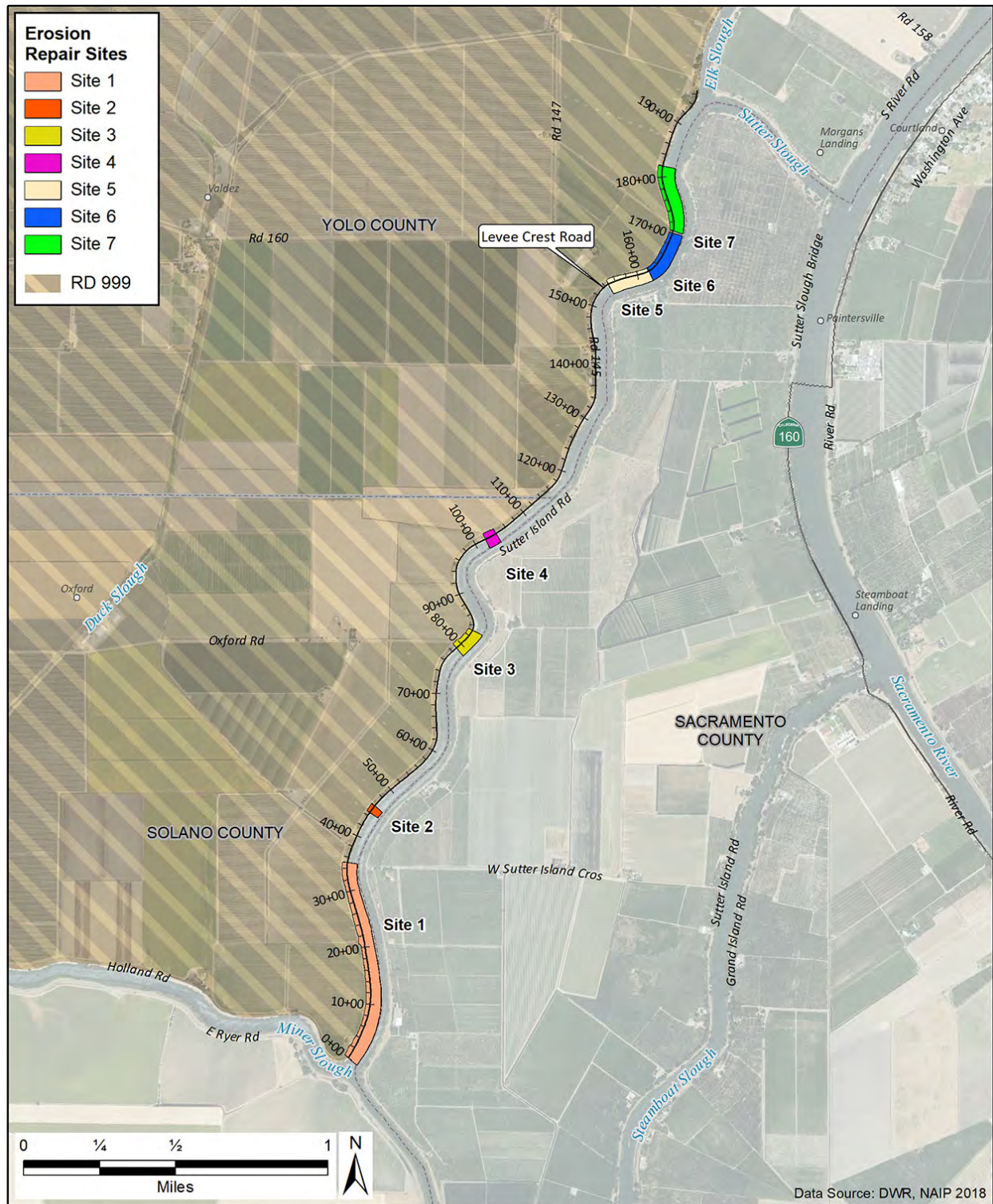


Figure Source: GEI Consultants, Inc. 2020.

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DWR has performed site reconnaissance and evaluations of past performance problems on District levees. The DWR evaluations noted the following issues for all erosion sites along the southern end of the right bank/waterside levee slope of Sutter Slough: over-steep to vertical bank slopes with undercut sections, erosional slumps along the bank, sloughing along levee slopes, and sloughing of existing concrete rubble. Continued erosion of the channel bank could encroach into and undermine the levee embankment or cause the levee slope to become unstable, leading to levee failure.

Initial planning, site identification, permitting, and design was performed under DWR FSRP Project Funding Agreement (PFA) 2019-FSRP-RD999-01, to address critical erosion sites along the right bank/waterside levee slope of Sutter Slough. The PFA was executed in April 2019, and includes prioritizing, planning, designing, and permitting erosion site repairs identified along 3.7 miles of the right bank/waterside levee slope of Sutter Slough from Miner Slough to Elk Slough, from Station 0+00 to 196+53. Construction of repairs may be funded through one or more State and/or local programs.

2.3 Project Objectives

The project objectives are to:

- Restore the design profile of the Sutter Slough Levee (Unit 3), where possible, in accordance with the USACE Supplement to Standard Operation and Maintenance Manual, Sacramento River Flood Control Project, Unit No. 113 [revised] (USACE 1966).
- Implement erosion repairs while limiting in-water work and vegetation removal to the extent feasible.

2.4 Project Components and Characteristics

In January 2020, MBK Engineers (MBK), on behalf of the District, identified seven erosion sites along Sutter Slough based on observations from site reconnaissance, geometric analysis from a land survey of the levee, and a bank and bathymetric survey of the channel. Observations of a steep levee or bank slope, active erosion above the waterline, or the indication of bank erosion or toe scour found in the bathymetric data contributed to the identification of an erosion site. The location of the channel thalweg and overall channel geometry were also used in erosion site identification. MBK also prioritized repairs based on a qualitative assessment of slope verticality, channel depth at waterside toe, levee geometry, channel meander, vegetated cover, and constructability. Erosion at the project site typically consists of toe scour within the channel causing erosion and slope instability that progresses into the bank and waterside levee toe. The project would either address bank loss, toe scour, and erosion by flattening the waterside bank slope and placing riprap to reestablish the bank slope and channel or monitor conditions within erosion sites.

2.4.1 Erosion Repairs

Based on site characteristics, two possible repairs types have been identified and designed for implementation under the proposed project—Erosion Repair Type 1, for critical sites, and Erosion Repair Type 2, for serious sites—as described in this section.

Site repairs of either type would share several common elements, including: placement of approximately 18- to 24-inch riprap along the levee slope; a variable bench at the top of the repair, with widths ranging from 2 to 5 feet; and a variable constructed slope ranging from 2 horizontal [H]: 1 vertical [V] to 3H:1V. **Erosion Repair Type 1 – Critical Site.** The first typical repair would address sites with severe erosion where the bank slope has been eroded into the levee prism. This repair consists of placing riprap along the levee slope to the levee toe at variable elevations depending on site-specific conditions, ranging from approximately elevation² 8 feet to elevation - 15 feet.

Erosion Repair Type 2 – Serious Site. The second type of repair, where the erosion is less severe, consists of repairing areas where erosion likely caused by boat wake, tidal action, and bank instability has created a cut into the levee toe near the water level. This repair would consist of placing a thin section of riprap at variable elevations depending on site-specific conditions, ranging from approximately elevation 8 feet to elevation 1 foot.

As part of the design process, U.S. Geological Survey gage data upstream (Sutter Slough at Courtland on the [Gage ID: SUT]) and downstream (Miner Slough at HWY 84 Bridge [Gage ID: HWB]) of the project site was evaluated to discern the Mean High Higher Water (7.5 feet) and Mean High Water (MHW) (6.25 feet) levels for the project vicinity and design the appropriate top of riprap elevation.

Table 2-1 shows the total length within each erosion repair site that Repair Types 1 and 2 are proposed and the quantity of riprap associated with the repairs. Erosion Site 3, where erosion is not severe, would not be repaired as part of this project. Site 3 conditions would instead be monitored as part of the District’s routine monitoring activities and are not analyzed further in this IS. Appendix A includes photos of representative sites for Erosion Repair Types 1 and 2 and monitoring sites. **Figure 2-3** shows typical cross-sections of Erosion Repair Types 1 and 2.

² All elevations referenced in the IS/MND are in North American Vertical Datum 1988.

Table 2-1: Proposed Erosion Repairs

Erosion Repair Site	Erosion Repair Type ¹	Approximate Linear Length (feet)	Approximate Riprap Quantity (tons)
1	1	1,550	17,100
	2	1,450	6,850
2	1	100	1,600
	2	n/a	n/a
3	Monitor	400	n/a-
4	1	n/a	n/a
	2	100	700
5	1	150	1,075
	2	550	1,775
6	1	600	6,550
	2	n/a	n/a
7	1	150	2,375
	2	50	275
<i>Totals</i>		<i>5,100</i>	<i>38,300</i>

Note: ¹ Type 1 Repairs address critical sites with severe erosion. Type 2 repairs address serious sites with less severe erosion.

2.5 Project Construction

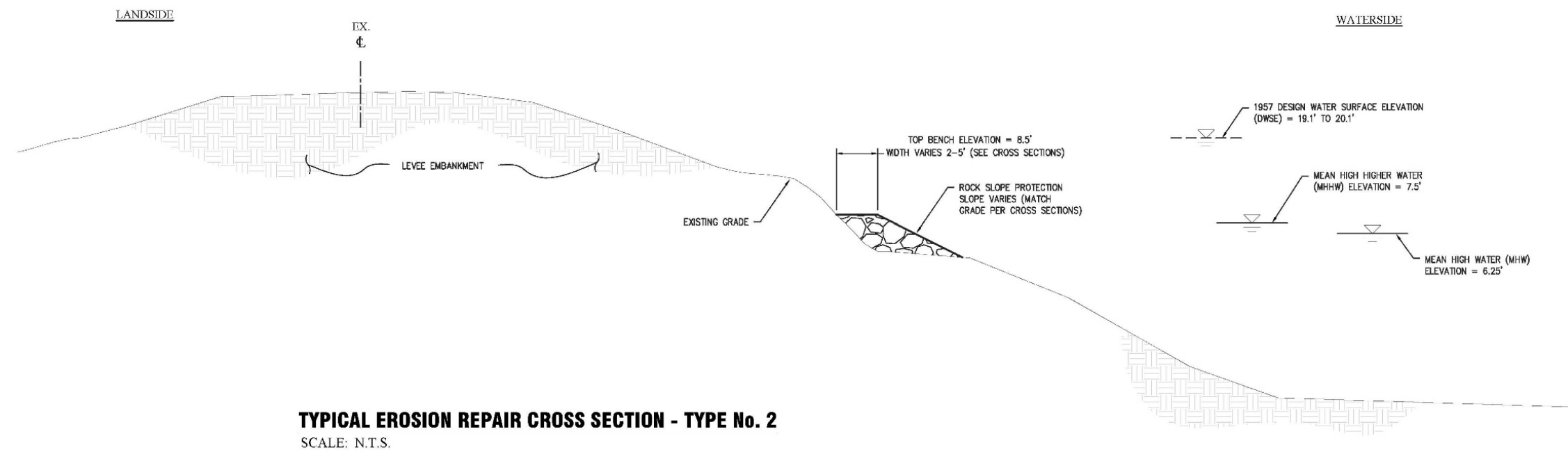
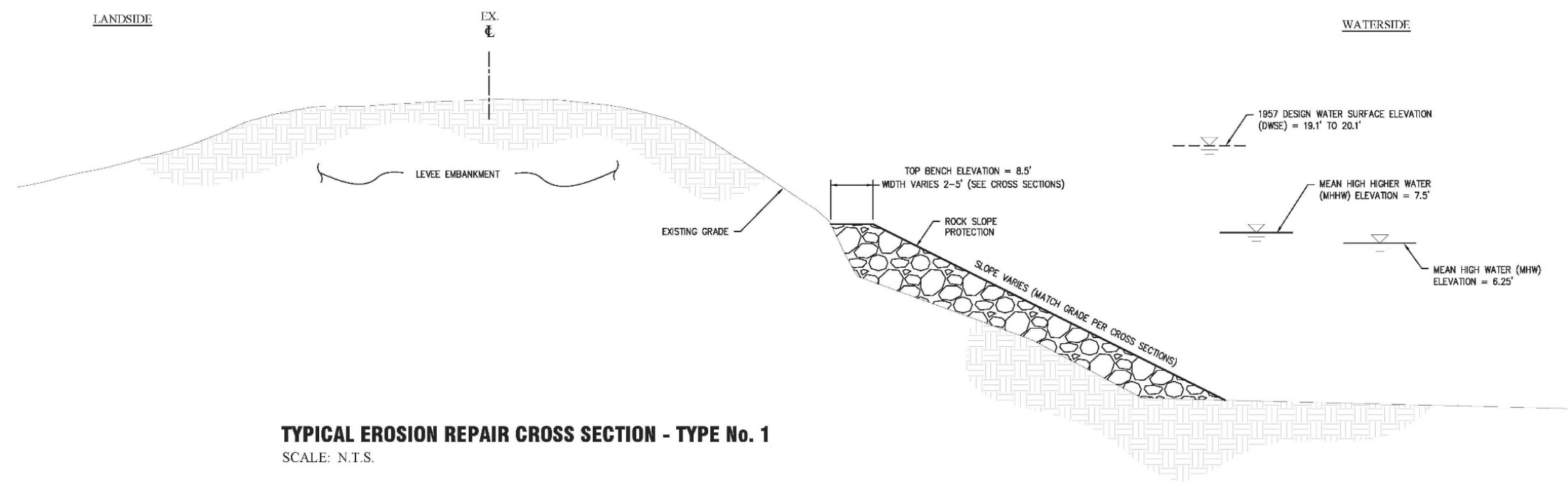
Depending on each erosion site's characteristics, construction could occur from equipment operating on the levee crown (a representative photograph of the levee crown is provided in Appendix A), also referred to as land-based construction, or from a barge in Sutter Slough, also referred to as water-based construction. Construction using both methods is discussed in this section.

2.5.1 Site Preparation and Restoration

Site preparation activities would initially consist of clearing ruderal plants, clearing debris, and trimming tree limbs. If voids or variability exist in the levee slope or embankment above MHW, these areas would be filled with select levee fill meeting Central Valley Flood Protection Board and USACE material requirements for levee fill material. Riprap would be used to fill any voids within the channel bank.

Existing vegetation would be left undisturbed to the extent feasible. Riprap would be placed around existing trees greater than 4 inches in diameter at breast height (dbh), where possible. However, dense areas of trees and woody vegetation may require removal, or thinning, especially if large trees present a levee safety concern due to exposed roots, scour around roots, and/or waterward lean. If large trees must be removed, removal would take place each year after August 1 to avoid effects to sensitive species (see Section 3.4, "Biological Resources"). Low hanging branches of trees left in place during construction would require pruning to facilitate placement of riprap.

Figure 2-3: Erosion Repair Types 1 and 2 Typical Cross-Section



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Areas on the levee slope disturbed by the project and above the MHW would be revegetated with native grasses after construction. Seeding would occur in approximately October or November, prior to the rainy season, and the District does not anticipate irrigation of seeded areas would be needed. To meet USACE criteria detailed in Engineering Pamphlet 1110-2-18, no new woody vegetation would be planted on the levee slope or within 15 feet of the waterside levee toe (USACE 2019).

2.5.2 Construction Schedule and Sequencing

It is anticipated the project would be completed over 5 years, likely beginning in 2022. However, changes in the schedule could occur due to uncertainty in project funding. The construction schedule would be determined based on District funding and the need to prioritize site implementation based on flood risk. The construction season would be limited by permit conditions for in-water work and is anticipated to occur annually between August 1 and November 30. Working hours would be 7:00 am to 7:00 pm. Active construction and equipment use would take place up to 10 hours per day. Equipment maintenance and other quiet activities could occur before and after working hours and on Sunday.

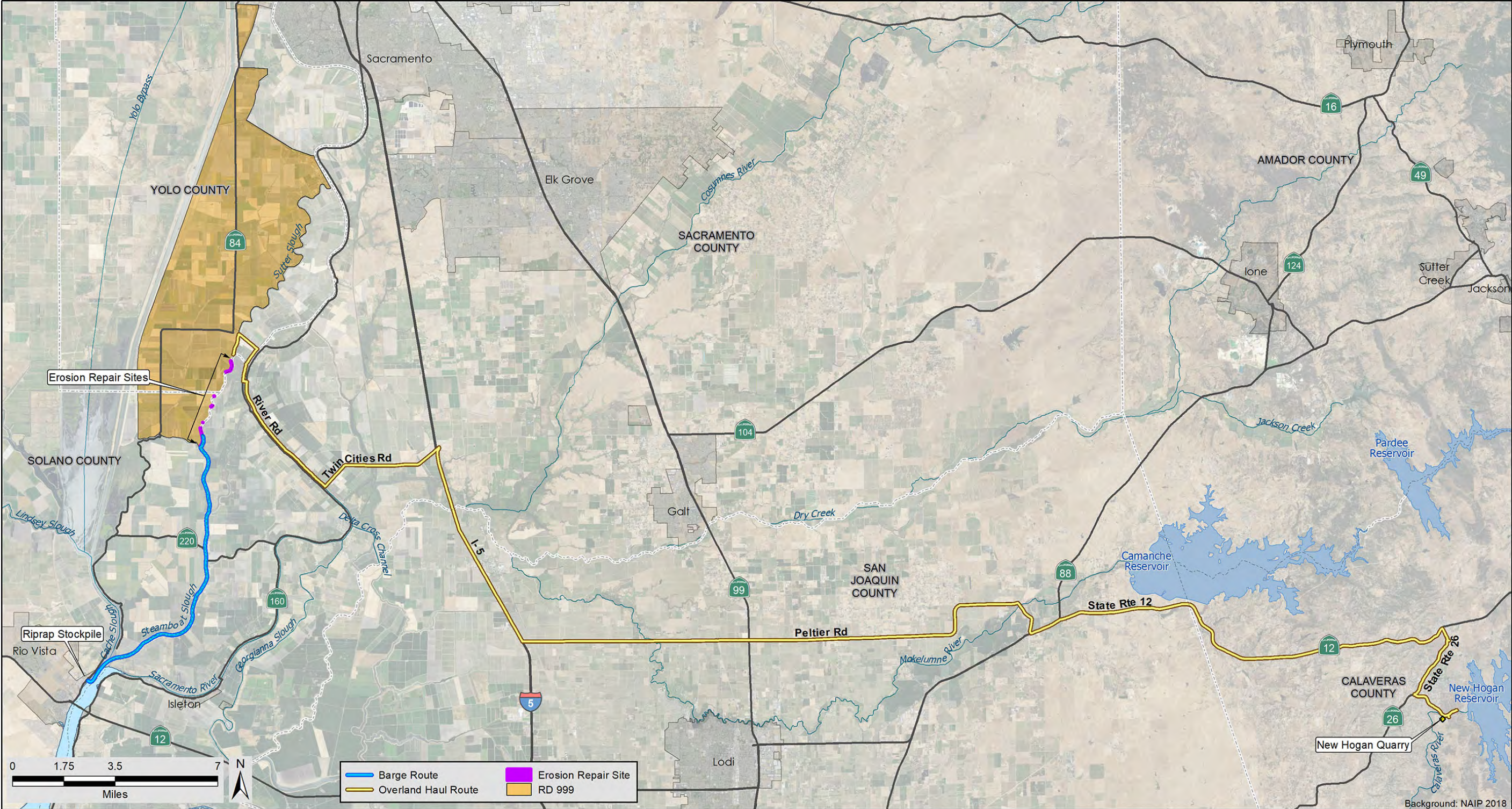
Erosion Site 1 may be constructed during one construction season and requires the largest amount of work compared to the other erosion repair sites combined—this site has the greatest quantity of riprap placement, number of haul trips, and longest construction duration. Construction of the other sites and Erosion Site 1, if not completed in a single year, is anticipated to occur over four additional years and would require less work each year, and therefore, construction of Erosion Site 1 represents the annual intensive construction scenario. The annual intensive construction scenario is used to analyze potential daily and annual impacts from construction activities in any year of construction. Under the annual intensive construction scenario, 35 days are anticipated for land-based or water-based construction.

2.5.3 Site Access, Haul Routes, and Material Staging

Access to the levee crown from the landside would be through a District levee gate near the intersection of Jefferson Boulevard (State Route 84) and Courtland Road, then south along the unpaved publicly accessible levee road (alternately signed as Road 145/Waukeena Road/Holland Road), as shown on **Figure 2-4**. Barges would access Sutter Slough from the south through Steamboat Slough, as shown on **Figure 2-4**. Rock would be hauled from either an existing riprap stockpile at Dutra materials (615 River Road) in Rio Vista or by truck from Valley Springs (**Figure 2-4**). The Rio Vista stockpile is approximately 10 miles from the project site and the Foothill Materials quarry in Valley Springs is approximately 62 miles from the project site.

Under the annual intensive construction scenario, transport of riprap by haul truck would result in approximately 958 roundtrip haul trips for land-based construction and transport of riprap by barge would require 10 roundtrip tug trips for water-based construction. Riprap transported by truck would be placed using land-based construction techniques. Riprap transported by tug and barge would be placed by a crane-barge. Daily stockpiling and staging of construction materials,

Figure 2-4: Haul Routes



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including portable equipment, vehicles, and supplies would be along the existing gravel levee crown road, adjacent to each repair site and any hazardous materials would be restricted to the existing gravel levee crown road.

During construction, one-way traffic with a flagger would be used to manage traffic flow through the project site. Prior to construction activities, signage would be posted at the Slough Entrance (near the Sutter Slough bridge off the Sacramento River) alerting boaters to downstream construction activities so they do not enter the work area.

2.5.4 Construction Equipment and Workers

When a site requires grading and placement of riprap from the levee crown, material would be hauled using on-road trucks and riprap would be placed by excavator and front-end loader from the levee crown. When a site requires construction from a barge on Sutter Slough, material would be delivered to the site by a barge (minimum 2,000-ton capacity) pulled by a tugboat and material would be placed by crane barge onto the waterside levee slope. One tug may transport multiple barges during a trip. Waterside work would also require a small land-based crew of workers. Barges and tugs would be transported from Rio Vista. During construction, the rock and crane barges would be moored adjacent to the current erosion repair site. Tugs may be moored or go to other non-related job sites if there is no need to move a barge for a period of time. The types and number of pieces of equipment needed for each erosion site and the anticipated duration of usage of equipment for the annual intensive construction scenario are shown in **Table 2-2**. Up to approximately 25 construction personnel would work on the project each day of land-based construction and up to approximately 10 construction personnel would work on the project each day for water-based construction.

2.6 Project Operations and Maintenance

Operations and maintenance associated with the erosion repairs is anticipated to be minor and primarily limited to inspections/patrols and other ongoing activities already implemented for the existing levee (e.g., vegetation management, burrowing animal control and abatement, slope maintenance, erosion protection, etc.). Inspections and patrols for levee integrity, debris and trash removal, security, and other purposes would be conducted regularly by one to two persons driving the levee crown road. Maintenance activities would occur as needed to repair erosion and maintain grades and slopes. Such repairs would generally be localized and minor, though grading and aggregate replacement may infrequently be required to repair larger areas. However, maintenance grading and aggregate placement beyond the scope of erosion repairs described above in this section is not analyzed in this IS/MND. Inspections and maintenance activities for the proposed project, including monitoring, would be coordinated and combined with existing maintenance trips by RD 999 staff or their contractor.

Table 2-2: Equipment Types and Usage

Construction Method	Equipment Type (All Erosion Sites)	Number	Annual Duration ¹ (work days)
Land-based	Caterpillar 320 or 330 Size Excavator	2	30
	Caterpillar 920 or 930 Size Front End Loader	1	30
	Haul Trucks (14 cubic yard/25-ton)	Up to 20	30
	Pickup Truck	1	35
Water-based	Dutra CB-8 Crane Barge or equivalent (barge is non-motorized)	1	30
	Rock Barge (non-motorized)	Up to 5	30
	Pusher Tug	1	10
	12-ft Skiff (motorized crew transport)	1	30
	Pickup Truck	1	35

Note: ¹ Shown for the annual intensive construction scenario

2.7 Regulatory Requirements, Permits, and Approvals

As the CEQA lead agency, the District has the principal responsibility for approving and carrying out the proposed project and for ensuring that CEQA requirements and all other applicable regulations are met. Other permitting agencies that may have permitting approval or review authority over portions of the proposed project are listed below:

- **Central Valley Flood Protection Board Maintenance Notification.** For work required to retain or maintain the intended functions of flood control facilities and of existing encroachments, within and adjacent to Federal and State authorized flood control projects.
- **Central Valley Regional Water Quality Control Board (RWQCB) Clean Water Act (CWA) Section 401 Water Quality Certification.** For discharge of dredge and fill materials into waters of the State.
- **USACE CWA Section 404 Permit.** For discharge of dredge and fill material into waters of the United States.
- **USACE Rivers and Harbors Act Section 10 Permit.** For all work, including discharge of dredge and fill material, into tidal and navigable waters of the United States.
- **California Department of Fish and Wildlife (CDFW) Lake/Streambed Alteration Agreement.** For changing the bed, channel, or bank, of any river, stream, or lake.
- **National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife (USFWS) Endangered Species Act (ESA) Section 7 Consultation.** Consultation for possible effects on Federally listed ESA species.

- **State Historic Preservation Officer/National Historic Preservation Act Section 106 Consultation.** Consultation and Programmatic agreement or Memorandum of Agreement regarding effects on cultural resources pursuant to Section 106 of the National Historic Preservation Act.

Chapter 3. Environmental Checklist

Project Information

1. Project title:	Sutter Slough Critical Erosion Repairs Flood System Repair Project
2. Lead agency name and address:	Reclamation District No. 999 38563 Netherlands Road Clarksburg, CA 95612
3. Contact person and phone number:	Tina Anderson, MBK Engineers anderson@mbkengineers.com (916) 456-4400
4. Project location:	Yolo and Solano counties
5. Project sponsor's name and address:	See #2, above.
6. General plan designation:	Agriculture with a Resource Conservation Overlay Agriculture with an Agriculture District Overlay
7. Zoning:	A-N – Intensive Agriculture, A-80 – Exclusive Agriculture 80 acres
8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)	The proposed project would either address bank loss, toe scour, and erosion by flattening the waterside levee slope and placing approximately 18- to 24-inch riprap to reestablish the bank slope and channel or monitor conditions within erosion site.
9. Surrounding land uses and setting: Briefly describe the project's surroundings:	Surrounding land use is agriculture. See "Environmental Setting," discussion under each issue area in Chapter 3, "Environmental Checklist."
10. Other public agencies whose approval may be required or requested (e.g., permits, financing approval, or participation agreement.)	Central Valley RWQCB CWA Section 401 Water Quality Certification, USACE CWA 404 Permit, CDFW Lake/Streambed Alteration Agreement, NMFS and USFWS Section 7 ESA Consultation, and State Historic Preservation Officer/National Historic Preservation Act Section 106 Consultation.
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?	Yes. Consultation is described in more detail in Sections 3.5, "Cultural Resources," and 3.17, "Tribal Cultural Resources."

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input checked="" type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Geology / Soils
<input checked="" type="checkbox"/> Greenhouse Gas Emissions	<input checked="" type="checkbox"/> Hazards and Hazardous Materials	<input checked="" type="checkbox"/> Hydrology / Water Quality
<input type="checkbox"/> Land Use / Planning	<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise
<input type="checkbox"/> Population / Housing	<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation
<input type="checkbox"/> Transportation	<input checked="" type="checkbox"/> Tribal Cultural Resources	<input type="checkbox"/> Utilities / Service Systems
<input checked="" type="checkbox"/> Mandatory Findings of Significance	<input type="checkbox"/> Energy	<input type="checkbox"/> Wildfire


Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Thomas Slater, President
Reclamation District 999


Date

Evaluation of Environmental Impacts

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. Operations and maintenance impacts of the proposed project are routine, minimal, and essentially the same as current operations and maintenance of the existing facilities. There is no potential for significant impacts to any resource category from project operations and maintenance of the existing and proposed facilities.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less-than-significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required. “Beneficial impacts” are also identified where appropriate to provide full disclosure of any benefits from implementing the proposed project.
- 4) “Less-than-significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level.
- 5) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 6) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 7) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 8) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less-than-significant.

Significance thresholds are identified for certain resources, but others are not necessary because there is clearly no impact or the question itself provides the basis for the significance threshold.

3.1 Aesthetics

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
AESTHETICS – Except as provided in PRC Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.1.1 Environmental Setting

The area around the project site is flat and comprised of agricultural fields, including orchards and row crops, drainage/irrigation canals, and the open water of Sutter Slough. There are no designated scenic vistas in the project vicinity. Elements of the built environment (structures, roads, and other man-made improvements) are present; however, they are clearly secondary to the dominant agricultural landscape. Jefferson Boulevard (State Route 84) is located approximately 1.5 miles west of Erosion Site 7 and would be used to access the erosion repair sites. Highway 160 is located approximately 0.6 mile east of Erosion Site 1. There are no designated State scenic highways in the project area (Caltrans 2019a). The nearest County-designated scenic route is 0.75 mile east of the project site in Sacramento County, and the erosion repair sites are not visible from the scenic route, due to multiple levees and waterside vegetation (Caltrans 2019b).

3.1.2 Discussion

- a), b), c) **Have a substantial adverse effect on a scenic vista? Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

There are no significant viewsheds, scenic vistas, or scenic highways located in the vicinity of the proposed project (Caltrans 2019a, Caltrain 2019b). The proposed project does not include any new developments. The project would restore the design profile of the Sutter Slough Levee and implement erosion repairs by placing riprap along the Sutter Slough Levee at erosion sites. The proposed project would require some vegetation removal and trimming along the Sutter Slough Levee slope and waterside to allow for worker safety, and to facilitate the placement of riprap. The existing vegetation would be left undisturbed to the extent feasible. Conversion of currently vegetated levee areas to riprap surfaces, including from removal of trees and shrubs, would be a change in the existing visual character of the levee slope and would be visible to boaters in Sutter Slough, including recreation users. However, riprap would be placed intermittently along the Sutter Slough Levee at the erosion sites (**Figure 2-2**) and long spans of the levee would remain vegetated. In addition, due to ongoing maintenance and repairs throughout the Delta, viewing intermittent segments of riprap along levees in the Delta is not uncommon to boaters and boaters would only briefly see riprap at any project location as they pass the project site. For the reasons discussed, the visual changes from riprap at the project locations are not considered to substantially degrade the existing visual character of the Sutter Slough Levee.

Areas along the levee slope disturbed by project construction would be revegetated with native grasses following the completion of construction activities. Construction equipment would be visible in the project area; however, this would be short-term and temporarily, and would not be substantially different than farm equipment or levee and channel maintenance equipment common to the area. The proposed project would not impact the adjacent agricultural land. Because the proposed project would not have an adverse effect on scenic vistas, nor would it damage scenic resources or substantially degrade the existing visual character of the sites, impacts would be **less than significant**.

- d) **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

The project would not include any new permanent light sources. Construction activities would be limited to the daylight hours of 7:00 a.m. to 7:00 p.m. between August 1 and November 30. There would not be any new structures at the project site that would create glare. There would be **no impact**.

3.2 Agriculture and Forestry Resources

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may <i>refer to</i> the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may <i>refer to</i> information compiled by the California Department of Forestry and Fire Protection [CAL FIRE] regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. – Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.2.1 Environmental Setting

Lands adjacent to Sites 1 through 3 are designated as A-N (Intensive Agriculture) by Yolo County and lands adjacent to Sites 4 through 7 are designated as A-80 (Exclusive Agriculture 80 acres) by Solano County (Yolo County 2014 and Solano County 1977). The project site is adjacent to lands designated as Prime Farmland by the Farmland Mapping and Monitoring Program (DOC 2016a, 2016b). Farms adjacent to the project site are under active Williamson Act contracts; however, the project would not require use of these adjacent farmlands and therefore would not conflict with any Williamson Act contracts (Yolo County 2014, Solano County 2008). There are no designated forest or timberlands in the vicinity of the project area.

3.2.2 Discussion

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

The erosion sites are adjacent to Prime Farmland; however, the proposed project would not convert Prime Farmland to non-agricultural use. The proposed project activities would be confined to the waterside (east) slope of the Sutter Slough Levee and would not encroach on agricultural lands on the west side of the levee. All equipment would be staged on the levee crown or from a barge in Sutter Slough. There would be **no impact**.

- b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

The proposed project would not conflict with existing zoning of adjacent lands for agricultural use, or Williamson Act contract lands. The erosion sites are adjacent to lands zoned as agriculture; however, the project would not impact agricultural production. See response to Question “a”. There would be **no impact**.

- c), d) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? Result in the loss of forest land or conversion of forest land to non-forest use?**

The project site is not zoned as forest land, timberland, or timberland zoned as timberland production, therefore, no loss or conversion of forest land to non-forest land would be necessary as part of the proposed project. There would be **no impact**.

- e) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

There would be no other changes from the proposed project on the existing environment that would convert farmland to non-agricultural use or forest land to non-forest use. See responses to Question “a”, “c”, and “d”. There would be **no impact**.

3.3 Air Quality

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
I. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.3.1 Environmental Setting

The project site is located in Yolo and Solano counties within the Sacramento Valley Air Basin. The Solano Air Quality Management District (YSAQMD) attains and maintains air quality conditions in Yolo and Solano counties. The land-based construction truck haul route (**Figure 2-4**) would stretch across the jurisdictions of four air districts with approximately 14 miles in the Calaveras County Air Pollution Control District (CCAPCD), approximately 21 miles in the San Joaquin Valley Air Pollution Control District (SJVAPCD), approximately 23 miles in the Sacramento Metropolitan Air Quality Management District (SMAQMD), and approximately 5 miles in YSAQMD. The water-based construction tug haul route (**Figure 2-4**) is located along Sutter Slough in SMAQMD to the south of Erosion Site 1.

The Federal Clean Air Act and the California Clean Air Act required the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) to establish health-based air quality standards at the Federal and State levels. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) were established for the following criteria pollutants: carbon monoxide (CO), ozone, sulfur dioxide, nitrogen dioxide, particulate matter less than 10 microns in diameter (PM₁₀), particulate matter less than 2.5 microns in diameter (PM_{2.5}), and lead. These standards have been established with a margin of safety to protect the public's health. Both EPA and CARB designate areas of the State as attainment, nonattainment, maintenance, or unclassified for the various pollutant standards according to the Federal Clean Air Act and the California Clean Air Act, respectively.

An “attainment” designation for an area signifies that pollutant concentrations did not violate the NAAQS or CAAQS for the pollutant. A “nonattainment” designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as identified in the criteria. A “maintenance” designation indicates that the area previously had nonattainment status and currently has attainment status for the applicable pollutant; the area must demonstrate continued attainment for a specified number of years before it can be re-designated as an attainment area. An “unclassified” designation signifies that data do not support either an attainment or a nonattainment status.

Under the NAAQS, Yolo and Solano counties are designated as nonattainment for 8-hour ozone and PM_{2.5}, attainment for nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), and lead, and unclassified for PM₁₀. Under the CAAQS, Yolo and Solano counties are designated as nonattainment for 8-hour ozone and PM₁₀, attainment for NO_x, CO, SO₂, and lead, and unclassified for PM_{2.5} and visibility reducing particles (YSAQMD 2019).

Under the NAAQS, Calaveras County is designated as nonattainment for 8-hour ozone, attainment for NO_x, CO, SO₂, and lead, and unclassified for PM_{2.5} and PM₁₀. Under the CAAQS, Calaveras County is designated as nonattainment for 8-hour ozone and PM₁₀, attainment for sulfates, NO_x, SO₂, and lead, and unclassified for hydrogen sulfide, CO, and PM_{2.5} and visibility reducing particles (CARB 2019).

Under the NAAQS, San Joaquin County is designated as nonattainment for 8-hour ozone and PM_{2.5}, attainment for NO_x, CO, SO₂, lead, and PM₁₀. Under the CAAQS, San Joaquin County is designated as nonattainment for 8-hour ozone, PM_{2.5} and PM₁₀, attainment for sulfates, CO, NO_x, SO₂, and lead, and unclassified for hydrogen sulfide and visibility reducing particles (CARB 2019).

3.3.2 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

At the local level, air quality is managed through land use and development planning practices, which are implemented in Yolo, Solano, Calaveras, Sacramento, and San Joaquin counties through the general planning process. The YSAQMD, CCAPCD, SMAQMD, and SJVAPCD are responsible for establishing and enforcing local air quality rules and regulations that address the requirements of Federal and State air quality laws. They are also responsible for implementing strategies for air quality improvement and recommending mitigation measures for new growth and development. The YSAQMD, CCAPCD, SMAQMD, and SJVAPCD have identified CEQA thresholds of significance for certain criteria air pollutants to assist lead agencies in determining air quality impacts for projects located in Yolo, Solano, Calaveras, Sacramento, and San Joaquin counties, as shown in **Table 3-1**.

Table 3-1: Criteria Pollutant Significance Thresholds for Construction Activities

Air District	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
YSAQMD	10 tons/year	10 tons/year	N/A	N/A	80 lbs/day	N/A
CCAPCD	150 lbs/day	150 lbs/day	N/A	N/A	150 lbs/day	N/A
SMAQMD	N/A	85 lbs/day	20 ppm 1-hour standard and 9 ppm 8-hour standard	0.25 ppm 1-hour standard and 0.04 ppm 24-hour standard	0 lbs/day or 80 lbs/day and 14.6 tons/year if all feasible BACT/BMPs applied	0 lbs/day or 82 lbs/day and 15 tons/year if all feasible BACT/BMPs applied
SJVAPCD	10 tons/day	10 tons/day	100 tons/year	27 tons/year	15 tons/year	15 tons/year

Notes: lbs/day = pounds per day, N/A = not adopted (i.e., the air district has not adopted a threshold of significance for this pollutant), ppm = parts per million, BACT = best available control technology, BMPs = best management practices, ROG = reactive organic gases, NO_x = nitrous oxides, PM₁₀ = particulate matter less than 10 microns in diameter, PM_{2.5} = particulate matter less than 2.5 microns in diameter, CO = carbon monoxide, SO_x = sulfur oxide, YSAQMD = Yolo Solano Air Quality Management District, SMAQMD = Sacramento Metropolitan Air Quality Management District, SJVAPCD = San Joaquin Valley Air Pollution Control District, CCAPCD = Calaveras County Air Pollution Control District
Sources: YSAQMD 2017; SMAQMD 2019; SJVAPCD 2015; CCAPCD 2018

The proposed project involves repair erosion sites on the Sutter Slough Levee and would not result in increased population or employment growth. Criteria air pollutant emissions in the YSAQMD would consist either of emissions associated with haul truck trips, equipment use for riprap placement, and worker vehicle trips during land-based construction, or emissions associated with tug trips, crane operation (from the barge) for riprap placement, and worker vehicle trips during water-based construction. Criteria air pollutant emissions in the SMAQMD would consist either of emissions associated with haul truck trips during land-based construction or tug haul trips during water-based construction. In addition, although the project site is in the YSAQMD, the boundary between the YSAQMD and SMAQMD jurisdictions is in the middle of Sutter Slough where emission-generating activities associated with the water-based construction such as, tug, motorized skiff, and crane barge operations would occur. Criteria air pollutant emissions in the SJVAPCD and CCAPCD jurisdictions would consist of emissions associated with haul truck trips during land-based construction. No activities associated with water-based construction would occur in SJVAPCD or CCAPCD jurisdictions.

There would be minimal long-term emissions from the proposed project due to maintenance and inspections, which occur under existing conditions without the project. Inspections and patrols would be conducted by one or two persons driving the levee crown road to check levee integrity, debris and trash removal, security, and other purposes. Maintenance activities would be conducted as needed.

Two criteria are used to determine whether the proposed project would conflict with or obstruct implementation of the air quality plans. The first criterion is whether the proposed project is consistent with the projections for population and vehicle miles traveled (VMT) that were used as the basis of the air quality plan. The proposed project would not increase population in the project area and would only temporarily add VMT 4 months a year during the 5-year construction period and would not exceed the projections used by all four air districts (see VMT estimates in Section 3.17, “Transportation”).

The second criterion is whether the proposed project would increase the frequency or severity of existing air quality violations, contribute to new violations, or delay the timely attainment of air quality standards. The YSAQMD, CCAPCD, SMAQMD, and SJVAPCD have developed thresholds of significance for criteria pollutants to evaluate regional impacts of project-specific emissions of air pollutants and their impact on the existing air quality plans. Emissions exceeding the thresholds have not been accommodated in the air quality plans and would not be consistent with such plans and therefore would be considered potentially significant impacts.

Tables 3-2 and 3-3 show the proposed project's estimated maximum annual and daily emissions from the annual intensive construction scenario. This scenario presents emissions for construction of Erosion Site 1. Emissions for construction of the other erosion sites in other years would all be substantially less.

Table 3-2. Estimated Maximum Criteria Air Pollutants Emissions from Land-Based Construction for the Annual Intensive Construction Scenario

Construction Phase	Emissions (lbs/day)				Emissions (tons/year)					
	ROG	NO _x	PM ₁₀	PM _{2.5}	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
YSAQMD										
Equipment, Vehicles, and Hauling Trips	--	--	1.4	--	<0.1	0.3	--	--	--	--
<i>Exceed threshold?</i>	--	--	No	--	No	No	--	--	--	--
SMAQMD										
Hauling Trips (unmitigated)	--	18.6	1.5	0.4	--	--	--	--	--	--
<i>Exceed threshold?</i>	--	No	Yes	Yes	--	--	--	--	--	--
Hauling Trips (mitigated)	--	18.6	1.3	0.4	--	--	--	--	<0.1	<0.1
<i>Exceed threshold?</i>	--	No	No	No	--	--	--	--	No	No
SJVAPCD										
Hauling Trips	--	--	--	--	<0.1	0.3	<0.1	<0.1	<0.1	<0.1
<i>Exceed threshold?</i>	--	--	--	--	No	No	No	No	No	No
CCAPCD										
Hauling Trips	0.5	15.5	0.9	--	--	--	--	--	--	--
<i>Exceed threshold?</i>	No	No	No	--	--	--	--	--	--	--

Notes: lbs/day = pounds per day, ROG = reactive organic gases, NO_x = nitrous oxides, PM₁₀ = particulate matter less than 10 microns in diameter, PM_{2.5} = particulate matter less than 2.5 microns in diameter, CO = carbon monoxide, SO_x = sulfur oxide, YSAQMD = Yolo Solano Air Quality Management District, SMAQMD = Sacramento Metropolitan Air Quality Management District, SJVAPCD = San Joaquin Valley Air Pollution Control District, CCAPCD = Calaveras County Air Pollution Control District

Table 3-3. Estimated Maximum Criteria Air Pollutants Emissions from Water-Based Construction for the Annual Intensive Construction Scenario

Construction Phase	Emissions (lbs/day)				Emissions (tons/year)			
	ROG	NO _x	PM ₁₀	PM _{2.5}	ROG	NO _x	PM ₁₀	PM _{2.5}
YSAQMD								
All Project Activities	--	--	2.3	--	0.1	0.8	--	--
<i>Exceed threshold?</i>	--	--	<i>No</i>	--	<i>No</i>	<i>No</i>	--	--
SMAQMD								
All Project Activities (unmitigated)	--	70.4	2.8	2.5	--	--	--	--
<i>Exceed threshold?</i>	--	<i>No</i>	Yes	Yes	--	--	--	--
All Project Activities (mitigated)	--	70.4	2.8	2.5	--	--	<0.1	<0.1
<i>Exceed threshold?</i>	--	<i>No</i>	<i>No</i>	<i>No</i>	--	--	<i>No</i>	<i>No</i>

Notes: lbs/day = pounds per day, ROG = reactive organic gases, NO_x = nitrous oxides, PM₁₀ = particulate matter less than 10 microns in diameter, PM_{2.5} = particulate matter less than 2.5 microns in diameter, YSAQMD = Yolo Solano Air Quality Management District, SMAQMD = Sacramento Metropolitan Air Quality Management District

Emissions from land-based construction were modeled using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Emissions from water-based construction from the use of the tug, crane barge, and motorized skiff were estimated using SMAQMD's Harbor Craft, Dredge, and Barge Emission Factor Calculator, which is based on the California Air Resource Board's Harbor Craft Database. Modeling results are presented in Appendix B. Although the project site and location of riprap material are located in YSAQMD, the boundary between the YSAQMD and SMAQMD is in the middle of Sutter Slough where emission-generating activities associated with the land-based construction (such as pusher tug, motorized skiff, and crane barge operations) would occur. As such, emissions associated with riprap placement and tug hauling trips during water-based construction are compared to both YSAQMD and SMAQMD thresholds to provide a conservative estimate of project impacts.

As shown in **Table 3-2 and 3-3**, calculated daily and annual emissions are below applicable CEQA thresholds of significance for all criteria air pollutants in YSAQMD, SJVAPCD, and CCAPCD and NO_x in SMAQMD for both land-based and water-based construction. Therefore, this impact is **less than significant**.

As shown in **Table 3-2 and 3-3**, emissions of PM₁₀ and PM_{2.5} would exceed the SMAQMD threshold of significance for both land-based and water-based construction. Therefore, impacts would be **potentially significant**. Mitigation Measure AQ-1 has been identified to address these impacts.

Mitigation Measure AQ-1: Implement SMAQMD Basic Construction Emission Control Practices

The District or its contractor shall implement the following SMAQMD measures, if applicable and feasible, for all construction activities taking place within the boundaries of SMAQMD:

- Haul trucks transporting soil, sand, or other loose material on the site shall be covered or shall maintain at least 2 feet of free board space. Any haul trucks transporting aggregate material (as defined by California Public Resources Code Section 23114) that would be traveling along freeways or major roadways should be covered.
- Wet power vacuum street sweepers shall be used to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Dry power sweeping shall not be used.
- Haul truck speeds on unpaved roads shall be limited to 15 miles per hour.
- Idling time shall be minimized either by shutting equipment off when not in use or reducing the time of idling to 5 minutes in accordance with California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485. Clear signage that posts this requirement for workers at the entrances to the site shall be provided.
- All equipment shall have current certificate(s) of compliance for the California Air Resource Board's In-Use Off-Road Diesel-Fueled Fleets Regulation as set forth in California Code of Regulations, Title 13, Sections 2449 and 2449.1.
- All construction equipment shall be maintained in proper working condition according to manufacturer's specifications. The equipment shall be checked by a certified mechanic and shall be determined to be running in proper condition before it is operated.

Timing: Before and during construction

Responsibility: RD 999 or its construction contractor(s)

Implementation of Mitigation Measure AQ-1 would include BMPs to manage fugitive dust during construction. Therefore, the project would have a **less-than-significant impact with mitigation incorporated**.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

The air basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its nature, air pollution is largely a cumulative impact. No single project by itself is sufficient in size to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In developing thresholds of significance for air pollutants, the four air districts where project activities would occur considered the emission levels for which a project's individual emissions would be cumulatively considerable. In general, if a project exceeds its identified project-level significance thresholds, the project's cumulative impact would be cumulatively considerable.

As shown in **Table 3-2 and 3-3**, calculated daily and annual emissions are below applicable CEQA thresholds of significance for all criteria air pollutants in YSAQMD, SJVAPCD, and CCAPCD and NOx

in SMAQMD for both land-based and water-based construction. Therefore, this impact is **less than significant**.

As shown in **Table 3-2 and 3-3**, emissions of PM₁₀ and PM_{2.5} would exceed the SMAQMD threshold of significance for both land-based and water-based construction. Therefore, impacts would be **potentially significant**. Mitigation Measure AQ-1 has been identified to address these impacts.

Mitigation Measure AQ-1: SMAQMD's Basic Construction Emission Control Practices

Please *refer to* Mitigation Measure AQ-1, above, for the full text of this mitigation measure.

Implementation of Mitigation Measure AQ-1 would include BMPs to manage fugitive dust during construction. Therefore, the project would have a **less-than-significant impact with mitigation incorporated**.

c) Expose sensitive receptors to substantial pollutant concentrations?

Some members of the population are especially sensitive to emissions of air pollutants and should be given special consideration during the evaluation of the project's air quality impacts. These people include children, older adults, any person with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. There are no sensitive receptors at the project site. The nearest sensitive receptor/residence is located approximately 0.3 mile from Erosion Site 1. Given the limited construction and operational emissions and temporary short-term and temporary nature of emissions each year under the project, sensitive receptors would not be subject to substantial pollutant concentrations. Therefore, the potential impact of exposing sensitive receptors to substantial pollutant concentrations would be **less than significant**.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Human response to odors is subjective, and sensitivity to odors varies greatly. Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, anxiety) to physiological (e.g., circulatory and respiratory reactions, nausea, vomiting, headaches). During construction, the project would generate odor from the use of diesel fuels, however, this would be short-term and nonsignificant. During operation, inspections and patrols would be conducted regularly by one or two persons, which would generate odor from the use of diesel fuel, however, this impact would be minimal as these, occurs presently under existing conditions, and would only occur as needed. Potential odor effects therefore would be **less than significant**.

3.4 Biological Resources

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
III. BIOLOGICAL RESOURCES – Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.4.1 Environmental Setting

Information presented in this environmental setting is based on review of biological resource databases and observations made during a field survey conducted on June 23, 2020 and a focused botanical survey on August 11, 2020.

Habitat and Land Cover Types

The seven erosion repair sites are located on the existing waterside slope of the Sutter Slough Levee/west bank of Sutter Slough. Land west of the levee is dominated by agricultural crops, including tomato (*Solanum lycopersicum*), corn (*Zea mays*), and vineyards (*Vitis* sp.). The levee crown is paved along most of the project alignment, but the southern end is a maintained gravel road.

Nonnative annual grassland at the project site is limited to the landside levee slope and is dominated by nonnative annual grasses, including ripgut brome (*Bromus diandrus*), soft chess (*B. hordeaceus*), slender oat (*Avena barbata*), foxtail barley (*Hordeum murinum*), Italian ryegrass (*Festuca perennis*), Bermudagrass (*Cynodon dactylon*), and rattail sixweeks grass (*Festuca myuros*). Nonnative forbs are also common in this habitat, including black mustard (*Brassica nigra*), turkey mullein (*Croton setiger*), horseweed (*Erigeron canadensis*), wild radish (*Raphanus sativus*), and prickly lettuce (*Lactuca serriola*). This grassland habitat is subject to regular vegetation management activities associated with levee maintenance (e.g., mowing).

The waterside levee slope is colonized by riparian vegetation. The southern end of the project site, notably Erosion Site 1, has a diverse assemblage of riparian trees, including Oregon ash (*Fraxinus latifolia*), box elder (*Acer negundo*), Fremont's cottonwood (*Populus fremontii*), and valley oak (*Quercus lobata*). Black locust (*Robinia pseudoacacia*) and tree of heaven (*Ailanthus altissima*), both nonnative species, were occasionally encountered at Erosion Site 1. Willow species, including Goodding's black willow (*Salix gooddingii*) and narrowleaf willow (*S. exigua*), are also present. Valley oak is the dominant tree species at all erosion sites, except Erosion Site 1 where valley oak is co-dominant. Thickets of dense shrubs, including California rose (*Rosa californica*) and Himalayan blackberry (*Rubus armeniacus*), occur at irregular intervals along the middle to lower elevations of the levee slope. Individual elderberry shrubs (*Sambucus nigra* ssp. *caerulea*), and dense shrub clusters of elderberries are present in Erosion Site 1. Elderberry shrubs are not present at any other sites. Santa Barbara sedge (*Carex barbara*) occurs along lower elevations of the levee slope, notably under valley oak canopy landward of the top of bank. Nonnative grasses are also common in the understory in areas where shrub canopy is absent.

Sensitive Biological Resources

Sensitive biological resources addressed in this section include those that are afforded consideration or protection under CEQA, the California Fish and Game Code (FGC), the California Endangered Species Act (CESA), the Federal ESA, CWA, and the Porter-Cologne Water Quality Control Act.

Special-status Species

For purposes of this analysis, special-status species include plants and animals in one or more of the following categories:

- taxa (i.e., taxonomic categories or groups) officially listed by the State or Federal government as endangered, threatened, or rare;
- candidates for State or Federal listing as endangered or threatened;

- taxa that meet the criteria for listing, even if not currently included on any list, as described in State CEQA Guidelines California Code of Regulations Section 15380;
- species identified by the CDFW as species of special concern;
- species listed as Fully Protected under the FGC; and
- plants considered by CDFW to be “rare, threatened, or endangered in California.”

The CDFW California Natural Diversity Database (CNDDDB) (CDFW 2020) and the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2020) were reviewed prior to field survey on June 23, 2020. These reviews were centered on the Courtland U.S. Geologic Survey 7.5-minute quadrangle, containing the erosion sites, and included the eight surrounding quadrangles. A list of resources under jurisdiction of the USFWS that could occur in the vicinity was obtained from the Information for Planning and Conservation website and indicates 1 fish species to be present (USFWS 2020). NMFS online California Species List Tools (NMFS 2019) were also reviewed and indicate 3 species (includes 2 individual runs of Chinook salmon) under NMFS jurisdiction are present in the Courtland U.S. Geologic Survey quadrangle. Database search results are included in Appendix C.

Special-status species were evaluated for the potential to occur at the erosion site locations, based on the database reviews and on-site habitat conditions. Species that occupy elevation ranges higher or lower than the project site, occur in a different floristic providence, or otherwise could be determined to have no potential to occur in the project vicinity, were eliminated from consideration. Species that were determined to have at least low potential to occur at the project site are discussed below.

Plants

Thirty-one special-status plants included in the CNDDDB and/or online Inventory of Rare and Endangered Vascular Plants of California search results were evaluated for their potential to occur on the project site. Plant species with habitat requirements that are not present at the project site were eliminated from further consideration. Based on observations made during the June 23, 2020 field surveys a total of eight special-status plants were determined to have potential to occur within the project site: bristly sedge (*Carex comosa*), Bolander’s water-hemlock (*Cicuta maculata* var. *bolanderi*), woolly rose-mallow (*Hibiscus lasiocarpus* var. *occidentalis*), Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*), Mason’s lilaeopsis (*Lilaeopsis masonii*), Sanford’s arrowhead (*Sagittaria sanfordii*), side-flowering skullcap (*Scutellaria lateriflora*), and Suisun marsh aster (*Symphotrichum lentum*). Focused botanical blooming period surveys targeting these species were conducted on the waterside of the levee from a boat in Sutter Slough on August 11, 2020. None of the plant species with potential to occur were identified during the focused botanical survey.

Fish

As part of ongoing monitoring related to impacts of Delta water exports by DWR and the U.S. Bureau of Reclamation (Reclamation), fisheries monitoring is conducted annually by the Interagency Ecological Program (IEP). The USFWS Breach III study along with the CDFW 20-millimeter (mm) Survey, Summer Townet Survey, Midwater Trawl Survey, and Spring Kodiak Trawl Survey, include sample locations near

Sutter Slough and provide useful fish distribution information for determining which fish species occur in the project vicinity. According to data generated by these and other sampling efforts, a number of special-status fish species have potential to occur in the project vicinity during various times of the year. All eleven special-status fish taxa included in the CNDDDB search results and/or on the USFWS or NMFS resource lists have potential to occur in Sutter Slough and are discussed below.

Delta smelt (*Hypomesus transpacificus*) is Federally listed as threatened, and the project site is within its designated Critical Habitat. Delta smelt are endemic to the Sacramento-San Joaquin Delta, occurring primarily below Isleton on the Sacramento River and below Mossdale on the San Joaquin River (Moyle 2002). They are tolerant of a wide range of salinities, but adults are mostly found in water of 2-7 parts per thousand (ppt) salinity; however, spawning and rearing mostly occurs in freshwater. Delta smelt typically rear in shallow (<10 feet) open waters of the Delta, San Pablo Bay, Suisun Bay, and Suisun Marsh (Moyle 2002). Spawning migrations begin in September or October when Delta smelt move to the upper portions of the Delta where they spawn between February and July. Delta smelt spawn in sloughs and shallow edge habitats in the upper Delta, in the Sacramento River above Rio Vista, Montezuma Slough near Suisun Bay, lower Napa River, and possibly Suisun Slough in Suisun Marsh (Moyle 2002).

Longfin smelt (*Spirinchus thaleichthys*) is an estuarine species occurring in the San Francisco Estuary, including the Delta, as well as other estuaries along coastal Northern California. Longfin smelt tend to be concentrated in Suisun, San Pablo, and North San Francisco bays. The longfin smelt is a Federal species of concern and State-listed as threatened. The distribution of longfin smelt depends on salinity and water temperature, as well as on the life stage of individual fish. A strong positive correlation has been established between Delta outflow and longfin smelt abundance the following year (Moyle 2002).

The Sacramento splittail (*Pogonichthys macrolepidotus*) is designated as a California species of special concern. Sacramento splittail are endemic to the Central Valley and San Francisco Estuary. In the Sacramento River, they have recently been observed as far upstream as Red Bluff Diversion Dam; however, the upstream extent of their spawning migrations is unknown (Feyrer et al. 2005). When flooded, the Yolo Bypass may provide important spawning and rearing habitat, suggesting that Sutter Slough may at times be used as rearing habitat for splittail (Moyle 2002). When they are not spawning, splittail are often most abundant in sloughs of Suisun Marsh and the northern portion of the Delta. The CDFW 20 mm survey regularly catches larval splittail in Sutter Slough and throughout the Cache Slough Complex.

There are four distinct Evolutionary Significant Units (ESU) of Chinook Salmon (*Oncorhynchus tshawytscha*) in the Central Valley, all of which spend part of their life cycle in the Delta: Sacramento River winter-run Chinook Salmon (Federally and State listed as endangered), Central Valley spring-run Chinook Salmon (Federally and State listed as threatened), Central Valley fall-run Chinook Salmon (California species of special concern and Federal species of concern), and Central Valley late-fall-run Chinook Salmon (California species of special concern and Federal species of concern). Adults of all four runs pass through the Delta on their upstream spawning migrations, and juveniles spend varying amounts of time rearing in the Delta. The USFWS Juvenile Fish Monitoring Program monitors juvenile outmigration throughout the Delta, and while Sutter Slough is not a sampling site of that program, it is believed that both adult and juvenile salmon may use it as a migratory corridor. In addition, the project

site is located in designated Critical Habitat for spring-run Chinook Salmon, and the aquatic habitat surrounding the project site is considered essential fish habitat (EFH) for all runs of Chinook Salmon.

Sacramento winter-run Chinook Salmon are unique to the Sacramento River. They typically migrate upstream in winter and spring as immature fish and then spawn in early summer. Presently, their spawning habitat is restricted to the Sacramento River below Shasta Dam, where releases are used to maintain river temperatures of 10 to 15°C. Juveniles spend 5 to 10 months in streams, followed by an intermediate period in the San Francisco estuary, including the Delta (Moyle 2002).

Central Valley spring-run Chinook salmon enter the San Francisco Bay in spring or early summer as immature fish and migrate to tributaries of the Sacramento River, where they hold in deep, cold pools for several months prior to spawning in early fall. Juveniles typically rear in streams for 3 to 15 months before moving downstream, primarily as smolt that move rapidly through the Delta (Moyle 2002). Historically, spring-run Chinook Salmon migrated far upstream in larger tributaries of the Sacramento and San Joaquin rivers. Due to dam construction, however, spring-run Chinook were eliminated from the San Joaquin River drainage and their spawning populations were greatly reduced in the Sacramento River drainage.

Central Valley fall-run Chinook salmon migrate from the ocean in late summer and early fall as mature fish and spawn within days or weeks of reaching their spawning grounds in the lowland reaches of larger rivers and their tributaries (Moyle 2002). Juveniles emerge from gravel in spring and move downstream within a few months to rear in mainstem rivers or estuaries. Central Valley fall-run Chinook Salmon have the longest rearing period of the four Chinook Salmon runs in the Central Valley (Moyle 2002). The fall run is currently the most abundant Chinook Salmon run in the Central Valley. Currently, fall-run Chinook in the Sacramento and San Joaquin rivers are supplemented by hatcheries on Battle Creek and the Feather, American, Mokelumne, and Merced rivers.

Central Valley late fall-run Chinook salmon typically migrate upstream from the ocean from October through February and hold for 1 to 3 months prior to spawning in January through March (Moyle et al. 1995). Juveniles spend 7 to 13 months in freshwater prior to outmigration. Late-fall-run Chinook are listed by CDFW as a species of special concern. The CALFED Bay-Delta Program considers Central Valley late-fall-run Chinook Salmon to be a species in need of “recovery.”

The Central Valley Steelhead (*Oncorhynchus mykiss*) Distinct Population Segment (DPS) is Federally listed as threatened, and the project is within its designated Critical Habitat. Steelhead are the anadromous, or migratory, form of coastal rainbow trout which have extremely variable and flexible life history patterns. Sutter Slough does not provide suitable spawning habitat for steelhead, but migratory individuals could travel through the slough on their way to and from upstream spawning sites.

Western river lamprey (*Lampetra ayresi*) is a California species of special concern. Individuals are recovered annually from the State and Federal fish collection facilities in the South Delta. In California, most records are from streams in the lower portion of the Sacramento—San Joaquin River system, but their distribution is poorly understood because they have not been studied extensively.

Pacific lamprey (*Entosphenus tridentata*) is a California species of special concern. Like other lampreys in California, Pacific lampreys are anadromous and spawn in gravelly streams, including tributaries of the San Francisco Estuary and the Central Valley. Adult migration into fresh water occurs primarily between March and late June. There are no surveys that regularly monitor or catch Pacific lampreys, and it is unknown what the extent of their distribution is within Sutter Slough. Because juveniles and larvae rear in silty backwater, it is unlikely that Sutter Slough only provides adequate habitat for adult migration (Moyle 2002).

The Southern DPS of North American green sturgeon (*Acipenser medirostris*) is Federally listed as threatened, and the project is within its designated Critical Habitats. Green sturgeon is a very wide-ranging anadromous species that primarily inhabits estuarine and coastal waters but migrates into freshwater to spawn. Currently in California, green sturgeon spawn in the Klamath, Trinity, and Sacramento rivers. Preferred spawning habitat is often characterized by deep, swiftly flowing water over substrate of large cobble where eggs are broadcast and fertilized externally. Sutter Slough does not provide suitable spawning habitat for green sturgeon, but migratory individuals could travel through the slough on their way to and from upstream spawning sites.

Wildlife

Twenty-two special-status wildlife taxa included in the CNDDDB search results and/or on the USFWS resource list were evaluated for their potential to occur on or adjacent to the project site. As with the plant species, nearly all of the wildlife species were determined to have no potential to occur on or adjacent to the project site because of restricted distribution and/or lack of suitable habitat. The few special-status wildlife taxa for which at least potentially suitable habitat occurs on or adjacent to the project site were evaluated in further detail and are discussed below.

Elderberry shrubs are the obligate host plant for the Federally threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). Elderberry shrubs are known to occur throughout the Sutter Slough riparian corridor and were observed on the waterside and landside of the levee at Erosion Site 1, and outside of the footprint of the waterside of Erosion Site 3, but within 165 feet of Erosion Site 3. Therefore, valley elderberry longhorn beetle has potential to occur at the project site because suitable habitat for the species is present.

Giant garter snake (*Thamnophis gigas*) is Federally and State-listed as threatened and inhabits marshes, sloughs, ponds, small lakes, low gradient streams, and other waterways and agricultural wetlands. Occupied aquatic habitats typically contain permanent or seasonal water, mud bottoms, and vegetated dirt banks. Giant garter snakes are inactive or greatly reduce their activities during late fall and winter, typically emerging from upland winter retreats in late March to early April and often remaining active through October. Suitable habitat for the species is characterized by all of the features necessary to support permanent populations, including: (1) adequate water during the snake's active season, (2) emergent herbaceous wetland vegetation for escape and foraging habitat, (3) grassy banks and openings in waterside vegetation for basking, and (4) higher elevation upland habitat for cover and refuge from flooding (USFWS 2016). Sutter Slough provides suitable aquatic habitat for the species. Suitable upland habitat is absent from the banks due to the density of mature riparian trees and shrubs that provide abundant shade

and eliminate basking sites along the middle to low levee slope. Small patches that are unshaded could provide limited upland areas for the species, but the amount of suitable habitat is limited. Land use landside of the levee is incompatible with the species habitat requirements. There are several occurrences of giant garter snake within the project vicinity, but no known occurrences from Sutter Slough. Documented occurrences are recorded Liberty Island more than 3 miles away and from Snodgrass Slough at a travel distance along aquatic routes of greater than 5 miles.

Western pond turtle (*Emys marmorata*), a California species of special concern, inhabits still and slow-moving aquatic habitats. This species is found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation and rocky or muddy bottoms. Western pond turtles also require basking sites such as logs, rocks, cattail mats, and exposed banks. Female turtles nest in April through August in loose soils near-aquatic habitat, usually along stream or pond margins (CaliforniaHerps.com 2014). Sutter Slough provides suitable aquatic habitat for western pond turtle and in-stream woody debris provides suitable basking sites for this species. Suitable upland nesting sites are generally absent from the project site due to the density of mature riparian trees and shade that the trees provide. Further, this species preferentially nests in sandy soils, which are not present within the project site.

Four special-status bird species were evaluated for potential to be affected by project activities: Swainson's hawk (*Buteo swainsoni*), western yellow billed cuckoo (*Coccyzus americanus occidentalis*), white-tailed kite (*Elanus leucurus*), and song sparrow "Modesto" population (*Melospiza melodia*).

Swainson's hawk is a State threatened species. Western yellow billed cuckoo is listed as Federally threatened and State endangered. Song sparrow "Modesto" population is a California species of special concern and white-tailed kite is fully protected under the FGC.

Western yellow-billed cuckoo could use Sutter Slough as stop over migratory habitat, but suitable nesting habitat is absent from the project site as the species requires wide swaths of mature riparian forest with a minimum size of approximately 49 acres (USFWS 2015). The riparian corridor along Sutter Slough is narrow, generally 70 feet or less in width. Habitat adjacent to the project site is only moderately suitable for use by non-breeding yellow-billed cuckoo and does not provide suitable nesting habitat. The riparian trees along Sutter Slough provide suitable nesting habitat for Swainson's hawk, white-tailed kite, and song sparrow.

One special-status mammal was evaluated for its potential to be affected by project activities: western red bat (*Lasiurus blossevillii*), a California species of special concern. In California, this species occurs throughout the Central Valley and the western portion of the State from Shasta County southward. Western red bats typically roost in the foliage of mature trees associated with woodland borders, rivers, and agricultural areas. Roost trees are typically large cottonwoods, sycamores, walnuts, and willows. Activity levels in the Central Valley, as measured by acoustic surveys, have been shown to be highest in riparian habitat corridors greater than 50 meters wide and dominated by mature trees (Pierson et al. 2006). There are several documented occurrences of western red bat in the vicinity of the project site, mainly along the Sacramento River (CNDDDB 2020).

Sensitive Habitats

Sutter Slough is a water of the United States and water of the State, protected under Sections 404 and 401 of the CWA and the Porter-Cologne Water Quality Control Act, which defines a water of the State as any surface water or ground water within the boundaries of the State (Water Code Section 13050(e)). It is also subject to the influence of tides and therefore subject to Section 10 of the Rivers and Harbors Act of 1899 below the MHW line. Riparian vegetation is regulated under FGC Section 1602, and riparian habitat is considered a sensitive natural community. Sutter Slough is critical habitat for Delta smelt, spring-run Chinook, green sturgeon, and steelhead. Sutter Slough is also considered to be EFH for all runs of Chinook salmon.

3.4.2 Discussion

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Marine Fisheries Service?**

Special-status Plants

As discussed, focused botanical blooming period surveys conducted on August 11, 2020, determined that none of the plant species with potential to occur are present at the project site. Therefore, the project would have **no impact** to special-status plants.

Special-status Fish

Special-status fish species generally have the potential to be affected by the project in four ways:

1. Direct impacts from erosion repairs have the potential to physically harm or kill fish within close proximity to the construction site. Direct impacts include mortality from construction equipment, vibrations, or falling debris.
2. Direct impacts from placement of fill material below the MHW line will directly affect the quantity and quality of aquatic habitat, including designated Critical Habitat. Riparian vegetation removal could result in loss of shaded riverine aquatic (SRA) habitat, depending on the type and location of the vegetation. Although riprap may provide habitat for juvenile salmonids and bolster densities on reaches of streams that have been severely degraded, it does not provide the intricate habitat requirements for multiple age classes or species provided by natural vegetated banks. Streambanks with riprap have fewer undercut banks, less low-overhead cover, and are less likely than natural stream banks to contribute large woody debris to the stream. Additionally, hardened surfaces provide less access to cover which reduces the ability of juvenile and/or small fish to avoid predation.
3. Indirect impacts from construction activities have the potential to affect the growth, survival, and reproduction of fish close to the construction site. Levee repair activities could indirectly harm fish by increasing sedimentation, causing habitat degradation, or movement disruption. Sediment released into Sutter Slough could result in indirect impacts on resident fish through gill damage

and reduced capacity to take in oxygen. Construction related noises could impact resident fish by disrupting their normal migratory or diel movement. All of these impacts could cause reduced fitness as a result of decreased dissolved oxygen (DO) intake ability, increased metabolic costs associated with reduced DO intake ability, and reduced foraging ability due to visibility.

4. Impacts from construction-related activities have the potential to affect fish spawning, rearing, or foraging habitat in close proximity to the construction site. Levee repair activities, including vegetation removal and levee armoring, could impact fish by releasing debris into Sutter Slough. Debris may temporarily impact the spawning, rearing, or foraging habitat of fish by degrading the natural habitat.

Smelt and Splittail Species

Erosion repairs will involve placement of riprap below MHW and construction associated with the repairs could result in the release of sediment and debris into Sutter Slough during earthmoving activities occurring below the high tide line. These activities have the potential to directly and indirectly affect Delta smelt by disrupting feeding activities and potentially compromising Critical Habitat for the species. Additionally, although in-water construction activities would take place when splittail are considered least vulnerable to in-channel activities, sediment and debris could also affect splittail feeding activities and construction-related noise may disrupt migration and daily movement of this species if they are present in the project area outside of their normal migration period. Finally, although longfin smelt are unlikely to occur in the project vicinity during the planned construction window, potential indirect impacts associated with sediment release could extend beyond the construction period (e.g., during later rain events or higher water levels) and occur when they are present. This impact would be **potentially significant**.

Salmon and Steelhead Species

Riprap placement would affect aquatic habitat for Chinook salmon and steelhead and could result in loss of SRA cover. Construction would occur outside of peak immigration/emigration timeframes and/or during periods designated by CDFW, and generally accepted by NMFS, as a period when Chinook salmon and steelhead are least vulnerable to in-channel activities. However, if any of these taxa are present in the project vicinity outside of peak immigration/emigration windows, sediment and debris released into Sutter Slough during project construction has the potential to directly or indirectly affect feeding activities, migration, or daily movements. Additionally, noise related to construction also has the potential to disrupt the natural migration or daily movement of all special-status fish species listed herein. This impact would be **potentially significant**.

Lamprey and Sturgeon Species

Although construction activities would not overlap with the adult Western river lamprey or Pacific lamprey immigration or juvenile emigration periods, these species haven't been studied extensively and are not well understood and, therefore, there is the potential for these species to be present in the project vicinity during construction. Although adult green sturgeon typically occur on the bottom of channels, away from channel margins associated with the project site, emigrating and rearing juveniles may utilize channel margins and vegetated cover in the vicinity of the project. In addition, the project is located in

Critical Habitat for green sturgeon, and project construction would permanently affect channel margins and vegetated cover associated with this Critical Habitat. This impact would be **potentially significant**.

The following mitigation measures have been identified to address potentially significant impacts to special-status fish species:

Mitigation Measure BIO-1: Conduct Worker Environmental Awareness Training

RD 999 shall conduct environmental awareness training before project activities begin to inform all construction personnel about measures to avoid and minimize effects on biological resources.

- The program will be conducted by a qualified biologist and will address the following: biology and habitat needs for special-status species with potential to occur in the project vicinity; regulatory status and protection; measures required to reduce potential impacts during project construction; penalties for non-compliance; and benefits of compliance.

Timing: Before and during construction.

Responsibility: RD 999

Mitigation Measure BIO-2: Limit Timing of In-water Work

In-water work will be completed between August 1 and November 30, the period designated by the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) and generally accepted by the National Marine Fisheries Service (NMFS) as when special-status fish are least vulnerable to impacts from in-channel activities (USFWS 2004, DFG 2005).

Timing: During construction

Responsibility: RD 999 and its construction contractor(s)

Mitigation Measure BIO-3: Minimize Turbidity and Monitor According to Permit Requirements

Rock material used for levee repairs below the mean high-water (MHW) mark shall be clean, hard, rock with no appreciable fines and shall be placed in a manner that limits resuspension of sediments. Turbidity measurements shall be taken in accordance with the project's Clean Water Act (CWA) 401 Water Quality Certification. If necessary to reduce turbidity levels, rock placement methods shall be modified, slowed, or suspended to comply with the terms and conditions of the Certification.

Timing: During construction

Responsibility: RD 999 and its construction contractor(s)

Mitigation Measure BIO-4: Implement Compensatory Aquatic Habitat Mitigation

The District will implement the measures described below to minimize impacts on aquatic habitat and compensate for loss of aquatic habitat, such that there is no net loss of aquatic function and values:

- An acreage of impact and mitigation ratios will be developed in coordination with resource agencies during project permitting and the Section 7 Endangered Species Act consultation process.
- Mitigation may include onsite enhancements, offsite habitat acquisition, and/or the purchase of credits at an accredited mitigation bank to compensate for any permanent loss of habitat.

Timing: Before and during construction

Responsibility: RD 999

Mitigation Measure BIO-5: Protect Riparian Habitat, Obtain and Comply with Necessary State Permits/Authorizations, and Develop and Implement a Mitigation Plan, if Necessary.

The District will implement the measures described below to minimize impacts on riparian habitat and compensate for loss of riparian habitat, such that there is no net loss of riparian functions and values:

- Removal of native woody vegetation will be avoided to the extent feasible. When feasible, the root system of shrubs shall be retained so that woody vegetation may re-sprout.
- Prior to removal of riparian vegetation, a CDFW streambed alteration agreement shall be obtained under Section 1602 of the California Fish and Game Code. Mitigation, if required, may be accomplished through habitat replacement, enhancement of degraded habitat (i.e., removal of invasive trees along Sutter Slough at Site 1), offsite mitigation at an established mitigation bank, contribution of in-lieu fees, or other methods acceptable to CDFW. Conditions of issuance of the streambed alteration agreement, including minimization and compensation measures, shall be implemented as part of the project, such that there is no net loss of riparian functions and values.
- If compensation is provided through permittee-responsible mitigation, a mitigation plan shall be developed to detail appropriate compensation measures determined through consultation with CDFW, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails.

Timing: Before and during project activities

Responsibility: RD 999

Mitigation Measure GEO-1: Implement a Stormwater Pollution Prevention Plan and Associated BMPs.

Please *refer to* Impact GEO-1 in Section 3.7, “Geology and Soils,” for the full text of this mitigation measure.

Implementing Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, and GEO-1 would reduce the potentially significant impacts associated with special-status fish species and their habitat, such that there is no net loss of aquatic function and values. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated.**

Special-status Invertebrates

Multiple elderberry shrubs were identified at Erosion Site 1, the only erosion repair site where elderberry shrubs occur. Elderberry shrubs are located near Erosion Site 3, but outside of the area disturbed by project activities. At Erosion Site 1 there are 8 individual shrubs located along the waterside levee slope and 5 clusters of elderberries. Elderberry clusters are concentrated at the northern end of Erosion Site 1 with 4 clusters located between Stations 22+00 to 33+00. Two individual elderberry shrubs are located along the landside levee slope near Stations 21+00 and 34+00. The density of elderberry shrubs along Sutter Slough, notably at Erosion Site 1, in combination with a diverse assemblage of mature riparian trees, provides high-quality habitat for valley elderberry longhorn beetle. Although the nearest CNDDDB occurrence for valley elderberry longhorn beetle is historic and located at a distance greater than what the species is typically capable of migrating, occurrences of this species are difficult to confirm and generally under-reported, because the species spends most of its lifecycle inside the host shrub.

Erosion Site 1 is the only erosion site that contains elderberry shrubs. If elderberry shrubs or associated riparian habitat is disturbed by project implementation, there could be direct or indirect adverse effects on valley elderberry longhorn beetle. Elderberry shrub removal would result in habitat loss and potential loss of individuals, if the shrubs are occupied by the species. Dust generated by ground disturbance and riprap placement could adversely affect elderberry shrubs. Potential project impacts on valley elderberry longhorn beetle, a Federally threatened species, could have a substantial adverse effect and would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure BIO-1: Conduct Worker Environmental Awareness Training

Please *refer to* Impact BIO-1, above, for the full text of this mitigation measure.

Mitigation Measure BIO-6: Minimize Potential Impacts on Valley Elderberry Longhorn Beetle

The District shall implement the following measures to minimize potential for significant adverse effects on valley elderberry longhorn beetle during project activities at erosion repair sites along Sutter Slough:

- All elderberry shrubs within 165 feet of project activities shall be identified and marked by a qualified biologist prior to construction.

- Impacts on elderberry shrubs will be avoided and/or minimized by considering the location of elderberry shrubs and avoiding them when feasible during erosion site repairs. If feasible on the steep levee slope, elderberry shrubs to be avoided will be protected with high-visibility fencing; at a minimum, elderberry shrubs will be marked with a high visibility marker, such as flagging tape.
- A minimum 20-foot protective buffer will be maintained around elderberry shrubs with a stem greater than 1 inch in diameter at ground level. If this is not feasible, the District will request technical assistance from USFWS regarding potential additional minimization and avoidance measures and will implement all feasible measures recommended by USFWS to minimize adverse impacts on and avoid take of valley elderberry longhorn beetle. Such measures may include, but not necessarily be limited to, restoring any areas within 100 feet of elderberry shrubs that are disturbed by project activities, prohibiting use of herbicides and fertilizers within the dripline and insecticides within 100 feet of elderberry shrubs, and implementing dust control measures when working near elderberry shrubs.
- If removing elderberry shrubs cannot be avoided, an incidental take permit may be required. If necessary, an appropriate and feasible mitigation plan will be developed and provided to USFWS for approval, prior to implementation by the District. The plan may include, but will not necessarily be limited to, transplanting shrubs to a conservation area and planting additional seedlings or cuttings at a ratio ranging from 2:1 to 3:1 (USFWS 2017). If transplanting shrubs to be removed and planting elderberry seedlings is not feasible, purchasing credits at a USFWS-approved mitigation bank may be used as alternative mitigation.
- If shrub transplantation and seedling planting will occur, the mitigation plan will specify how to manage the elderberry transplant area to ensure that the appropriate habitat conditions are provided. At a minimum, the plan will describe requirements for transplanting shrubs that require removal, specify the number of replacement elderberry shrubs and associated native plants to be established and associated success criteria, specify remedial measures to be undertaken if survival success criteria are not met, and describe short- and long-term maintenance and management, including funding.
- If off-site mitigation includes dedicating conservation easements, purchasing mitigation credits, or implementing other off-site conservation measures, the details of these measures will be included in the mitigation plan. The plan will list responsible parties for long-term management, conservation easement holders, and long-term management requirements as appropriate to target long-term habitat viability and preservation.

Timing: Before ground-disturbing activities adjacent to elderberry shrubs

Responsibility: RD 999 and its construction contractor(s)

Implementing Mitigation Measures BIO-1 and BIO-6 would minimize the potential impact to valley elderberry longhorn beetle by avoiding elderberry shrubs where feasible and require that transplanting removed shrubs and planting additional seedlings, or purchasing mitigation bank credits, would compensate for unavoidable impacts. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

Special-status Reptiles

Suitable upland habitat for giant garter snake is limited at the project site due to the density of mature trees and the contiguous shade that these trees provide along the levee slope, and notably along the lower portion of the levee slope and along the edge of the water surface. Giant garter snake prefers open areas for basking but could seek refuge or opportunities to thermoregulate along the banks. Suitable upland habitat is present at Erosion Site 3 and is low quality for the species since the area is subject to anthropogenic disturbances associated with recreational fishing and illegal camping and dumping. Placing riprap could result in injury or mortality of individuals in the water or along the slope in suitable upland areas, if the species is present during this activity. The overall linear footage of suitable habitat that would be disturbed during project construction is a very small amount of the habitat available for the species along Sutter Slough and within the Delta. However, injury or mortality of individuals, if present, could have a substantial adverse effect on the local population and would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure BIO-1: Conduct Worker Environmental Awareness Training

Please *refer to* Impact BIO-1, above, for the full text of this mitigation measure.

Mitigation Measure BIO-7: Minimization Measures for Giant Garter Snake

The District will implement the measures described below to minimize impacts on giant garter snake:

- A qualified biologist shall complete a preconstruction survey for giant garter snake no more than 24 hours in advance of ground-disturbing activities. If there is a lapse in greater than 14 days in project-related ground disturbance, the areas which provide suitable upland habitat shall be re-surveyed by a qualified biologist.
- Initial ground disturbing project activities in areas of suitable upland habitat would be conducted during the giant garter snake active period—before October 1.
- A biologist shall be present when conducting initial ground-disturbing activities in areas of suitable upland habitat before October 1.

Timing: Before and during construction

Responsibility: RD 999

Implementing Mitigation Measures BIO-1 and BIO-7 would require surveys and monitoring to minimize potential for injury or mortality of individual giant garter snakes that may be present on the project site.

Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

Sutter Slough provides aquatic habitat suitable to support western pond turtle, and the in-stream woody debris present along the banks provides suitable basking sites. However, western pond turtles are unlikely to nest at the project site because substrates along the bank slopes are generally composed of silt or clay and the lower bank slopes are heavily shaded by mature riparian trees and dense thickets of shrubs. Where bank slopes are unshaded is typically high on the levee slope and soils are dense and compacted. In addition, because the project would be implemented almost entirely outside the nesting season for this species, nest destruction is very unlikely to occur, if present. Pond turtles are highly susceptible to disturbance and any individuals that may occur in the area are likely to avoid the project site during construction activities and use alternative similar nearby suitable habitat, which is readily available in the project vicinity. Therefore, direct injury or mortality of pond turtle is unlikely to occur and impacts to this species are **less than significant**.

Special-status Birds

Swainson's hawk nests have been documented at multiple locations along and nearby Sutter Slough. This species was observed soaring over the southern portion of the project site, notably Erosion Site 1, at the time of the field survey. The banks of Sutter Slough are characterized by mature riparian trees which provide suitable nesting habitat for Swainson's hawk. Agricultural row crops, notably present landside of Erosion Site 1, provide suitable foraging for Swainson's hawk. Nesting habitat is present at the project site for white-tailed kite and song sparrow "Modesto" population. Because erosion repairs would be implemented August 1 to November 30, construction would only overlap the latter end of the nesting season, when sensitive life stages that are dependent on the nest for survival are much less likely to be present. However, because young fledglings with limited mobility could still be present in on-site vegetation during the beginning of the construction window, there is potential for direct take of individuals and therefore the project could have a substantial adverse effect on Swainson's hawk, white-tailed kite, and song sparrow and would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure BIO-1: Conduct Worker Environmental Awareness Training

Please *refer to* Impact BIO-1, above, for the full text of this mitigation measure.

Mitigation Measure BIO-8: Minimize Disturbance of Active Raptor and Song Sparrow Nests and Avoid Take of Individuals.

The District and its contractor(s) will implement the following measures to reduce effects of the project on nesting raptors and song sparrows:

- All vegetation removal along the banks of Sutter Slough will be conducted between September 16 and January 31 (outside of the nesting season), to the extent feasible.

- If project activity is scheduled to occur during the nesting season (February 1–September 15), focused surveys for nesting raptors and song sparrows will be conducted. Surveys for Swainson’s hawk will follow methodology developed by the Swainson’s Hawk Technical Advisory Committee (2000).
- Nesting surveys will be conducted by a qualified biologist before the start of project construction to identify active nests on the project site and in the vicinity. At least one survey will be conducted no more than 14 days before project activities commence. Surveys for Swainson’s hawk nests will include all accessible areas of suitable nesting habitat within 0.25 mile of the project site. Surveys for other raptors and song sparrows will include accessible suitable nesting habitat located within 500 feet of the project site. A letter report documenting the survey methods and results will be prepared and submitted to CDFW. If no active nests are found, no further mitigation is required.
- If active nests are identified, appropriate buffers around the active nest sites will be established to avoid nest failure resulting from project activities. No project activity shall commence within the buffer areas until a qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer would not result in nest abandonment. CDFW guidelines recommend implementing 0.25- or 0.5-mile-wide buffers for Swainson’s hawk (depending on local conditions) and 500-foot buffers for other raptor species. The size of the buffer may be adjusted if a qualified biologist determines it would not be likely to adversely affect the nest. If reduced buffers are implemented, a qualified biologist will monitor the nest during construction activities to ensure that the reduced buffers do not adversely affect the adults or their young. If construction activities cause the nesting birds or their young to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, the buffer will be adjusted to ensure project activities are far enough from the nest to avoid such agitation.

Timing: Before ground-disturbing activities

Responsibility: RD 999 and its construction contractor(s)

Implementing Mitigation Measures BIO-1 and BIO-8 would reduce potential impacts to Swainson’s hawk, white-tailed kite, nesting common raptors, song sparrows, and all bird because it would minimize potential for disturbance of active nests and avoid loss of individuals. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

Special-status Mammals

Western red bat could forage in the project area, and mature trees on the project site provide potential roosting habitat. However, the quality of roosting habitat is poor, because riparian vegetation occurs in a very narrow (approximately 40 to 70 feet wide) corridor. Foraging activities are unlikely to be disturbed by construction activities, and few, if any, roosting individuals are anticipated to be disturbed. In addition, potential active maternal colonies would not be removed, because mature trees over 4 inches dbh would be avoided during construction, to the extent feasible. Project construction would occur annually between August 1 and November 30; and therefore, tree removal would be conducted after August 1 and would

avoid impacts to active maternity colonies. These minor potential impacts would not result in a substantial adverse effect on western red bat. Therefore, potential impacts on special-status mammals would be **less than significant**.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Riparian Habitat

Each of the seven erosion sites has riparian vegetation present along the west bank of Sutter Slough. The on-site riparian habitat can be characterized as valley oak woodland, which is a CDFW sensitive natural community and is regulated by CDFW under Section 1602 of the FGC because of its abutting spatial relationship to Sutter Slough. Because the project proposes to retain all trees greater than 4 inches dbh, the vegetation removal is most likely to occur in the understory layer. Removal of understory vegetation is an alteration of the riparian habitat. The project description does allow that shrubs and trees over 4 inches may require removal, although impacts to woody vegetation would be minimized to the extent feasible. The mature, diverse assemblage of native trees and shrubs along both banks of Sutter Slough provides high-quality riparian habitat. Removal of riparian habitat, especially vegetation that functions as SRA would result in habitat alteration and degradation that could result in a substantial adverse effect on for special-status fisheries. Therefore, this impact would be a **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure BIO-5: Protect Riparian Habitat, Obtain and Comply with Necessary State Permits/Authorizations, and Develop and Implement a Mitigation Plan, if Necessary.

Please *refer to* Impact BIO-5, above, for the full text of this mitigation measure.

Implementing Mitigation Measure BIO-5 would reduce the significant impact associated with loss of riparian habitat to a less-than-significant level, because impacts to riparian habitat would be minimized and mitigated, such that there is no net loss of riparian functions and values. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

- c) **Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

The levee slopes do not support State or Federally protected wetlands. Sutter Slough is a regulated waters of the United States under CWA Section 404 and Section 10 of the Rivers and Harbors Act of 1899. Sutter Slough is also a waters of the State subject to CWA Section 401 permitting and is subject to Section 1602 of the FGC, as implemented by CDFW. The site does not contain areas that meet the Federal or State definition of wetlands. Construction of erosion repairs would not realign the channel course or alter capacity of Sutter Slough but would result in the placement of riprap (i.e., fill) below the plane of the MHW line. Placement of fill into Federal and State regulated aquatic resources has the potential to have temporary adverse effects on water quality by increasing turbidity at the erosion repair sites and

downstream. Degradation of water quality and alteration of the channel below the plane of the MHW line could substantially alter function and values. These impacts would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure BIO-9: Protect Jurisdictional Waters, Obtain and Comply with Necessary Federal and State Permits/Authorizations, and Develop and Implement a Mitigation Plan, if Necessary.

The District will implement the measures described below to minimize impacts on jurisdictional waters:

- Before beginning project activities, high-visibility markers, such as fencing or flagging, shall be installed to delineate the work limits of the erosion repair site. The fencing or flagging shall be inspected before the start of each workday and shall be removed when construction is completed. Sensitive habitat information shall be incorporated into project bid specifications, along with a requirement for contractors to avoid these areas.
- Prior to disturbing jurisdictional waters, authorization for impacts on jurisdictional waters shall be secured – a CWA Section 404 permit from the U.S. Army Corps of Engineers (USACE) and a water quality certification pursuant to CWA Section 401 from the Central Valley Regional Water Quality Control Board (RWQCB) – before starting project activities. Any measures determined necessary during the 404 and 401 permitting processes shall be implemented, such that there is no net loss of functions and values of jurisdictional waters.
- Mitigation, if required by agencies with permit authority over aquatic resources, may be accomplished through habitat replacement, enhancement of degraded habitat, offsite mitigation at an established mitigation bank, contribution of in-lieu fees, or other method acceptable to the regulatory agencies, such that there is no net loss of functions and values.

Timing: During project activities

Responsibility: RD 999 and its construction contractor(s)

Mitigation Measure GEO-1: Implement a Stormwater Pollution Prevention Plan and Associated BMPs.

Please *refer to* Impact GEO-1 in Section 3.7, “Geology and Soils,” for the full text of this mitigation measure.

Implementing Mitigation Measures BIO-9 and GEO-1 would reduce potential direct and indirect impacts to jurisdictional waters such that there is no net loss of their functions and values. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Implementation of erosion repair activities would result in the temporary disturbance of wildlife movement patterns for up to four months per year in the riparian corridor along Sutter Slough. The short extent of levee slope requiring construction in a day at any erosion site and limiting construction activities to daytime hours, would allow for overnight animal movements along the upper levee slope, when most movement of terrestrial wildlife typically occurs. In addition, the levee road is subject to light vehicular use, and agricultural fields landside of the levee provide an opportunity for wildlife to make detours around erosion repair sites. Post-implementation, wildlife movements are anticipated to resume as normal. Therefore, this impact on terrestrial wildlife would be **less than significant**.

Refer to Question a) for a discussion of potential impacts to fish movement in the project vicinity.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Erosion Sites 5, 6, and 7 are located in Yolo County. The Open Space Element of the Yolo County General Plan calls for no net loss of riparian habitat and direction of development away from riparian areas. Implementation of erosion site repairs does not constitute “development” as the area would remain in a natural state. However, removal of riparian habitat would result in habitat alteration and degradation that could result in a substantial adverse effect. Therefore, this impact would be a **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure BIO-6: Protect Riparian Habitat, Obtain and Comply with Necessary State Permits/Authorizations, and Develop and Implement a Mitigation Plan, if Necessary.

Please *refer to* Impact BIO-6, above, for the full text of this mitigation measure.

Implementing Mitigation Measure BIO-6 would reduce the potential impact to riparian habitat such that there is no net loss of riparian functions and values. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

Erosion Sites 1–4 are located in Solano County. The Resource Conservation Element of the Solano County General Plan calls for protecting watercourses in their natural state, including preserving natural vegetation, and states that an ordinance should be adopted. The project would result in placement of riprap for erosion protection below MHW and therefore alter the natural state of Sutter Slough. Therefore, this impact would be a **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure BIO-9: Protect Jurisdictional Waters, Obtain and Comply with Necessary Federal and State Permits/Authorizations, and Develop and Implement a Mitigation Plan, if Necessary.

Please *refer to* Impact BIO-9, above, for the full text of this mitigation measure.

The mitigation identified under BIO-9 would reduce the potential impact to jurisdictional habitat such that there is no net loss of functions and values to Sutter Slough would occur. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

The District is a participant in the Yolo County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and operations and maintenance undertaken by the District are covered by the Yolo County HCP/NCCP. The HCP/NCCP covered activities include levee repair and improvements including bank and levee stabilization and repair projects. Implementing the proposed project would not jeopardize feasibility of key objectives or actions included in the Yolo County HCP/NCCP and the project would not conflict with the Yolo County HCP/NCCP. Therefore, there would be **no impact**.

A habitat conservation planning effort is underway for Solano County. The Solano Multispecies Habitat Conservation Plan (Solano HCP) is presently in administrative draft form and includes 37 proposed species for protection. The Solano HCP was developed in response to the March 1999 USFWS Biological Opinion for the Solano Project Water Service Contract Renewal between the United States Department of the Interior, Reclamation and the Solano County Water Agency (SCWA) (SCWA 2012). The District is not a Participating Agency or Member Agency to the Solano HCP. The plan has not been adopted by Plan Participants or approved by the regulatory agencies, but it could be adopted and begin implementation before the proposed project has been completed. Therefore, potential conflict with the plan is evaluated in this section.

The proposed project is located within Zone 3 of the Solano HCP area. According to the HCP, the project site is not located in a priority drainage or watershed conservation area or in a key movement corridor, and it is in an area that supports low numbers of rare species (SCWA 2012). Species covered by the Solano HCP and with potential to occur at the project site include valley elderberry longhorn beetle, giant garter snake, Swainson's hawk, Chinook salmon, steelhead, Delta smelt, Sacramento splittail, and green sturgeon; special management species with potential to occur include western pond turtle and Modesto song sparrow. The project site is located within the giant garter snake conservation area, but on-site upland habitat is of poor quality for the species, and project implementation would not conflict with conservation goals for giant garter snake. The project site is also located within the irrigated agriculture conservation area for Swainson's hawk and burrowing owl, but project implementation would not conflict with the conservation goals for these species. If the Solano HCP is adopted before project implementation is complete, the proposed project would not conflict with successful implementation of the HCP, including achievement of identified conservation goals and objectives. Therefore, there would be **no impact**.

3.5 Cultural Resources

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
IV. CULTURAL RESOURCES – Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.5.1 Environmental Setting

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance. CEQA defines a “historical resource” as any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR).

Prehistoric Setting

This brief overview of the prehistory of the region is adapted from synthesis and analysis of the archaeology of central California (Rosenthal et al. 2007), which expands and refines earlier chronological schemes developed for central California.

The Paleo-Indian period (11500 to 8550 cal Before Common Era [B.C.E.]) is the earliest accepted period for human occupation in California. Archaeological evidence dating to this period, however, is extremely rare or of dubious association.

The Lower Archaic period (8550 to 5550 cal B.C.E.) is nearly as bereft of evidence as the Paleo-Indian primarily, because of two large depositional events in 9050 cal B.C.E. and 5550 cal B.C.E. Artifacts dating to this period are usually found as isolated finds and include stemmed points, crescent-shaped flaked stone tools, and early concave base points. Despite this limited data set, however, marine shell from California found in the Great Basin and obsidian from sources in the Great Basin indicate that regional interaction was well established by this archaeological period.

Middle Archaic period (5550 to 550 cal B.C.E.) sites are rare in most of central California but are relatively common in buried contexts in the foothills. Archeological assemblages from this period are characterized by expedient, cobble-based tools used for chopping, pounding, scraping, and mulling. Archaeobotanical

studies have shown a heavy reliance on acorns and pine nuts during this period. Few bone or shell artifacts have been identified to this period, but tabular pendants, incised slate, and perforated stone plummets have been found in low numbers and over wide areas. Material sources tend to be local, with few imported obsidian artifacts.

The Upper Archaic period (550 cal B.C.E. to cal Common Era [C.E.] 1100) corresponds roughly to the beginning of the Late Holocene, a time characterized by a shift from a relatively warm, dry climate to a wetter, cooler, and more stable climate. This archaeological period is better represented and understood than previous periods, with evidence indicating that while economies varied by region, the overall emphasis was on resources that could be harvested and processed in bulk. Such resources included acorn, rabbit, salmon, shellfish, and deer. Specialized technologies, including new types of bone tools, various bead types, ceremonial blades, and polished and ground stone plummets appear in the archaeological record during this period. The lower Sierra foothills may have been occasionally occupied by groups from the valley floor, based on similar burial patterns.

The Emergent period (cal C.E. 1100 to Historic) archaeological record is the most substantial and comprehensive of any period, and its assemblages and adaptations are also the most diverse. Many earlier archaic technologies and traditions are no longer represented during this period, and arguably the most distinctive technological aspect of the Emergent period, bow and arrow technology, appears. More complex social forms also emerged, as evidenced by increased variation in burial types and furnishings. Other changes included shifts in obsidian use/production, decentralization of bead manufacture, a unique arrow type form in some areas, changes in burial practices, and possibly a monetized system of exchange. The Emergent period is usually split into two broad phases, the Lower and Upper Emergent, that are defined based on the appearance or increase in frequency of specific artifact types.

Ethnographic Setting

The project site is in the traditional territory of Central Valley Miwok speakers, part of the Eastern Miwok, a subgroup of one of two major divisions of Miwok, which is a part of the Utian language family. Linguistic analysis indicates that Miwok speakers have been present in the Sacramento-San Joaquin River Delta region for a long period, possibly thousands of years, though presence in the foothills of the Sierra Nevada is likely much more recent, approximately 600 years (Barrett 1908; Bennyhof 1977; Kroeber 1925; Levy 1978).

The Miwok lived in small villages throughout the foothills, mostly situated on ridges or terraces above streams for a nearby water supply, though smaller specialized camp locations were established farther from water sources. Like much of central California, the political organization of the Central Valley Miwok revolved around the tribelet. In general, the tribelet system was typified by a single, relatively large village, usually containing one or more ceremonial structures and the home base for a chief and possibly several assistants. This central, large village had one or more satellite villages associated with it. Together, the central village and its satellites were the largest political unit (the tribelet) that was recognized by Miwok speakers. Associated villages within an individual tribelet cooperated with each other for ceremonial purposes and group activities such as game drives (Kroeber 1925; Levy 1978; Merriam 1967).

The subsistence staple of the Miwok, again as in much of California west of the Sierra Nevada mountains, was the acorn. Acorns were processed using the mortar and pestle to reduce nutmeats to meal, followed by a leaching process to remove tannins. Bread and mush were made from the processed meal. Acorn was supplemented with other seeds, berries, nuts, and edible roots. Animals food resources included small game, such as rabbit and quail. Larger game, such as mule deer, tule elk, black bear, and grizzly bear were also hunted. Fishing was also important in the valley and in the foothills along major water ways (Levy 1978).

The Miwok tool kit was varied and efficient. Ground stone tools included cobble pestles used with several different types of bedrock mortars, acorn anvils, and hammer stones. Several types of flaked stone hunting and butchering tools, made of chert and imported obsidian, were used, including knives, scrapers, and arrow and spear points. The Miwok made excellent and varied types of baskets, including seed beaters, burden baskets, rackets for games, cradle baskets, and others for cooking and serving foods. Pottery was not made, but the Miwok did fashion stone bowls. Fishing nets, fishing hooks, seines, and harpoons also were crafted (Levy 1978).

The Miwok built several different types of structures, including surface and semi-subterranean conical dwelling houses, a public assembly house, and sweat houses. Less substantial structures included acorn granaries, brush-covered ceremonial structures, shades, and hunting blinds (Barrett and Gifford 1933).

Historic Setting

The project site is located in Yolo and Solano counties. Yolo County was one of California's original 27 counties. The City of Woodland became the permanent county seat in 1862, after the seat had moved several times. The City of Benicia was the original county seat of Solano County, but in 1858 the seat moved to Fairfield (Hoover et al. 1990). Horse and cattle raising and the cultivation of grain and fruit orchards were common forms of livelihood in the region during the 19th and early 20th century period (Larkey and Walters 1987: 19, 23). By the early 20th century, improvements in irrigation allowed for varied crops to be introduced, such as rice (Hart 1978: 489). Agriculture continues to be a major part of the Yolo County's economy and industrial and commercial development are key to Solano County.

Irrigation and Flood Control

The California State Board of Swampland Commissioners was created in 1861 to effect reclamation of swamp and overflow lands. However, a lack of cooperation among the landowners in the districts led to chronic financial crises for the State Board of Swampland Commissioners. When the State Legislature terminated the State Board of Swampland Commissioners in 1866, responsibility for swamp and overflow land fell to the individual counties. Disorganized levee construction and reclamation efforts led to the establishment of the Reclamation Board in 1911 who exercised jurisdiction over the Reclamation and levee plans in California. During this period the State approved and began implementation of the Sacramento River Flood Control Project (SRFCP). The ambitious project included the construction of levees, weirs, and bypasses along the Sacramento River to channel floodwaters away from population centers (O'Neill 2006b:125). Under the SRFCP, new Reclamation Districts were created including RD 999 which was formed in 1913 to maintain Holland Tract's 33-mile levee system. That same year, the

California Reclamation Board was given the ability to approve private construction of levees while requiring that they meet the standards for the SRFCP

The SRFCP marked the first expansive flood control efforts on the Sacramento River. It also was the first time Congress appropriated funds for the specific purpose of flood control. By 1925, most of the levees on the Sacramento River were improved to meet Federal design standards (Kochis 1963:11). The 1936 Flood Control Act established the Federal government's responsibility for flood control. The SRFCP was amended in 1937 to include bank protection measures and levee setbacks. The act was modified again in 1941 to authorize Federal expenditures for flood control projects. By 1967, the entire SRFCP included approximately 440 miles of river canal and stream channels; 1,000 miles of levees; five weirs; two sets of outfall gates; three drainage pumping plants; 95 miles of bypasses; five low-water check dams; 50 miles of drainage canals and seepage ditches; and numerous control structures, bridges, and gaging stations (DWR 2014:4).

Methods

The cultural resources investigations carried out for the proposed project included a Sacred Lands File database search with the Native American Heritage Commission (NAHC), background research conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System, review of historic maps and ethnographic and primary documents, and an archaeological pedestrian survey of the project area.

GEI cultural staff conducted an archaeological pedestrian survey of the project area on July 19, 2020. The survey was conducted to the equivalent of intensive standards (transects spaced no more than 50 feet apart or closer). A Trimble 7 Series geographic positioning system unit capable of sub-meter accuracy was carried to record the location of any identified resources. Hard copy maps were used to ensure adequate survey coverage.

Findings

GEI cultural resources staff contacted the NAHC on June 17, 2020 requesting a search of their Sacred Lands File database for lands including the project area. The NAHC responded on July 8, 2020. In their response the NAHC indicated that their database search had negative results.

GEI cultural resources staff requested a records search of the project area from the NWIC on June 17, 2020. The NWIC responded on July 24, 2020 (NWIC File No. 19-2278). The NWIC letter report indicated that no previously reported resources were identified within the project area. The letter report also indicated that a total of seven previous investigations intersected some portion of the project area.

The June 19, 2020 field survey identified one historic-era resource (45 years old or older) in the project area: the Sutter Slough Levee.

3.5.2 Discussion

a) **Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**

Under CEQA, public agencies must consider the effects of their actions on “historical resources.” The CRHR includes resources listed in or formally determined eligible for listing in the National Register of Historic Places, as well as some California Historical Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise (California PRC Section 5024.1, 14 CCR Section 4850). The eligibility criteria for listing in the CRHR are similar to those for National Register of Historic Places listing but focus on importance of the resources to California history and heritage.

A cultural resource may be eligible for listing on the CRHR if it:

1. is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage
2. is associated with the lives of persons important in our past
3. embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values
4. or has yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting one or more of the above criteria, resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (OHP 1999).

The Sutter Slough Levee meets CRHR criteria for its association with the SRFCP. It is therefore considered a historical resource for the purposes of CEQA. When constructed, the levee was designed to undergo periodic maintenance and minor modifications to improve its function as a component of the SRFCP. The proposed project’s erosion repairs would not cause the physical destruction of the levee or alter its overall design or form and it would continue to convey its historical significance as a component of the SRFCP. Therefore, this impact is **less than significant**.

The NAHC search, NWIC records search, and pedestrian survey all had negative results. Further, given the project area and nature of the work to be done, it is unlikely any cultural resources will be encountered during project activities. Though very unlikely, however, the possibility remains that a resource meeting CRHR significance criteria for a historical resource may be discovered during project-related ground-disturbing activities. Therefore, this impact would be **potentially significant**. The following mitigation measure has been identified to address this impact:

Mitigation Measure CR-1: Address Previously Undiscovered Historic Properties, Archaeological Resources, and Tribal Cultural Resources.

RD 999 shall implement the following:

- Before project activities begin, environmental awareness training will be presented to all project personnel working on the project site. The training will inform all construction personnel about measures to avoid and minimize potential effects on historic, cultural, and Tribal Cultural Resources. The program will be conducted by qualified staff and will address the following: potential for resources to occur in the project vicinity, regulatory status and protection, measures required to reduce potential impacts during project construction, the protocols to be implemented in the event resources are encountered during construction, penalties for non-compliance, and benefits of compliance.
- If buried or previously unidentified historic properties, archaeological resources, or Tribal Cultural Resources are discovered during project activities, all work within a 100-foot radius of the find shall cease. The District shall retain a professional archaeologist meeting the Secretary of the Interior’s Professional Standards for Archaeologists to assess the discovery and recommend what, if any, further treatment or investigation is necessary for the find. Interested Native American Tribes will also be contacted. Any necessary treatment/investigation shall be developed with interested Native American Tribes providing recommendations and shall be coordinated with the State Historic Preservation Officer and RD 999, if necessary, and shall be completed before project activities continue in the vicinity of the find.

Timing: Before and during construction
Responsibility: RD 999

Implementing Mitigation Measure CR-1 would minimize the potential impact related to discovery of unknown historic, cultural or Tribal Cultural Resources because workers on the project site would receive awareness training regarding these resources and, if unknown resources are discovered, the find would be assessed by an archaeologist and the treatment or investigation would be conducted in accordance with CEQA guidelines regarding cultural resources. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated.**

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

The State CEQA Guidelines require consideration of unique archaeological resources (CCR Section 15064.5). As used in California PRC Section 21083.2, the term “unique archaeological resource” refers to an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

No archaeological resources were identified within the project area during the records search or pedestrian survey. It is highly unlikely that any archaeological resources are present within the project area, however, the possibility still exists that an archaeological resource might be identified during project activities; this impact would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure CR-1: Address Previously Undiscovered Historic Properties, Archaeological Resources, and Tribal Cultural Resources.

Please refer to Mitigation Measure CR-1 in cultural resources impact a) above for the full text of this mitigation measure.

Implementing Mitigation Measure CR-1 would minimize the potential impact related to discovery of unknown unique archeological resources because workers on the project site would receive awareness training regarding these resources and, if unknown resources are discovered, the find would be assessed by an archaeologist and the treatment or investigation would be conducted in accordance with CEQA guidelines regarding cultural resources. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No human remains have been discovered in the project area and it is not anticipated that human remains, including those interred outside of dedicated cemeteries, would be discovered during ground-disturbance activities within the project site. There is no indication from the records searches or pedestrian survey that human remains are present within the project area. However, in the event that human remains, including those interred outside of formal cemeteries and including associated items and materials, are discovered during subsurface activities, the human remains and associated items and materials could be inadvertently damaged. Therefore, a **potentially significant impact** would occur. The following mitigation measure has been identified to address this impact:

Mitigation Measure CR-2: Avoid Potential Effects on Undiscovered Burials.

The District shall implement the following measures to reduce or avoid impacts related to undiscovered burials. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all potentially damaging ground-disturbance in the area of the burial and within a 100-foot radius, shall halt and the Yolo County Coroner shall be notified immediately. The coroner is required to examine all discoveries of

human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]).

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. RD 999 shall ensure that the procedures for the treatment of Native American human remains contained in California Health and Safety Code Sections 7050.5 and 7052 and Public Resources Code Section 5097 are followed.

Timing:	During construction
Responsibility:	RD 999

Implementing Mitigation Measure CR-2 would minimize the potentially significant impact related to discovery of human remains because the find would be assessed by an archaeologist and treated or investigated in accordance with State laws. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated.**

3.6 Energy

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
V. ENERGY.					
Would the project:					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.6.1 Environmental Setting

In 2018, the total electricity consumption for Yolo County was approximately 1,718 million kilowatts per hour (kWh), total energy consumption for Solano County was approximately 3,243 million KWh, total energy consumption for Calaveras County was 332 million KWh, and total energy consumption for San Joaquin County was 5659 million KWh (CEC 2018).

3.6.2 Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project would involve temporary use of diesel-fueled vehicles, equipment, and a tugboat during construction activities for five years between August 1 and November 30 each year. Operation and maintenance activities would not include permanent lighting or other additional sources of energy use. The District would continue minimal use of pickup trucks for ongoing levee patrol and maintenance purposes. Construction-related energy use and associated emissions are analyzed in Section 3.3, “Air Quality,” and Section 3.8, “Greenhouse Gas Emissions.” Energy use from the proposed project would result in a **less-than-significant** impact.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Yolo and Solano counties adopted Climate Action Plans in 2011, which address renewable energy and energy efficiency (Yolo County 2011, Solano County 2011). The proposed project would comply with local plans and with the State’s Climate Commitment to reduce the reliance on non-renewable energy sources by half by 2030 (CEC 2015). Calaveras County has not adopted any climate action planning documents but San Joaquin County adopted a Climate Change Action Plan in 2008 (SJVAPCD 2009). Implementing the project would not result in developed land uses or construct temporary or permanent structures or facilities that could conflict with State or local plans for renewable energy or efficiency. There would be **no impact**.

3.7 Geology and Soils

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
VII. GEOLOGY AND SOILS – Would the project:					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (<i>Refer to California Geological Survey Special Publication 42.</i>)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 2-18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.7.1 Environmental Setting

Soils along the project extent are classified as Columbia fine sandy loam (found on floodplains and natural levee areas) or Lang silt loam (found on alluvial fans and toe slopes) (NRCS 2020). The nearest faults to the project site are considered inactive by the California Geological Survey (CGS) and include two early Quaternary faults – the Midland Fault, 6 miles southwest of the project site, and the Rio Vista Fault, 10 miles southwest of the project site. The closest active faults – the Cordelia, Green Valley, Concord, and Clayton faults – are located approximately 35 miles west/southwest of the project site (CGS 2010). There are no Alquist-Priolo Earthquake Fault Zones of required investigation near the project site (CGS 2020). Additionally, the project site is not within an area at risk for landslides or within a known liquefaction zone (CGS 2020).

The project area is underlain by Quaternary-period natural levee and basin deposits, from the Holocene epoch due to its proximity to Sutter Slough. The project site lies in Quaternary-period stream channel and alluvial fan deposits from the Holocene epoch (Saucedo and Wagner 1992). These recent sedimentary deposits are not known to be paleontologically sensitive under the Society of Vertebrate Paleontology guidelines (2010).

3.7.2 Discussion

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
 - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (*Refer to California Geological Survey Special Publication 42.*)**

The project site is not within an Alquist-Priolo Earthquake Fault Zone. Additionally, the faults in the project vicinity are not considered active by CGS, because surface fault rupture is most likely to occur on active faults (i.e., faults showing evidence of displacement within the last 11,700 years). Therefore, there would be **no impact**.

- ii) **Strong seismic ground shaking?**
- iii) **Seismic-related ground failure, including liquefaction?**
- iv) **Landslides?**

Strong earthquakes generally create ground shaking, including liquefaction and landslides, with reduced effects as distance increases from the earthquake's epicenter. The area affected by ground shaking in any given earthquake would vary depending on the earthquake's intensity, duration, distance from the project site, and the underlying material. Although the closest active fault to the project site is 35 miles away, ground shaking could occur from distant earthquakes. However, project design would comply with California Uniform Building Code (UBC); California UBC is based on the Federal UBC but is more

detailed and stringent. Chapter 18 of the California UBC regulates excavation and geotechnical considerations, and Appendix J addresses grading, excavation, fill, drainage, and erosion control considerations. UBC Appendix Chapter A33 regulates grading activities, including drainage and erosion control, and construction on unstable soils (BSC 2016). Additionally, the project site is not located within a known liquefaction or landslide zone (CGS 2020). Finally, as indicated in the project description, an assessment of the conditions and necessary repairs for the erosion sites was conducted as part of project design and the erosion repairs would not exacerbate existing deficiencies along the levee and the repairs would be made in accordance with USACE's Supplement to Standard Operation and Maintenance Manual, Sacramento River Flood Control Project, Unit No. 113 [revised] (USACE 1966). The project would not expose people or structures to potential substantial adverse effects from strong seismic ground shaking. Therefore, this impact would be **less than significant**.

b) Result in substantial soil erosion or the loss of topsoil?

Site preparation activities and placement of riprap would result in the short-term soil disturbance and could expose disturbed areas if a storm event occurs during construction. Rainfall of sufficient intensity could dislodge soil particles from the soil surface. If particles are dislodged and the storm is large enough to generate runoff, substantial localized erosion could occur. In addition, soil disturbance could result in substantial loss of topsoil from wind erosion. Therefore, this impact would be **potentially significant**. Mitigation Measure GEO-1 presented below has been identified to address this impact.

Mitigation Measure GEO-1: Implement a Stormwater Pollution Prevention Plan and Associated BMPs.

The District shall prepare and implement the appropriate Stormwater Pollution Prevention Plan (SWPPP), or Stormwater Management Plan (SWMP), as required by Federal and State laws for projects with ground disturbance greater than 1 acre, to prevent and control pollution and to minimize and control runoff and erosion. The SWPPP or SWMP shall identify the activities that may cause pollutant discharge (including sediment) during storms or strong wind events, techniques to control pollutant discharge, and an erosion control plan. Regardless of the need for a SWPPP or SWMP, construction techniques and Best Management Practices (BMPs) will be identified and implemented, as appropriate to reduce the potential for runoff and exposure to hazardous materials.

Construction techniques will include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. BMPs that specify erosion and sedimentation control measures to be implemented may include: silt fences, staked straw bales/wattles, silt/sediment basins and traps, geofabric, soil stabilizers, and re-seeding with native species to revegetate disturbed areas.

The SWPPP or SWMP shall also include a spill prevention, control, and countermeasure plan, and applicable hazardous materials business plans. The SWPPP or SWMP shall identify the types of materials used for equipment operation (including fuel and hydraulic fluids), measures to prevent hazardous material and waste spills, and materials available to clean up hazardous material and waste spills. The SWPPP or SWMP shall also identify emergency procedures for responding to spills. No

refueling, storage, servicing, or maintenance of equipment shall take place on land within 100 feet of the ordinary high-water mark of Sutter Slough.

The SWPPP shall also include dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. The BMPs presented in either document shall be clearly identified and maintained in good working condition throughout the construction process. The construction contractor shall retain a copy of the approved SWPPP or SWMP on the construction site and modify it as necessary to suit specific site conditions.

The District and all contractors will abide by regulations governing hazardous materials transport included in CCR Title 22, the California Vehicle Code (CCR Title 13), and the State Fire Marshal Regulations (CCR Title 19). Transport of hazardous materials can only be conducted under a registration issued by the California Department of Toxic Substances Control. Construction contractors shall be required to use, store, and transport hazardous materials in compliance with Federal, State, and local regulations.

Timing: Before and during construction
Responsibility: RD 999 and construction contractor(s)

Implementing Mitigation Measure GEO-1 would minimize the potential impact from construction-related erosion because a SWPPP or SWMP and BMPs would be implemented to prevent and control pollution and minimize and control runoff and erosion. Therefore, the project would have a **less-than-significant impact with mitigation incorporated**.

- c) **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?**

See response to Question “a)” above. This impact would be **less than significant**.

- d) **Be located on expansive soil, as defined in Table 2-18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?**

Soils located along the project extent are classified as having a low shrink-swell potential, except for the deepest layers of the Lang silt loam, underlying Sites 5-7, where the shrink-swell potential is high (NRCS 1972, NRCS 1977). Although the deepest soil layers underlying a portion of the project site could be considered expansive, the proposed project involves only placement of riprap on the waterside surface of the levee. Additionally, the subsurface soil profile along the existing levee alignment has been extensively disturbed during past levee construction and repairs. This impact would be **less than significant**.

- e) **Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

The project does not include septic tanks or connection to a sewage system. Project workers would be served by regularly serviced portable toilets during construction. There would be **no impact**.

- f) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

The project site is not located within a paleontologically sensitive geologic unit and paleontological resources are not likely to be encountered during erosion repairs. There would be **no impact**.

3.8 Greenhouse Gas Emissions

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
II. GREENHOUSE GAS EMISSIONS –					
Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.8.1 Environmental Setting

Yolo and Solano counties adopted Climate Action Plans in 2011 with the intent to address climate change and reduce the community's greenhouse gas (GHG) emissions at the local level, and to address economic and social adaptation to the effects of climate change (Yolo County 2011, Solano County 2011). Additionally, in 2007 Yolo County approved a resolution to participate in the Cool Counties Climate Stabilization Declaration and committed to reduce GHG emissions by 80% by 2050. Calaveras County has not adopted any climate action planning documents, but San Joaquin County adopted a Climate Change Action Plan in 2008 (SJVAPCD 2009).

3.8.2 Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The YSAQMD, SJVAPCD, and CCAPCD have not established CEQA thresholds of significance for GHG emissions. However, SMAQMD has adopted a CEQA threshold of 1,100 metric tons (MT) of carbon dioxide equivalents (CO₂e) per year for construction GHG emissions (SMAQMD 2015). The SMAQMD threshold was used to evaluate the significance of GHG emissions.

As discussed in Section 3.3, "Air Quality," the project would result in minimal operational emission (including GHGs) from vehicle exhaust during inspection and maintenance activities. Project construction would temporarily generate GHG emissions each year of the project. Land-based construction emissions would be generated by vehicle engine exhaust from heavy-duty construction equipment, truck haul trips, and worker vehicle trips. Water-based construction emissions would be generated by vehicle engine exhaust from tug haul trips, the crane barge, skiff, and worker vehicle trips.

GHG emissions would be approximately 284 MT of CO₂e per year from land-based construction and approximately 86 MT of CO₂e per year from water-based construction for the annual intensive

construction scenario. This scenario presents emissions for construction of Erosion Site 1. Emissions for construction of the other erosion sites in other years would all be substantially less. Emissions from land-based construction were modeled using CalEEMod, Version 2016.3.2. Emissions from water-based construction from the use of the tug, crane barge, and motorized skiff were estimated using SMAQMD's Harbor Craft, Dredge, and Barge Emission Factor Calculator Modeling results are presented in Appendix B.

Calculated emissions are below SMAQMD's threshold of significance for both land-based and water-based construction, and the project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the physical environment. Therefore, this impact would be **less than significant**.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The proposed project would not conflict with plans, policies, or regulations prepared or established to reduce GHG emissions. The proposed project's incremental contribution to the cumulative impact of increasing atmospheric levels of GHGs would be less than cumulatively considerable. The impact would be **less than significant**.

3.9 Hazards and Hazardous Materials

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
VI. HAZARDS AND HAZARDOUS MATERIALS – Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.9.1 Environmental Setting

A database search was conducted of all data sources in the Cortese List (enumerated in PRC Section 65962.5), including the GeoTracker database, a groundwater information management system that is maintained by the State Water Resources Control Board (SWRCB); the Hazardous Waste and Substances Site List (i.e., the EnviroStor database), maintained by the California Department of Toxic Substances Control (DTSC); and EPA's Superfund Site database (DTSC 2020a and 2020b, SWRCB 2020a and 2020b, CalEPA 2020, EPA 2019). There were no hazardous materials sites identified within 0.25 mile of the project site. The project site locations are not in areas identified as more likely to contain asbestos by the California Department of Conservation (DOC) (DOC 2000).

There are no schools within 0.25 mile of the project site. The nearest schools to the project site are River Delta Community Day School, and the Bates Elementary School, both are located approximately 1-mile northeast of Erosion Site 1.

3.9.2 Discussion

- a), b) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

The project consists of temporary construction activities and would not result in new or different long-term activities that would include the use, transport, or disposal of hazardous materials. However, project construction would involve the storage, transport, and use of small amounts of hazardous substances necessary to operate and maintain construction vehicles and equipment such as oils, lubricants, and fuel. Use of these materials would be restricted to the existing levee crown road, crane barge, skiff, and tug. The project would not involve routine or long-term transport or disposal of such materials. None of the proposed project activities would involve the use of acutely hazardous materials.

The transport and use of hazardous materials by land and by water are strictly regulated by local, State, and Federal agencies to minimize adverse hazards from accidental release. EPA, the California Highway Patrol, California Department of Transportation (Caltrans), and DTSC implement and enforce State and Federal laws regarding hazardous material transportation. Additionally, DTSC regulates and the California State Parks, Division of Boating and Waterways offers guidance for boat operators regarding best practices for managing hazardous materials, including spill prevention, associated with boating. Contractors would be required to use, store, and dispose of any hazardous materials in accordance with all applicable regulations. However, accidental spills could still occur and therefore the project would have a **potentially significant impact**. The following mitigation measure has been identified to address this impact:

Mitigation Measure GEO-1: Prepare and Implement a Storm Water Pollution Prevention Plan and Associated BMPs.

Please refer to Mitigation Measure GEO-1 in Section 3.7, Geology and Soils, for the full text of this mitigation measure.

Implementing Mitigation Measure GEO-1 would reduce the potential impact from accidental spill of or exposure to hazardous materials during routine use, transport, or disposal because a SWPPP would be prepared and implemented. The SWPPP would include a spill prevention, control, and countermeasure plan, and would identify the types of materials used for equipment operation (including fuel and hydraulic fluids), along with measures to prevent and materials available to clean up hazardous material and waste spills. The SWPPP would also identify emergency procedures for responding to spills. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

There are no schools within 0.25 mile of the project site. There would be **no impact**.

- d) **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

The erosion sites are not identified on lists compiled pursuant to Government Code Section 65962.5. There would be **no impact**.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

The project site is not within an airport land use plan area or within 2 miles of a public airport or public use airport (Yolo County 2009, Solano County 2008). There would be **no impact**.

- f) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

The project would implement erosion repairs by placing riprap at erosion sites along the Sutter Slough Levee. Up to approximately 10 construction personnel would work on the landside portion of the site at a time. Therefore, there would not be a significant increase in the number of users at the site that could impair emergency response or evacuation. The proposed project would not substantially change operations and maintenance at the project site, inspections and patrols would be conducted regularly by one or two persons driving the levee crown road, and maintenance activities would occur as needed. Additionally, the temporary nature of construction and the intermittent nature of drop-off via large trucks at the site would not pose a risk to emergency response or evacuation during an emergency. The project would not adversely affect an adopted emergency response plan. This impact would be **less than significant**.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The project site is not located in a very high fire hazard severity zone (CAL FIRE 2007a, 2007b, 2007c, 2007d). Construction activities would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. There would be **no impact**.

3.10 Hydrology and Water Quality

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:					
i) result in substantial erosion or siltation on- or offsite;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.10.1 Environmental Setting

Surface Water

Existing site drainage is by overland flow that infiltrates into surface soils and runs off into Sutter Slough. The project site is located within a special flood hazard area and is mapped as Zone A and Zone AE (areas with a 1 percent annual chance of flooding) (FEMA 2009, FEMA 2010). The project site is currently mapped in a dam inundation zone for multiple dams according to the Yolo and Solano County General

Plans and Solano County Emergency Operations Plan. However, the project does not occur within a DWR-mapped dam inundation zone (DWR 2020a, Solano County 2008, Solano County 2017 and Yolo County 2009). The project site is not in a coastal area and is outside the tsunami hazard zone. Additionally, there are no water bodies on or near the project site large enough to be subjected to a seiche, as a result of an earthquake.

The project site is in the Sacramento Hydrologic Basin Planning Area, the Sacramento Delta Hydrologic Unit (510.00), as designated by the Central Valley RWQCB (2018). In accordance with CWA Section 303, water quality standards for this basin are contained in the Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin. There are no water bodies on the project site that appear on the 303(d) list as an impaired water. However, the project site ultimately drains to Steamboat Slough, which is listed for chlorpyrifos (SWRCB 2016).

Groundwater

The project site is in the Sacramento Valley – Yolo Groundwater Subbasin (#5-021.67), as designated by DWR Bulletin 118 (DWR 2016). The site is located within a “High Priority” groundwater basin, however, the basin is not designated as “Critically Overdrafted” (DWR 2020c). The project site also lies within a Subbasin defined by the Yolo County Flood Control and Water Conservation District, as the Southern Sacramento River Subbasin in its Groundwater Management Plan (YCFCWCD 2006). This Subbasin designation differs from the boundaries used in DWR’s Bulletin 118 and encompasses the eastern part of Yolo County along the Sacramento River and its historic floodplain, including the Sacramento and Yolo Bypasses.

There are no known municipal, domestic, or industrial groundwater supply wells near the project site. The nearest documented groundwater monitoring wells are approximately 2 miles west/southwest of the project site (DWR 2020b). Depth to groundwater information in the project area is not available at this time (DWR 2020d). Localized groundwater levels may be variable, due to proximity to Sutter Slough and Steamboat Slough, in the southern portion of the project area.

3.10.2 Discussion

a) Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality?

Construction is planned for the dry season. However, the possibility exists that soils exposed during erosion repairs may experience erosion during unforeseen rainfall events that occur during construction. During construction, both direct and indirect discharges associated with ground-disturbing project activities could cause surface water to become contaminated by soil or construction-related substances. Project activities could temporarily impair water quality if disturbed material, petroleum products, or construction-related wastes are discharged into surface drainages or onto the ground, where they could be carried into receiving waters. Accidental spills of construction-related substances, such as oils and fuels, could also contaminate both surface water and groundwater. The extent of potential impacts on water quality would depend on several factors, including the tendency toward erosion of soil types encountered,

soil chemistry, construction practices, extent of disturbed area, duration of construction activities, proximity to receiving water bodies, and sensitivity of those water bodies to construction-related contaminants.

Erosion repairs would not require dewatering during construction. Therefore, no dewatering effluent would need to be managed during construction or discharged to surface waters, and there would be no impact associated with dewatering. Ground-disturbing activities would primarily be limited to site preparation activities (including vegetation removal and filling of small voids on the levee surface) and riprap placement. Surface soils could be exposed to wind and water erosion during project construction. If precautions are not taken to contain these materials, construction activities could produce sediment-laden storm runoff that would degrade water quality. Exposure of construction materials to rain or wind could also result in adverse water quality impacts.

Construction activities would occur during the dry season. However, regardless of construction timing, direct and indirect impacts to water quality from erosion and stormwater runoff, and ponding during storm events, have the possibility to occur and result in a **potentially significant** impact. Mitigation Measure GEO-1 has been identified to address this impact.

Measure GEO-1: Implement a Stormwater Pollution Prevention Plan and Associated BMPs.

Please *refer to* Mitigation Measure GEO-1 in Section 3.7, “Geology and Soils,” for the full text of this mitigation measure.

Implementation of Mitigation Measure GEO-1 would include measures to prevent and manage soil erosion and sediment-laden stormwater runoff that could degrade water quality during construction. Therefore, potential impacts to surface water quality from the project would be a **less-than-significant impact with mitigation incorporated**.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project would not use groundwater for construction, operation, or maintenance activities. The erosion repairs would be constructed of uniform riprap material and would not require the placement of impervious surfaces on the project site. Any surface runoff from the sites would continue to flow overland in the same manner as pre-project conditions and infiltrate between the placed riprap. Therefore, the project would not interfere with groundwater recharge and would not impede sustainable management of the groundwater basin in the region. This impact would be **less than significant**.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or offsite?

The project would slightly alter the drainage pattern of the site by placing irregularly shaped riprap on eroded portions of the levee. However, this alteration would not affect the general flow of stormwater drainage at the site; stormflows would continue to drain overland to Sutter Slough and infiltrate between the riprap to the underlying soil. Additionally, the project involves repairing and/or monitoring known levee erosion sites. By placing riprap and repairing the erosion sites, erosion would be reduced along the 6,740 feet extent of the erosion repairs. This impact would be **beneficial**.

Construction is planned for the dry season. However, as described above, the possibility exists that soils exposed during erosion repairs may experience erosion during unforeseen rainfall events that occur during construction. Unforeseen precipitation could contribute to siltation offsite. As discussed previously in Section 3.7, "Geology and Soils," and under Impact a) above, onsite construction activities could result in the temporary and short-term disturbance of soil and could expose disturbed areas, if a storm event occurs during construction activities, resulting in on- or off-site siltation. This impact would be **potentially significant**. Mitigation Measure GEO-1 has been identified to address this impact.

Mitigation Measure GEO-1: Implement a Stormwater Pollution Prevention Plan and Associated BMPs.

Please *refer to* Mitigation Measure GEO-1 in Section 3.7, "Geology and Soils," for the full text of this mitigation measure.

Implementation of Mitigation Measure GEO-1 would include BMPs to manage erosion and siltation during construction. Therefore, the project would have a **less-than-significant impact with mitigation incorporated**.

- ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?**
- iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**
- iv) Impede or redirect flood flows?**

Although the project site is mapped within a 100-year flood hazard zone, the project would not substantially increase surface runoff and would not impede or redirect flood flows in a manner which would affect flood risk at the project site or offsite. The erosion repairs would follow the general specifications for levee geometry as detailed in USACE's Supplement to Standard Operation and Maintenance Manual, Sacramento River Flood Control Project, Unit No. 113 [revised] (USACE 1966) and the erosion repairs would not include any features that would impede or redirect flood flows in a manner that could undermine adjacent levees. This impact would be **less than significant**.

There are no existing stormwater management facilities on the project site, and none are planned for construction. There would be **no impact**.

Additionally, because the erosion repairs would be completed with clean riprap imported from an approved supplier, project construction is not expected to contribute to polluted runoff from the site. This impact would be **less than significant**.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The project site is located in a designated 100-year flood hazard area. However, project construction would improve flood protection in the District, since known erosion sites would be repaired and/or monitored under the proposed project. Therefore, erosion repairs would not increase the risk of pollutant release during a flood and continued inspections, and maintenance associated with the erosion repairs would contribute to a reduced risk of flooding and associated pollutant releases that may occur during a flood inundation event. Additionally, the project is not located within a tsunami or seiche hazard area, and the project would not expose people or structures to additional danger from such an event. This impact would be **beneficial**.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Refer to the discussion above under Impacts a), b), and c). The project would not result in other effects that would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, this impact would be **less than significant**.

3.11 Land Use and Planning

Environmental Issue		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
VII. LAND USE AND PLANNING – Would the project:						
a)	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.11.1 Environmental Setting

Lands adjacent to Erosion Sites 1 through 3 are designated as Intensive Agriculture by Yolo County and Erosion Sites 4 through 7 are designated as Exclusive Agriculture 80 acres by Solano County (Yolo County 2004 and Solano County 1977). Additionally, lands adjacent to Erosion Sites 4 through 7 are designated by the Solano County General Plan as Resource Conservation Overlay, this designation is meant to identify and protect areas of the County with special resource management needs (Solano County 2008). Additionally, as discussed in Section 3.4, “Biological Resources,” the project site is located within established HCP Planning Areas – Erosion Sites 1 through 3 are located within the Yolo HCP Area, and Erosion Sites 4 through 7 are located within the Solano HCP Area (Yolo County 2018, Solano County 2012).

3.11.2 Discussion

a, b) Physically divide an established community? Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project site is located in an area dominated by agriculture production, is located outside of existing communities, and land uses are consistent with existing zoning. There would be no change in land use associated with implementing the project. There would be **no impact**.

Refer to Section 3.4, “Biological Resources,” for a discussion of project activities as they would relate to HCP regulations.

3.12 Mineral Resources

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
VIII. MINERAL RESOURCES – Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.12.1 Environmental Setting

The project site is not located in an area of known mineral resources and is not located within a designated Mineral Resource Zone (Yolo County 2009 and Solano County 2008).

3.12.2 Discussion

- a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?**

There are no known mineral resources at the project site. There would be **no impact**.

- b) **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

There are no locally designated mineral resources at the project site. There would be **no impact**.

3.13 Noise

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
IX. NOISE – Would the project:					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, State, or Federal standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.13.1 Environmental Setting

The project site is located along a tidal slough, with rural residences scattered throughout the adjacent agricultural lands. The closest sensitive noise receptor is a rural residence located approximately 0.3 mile from Erosion Site 1.

The Yolo County 2030 General Plan Action HS-A61 states a goal of developing a comprehensive Noise Ordinance. As of preparation of this IS, no County ordinance is in place. However, existing noise conditions in Yolo County were assessed as part of the Yolo County 2030 General Plan Update. The Day/Night Average Sound Level (L_{dn}) along the closest road segment to the project site (State Route 84 – Clarksburg Road to West Sacramento) range from 58.7 L_{dn} 100 feet from the road centerline to 62 L_{dn} less than 60 feet from the road centerline (Yolo County 2009). Solano County Code Section 28.1-60(3) grants an exemption from noise regulations for “*Emergency construction or maintenance work conducted by public agencies or their contractors which is necessary to maintain the health and safety of the public*” (Solano County 2017). There are no vibration criteria associated with Yolo or Solano county code.

3.13.2 Discussion

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable standards of other agencies?**

Following construction activities, operations and maintenance would be similar to current levee patrol and maintenance activities. Construction noise impacts typically occur when construction activities take place during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), when construction activities occur immediately adjacent to noise sensitive land uses, or when construction durations last over extended periods of time. Construction of the proposed project would temporarily increase the ambient noise levels within the vicinity of the project site.

The project would generate construction noise from equipment operating at the erosion sites and from the transport of construction workers, construction materials, and equipment to and from the project site. Construction equipment includes a pickup truck, rock barge, crane barge, small workboat, excavator, front end loader, tugboat, and haul trucks.

A list of typical construction equipment that may be used for construction and typical noise levels generated at 50 feet from each equipment type (reference levels) are presented in **Table 3-4**.

Table 3-4. Construction Equipment and Typical Equipment Noise Levels.

Type of Equipment	Typical Noise Levels (dB) L_{max} at 50 Feet
Backhoe	80
Dump Truck	76
Pick-up Truck	75

Notes: dB = decibels; L_{max} = maximum instantaneous sound level;

Source: Construction equipment list based on Federal Highway Administration 2006, adapted by GEI Consultants, Inc. in 2020

Hauling and riprap placement would generate temporary construction noise. Both haul routes pass through rural and agricultural areas, but most of the land-based haul route is along State highways or I-5 in Calaveras and San Joaquin counties, with the exception of the eastern end of the haul route nearest the project site. Haul truck noise levels would be similar to existing highway truck traffic on the haul route and would not represent a significant increase above existing noise levels. Although the eastern end of the land-based construction haul route is off-highway, and travels through agricultural areas, the operation of heavy-duty equipment associated with agricultural activities is common along these portions of the haul route, along the levee crown road, during noise sensitive times of day, and can typically result in noise levels of approximately 75 A-weighted decibels (dBA) equivalent sound level (L_{eq}) at 50 feet (EPA 1974). Sound levels attributable to equipment use at the erosion repair sites and along land-based haul routes would be similar to periodic agricultural and maintenance equipment usage in the area. Although higher than sound levels along the nearest measured road segment in Yolo County, any noise resulting from construction hauling would be short-term and temporary and would cease after construction is complete. Water-based construction haul routes would involve the use of non-motorized barges towed by tugs. The water-based construction haul route originates at a currently operational quarry and noise levels

associated with the proposed project would be consistent with current quarry operations. This type of equipment would generate noise levels consistent with barge and tug equipment common to Delta waterways.

All construction equipment would be properly maintained and equipped with standard noise control components, such as mufflers, per manufacturer's specifications. Additionally, construction hours would be 7:00 am to 7:00 pm and active construction and equipment use would take place only 10 hours per day. Equipment maintenance and other quiet activities could occur before and after working hours and on Sunday. No maximum noise levels are applicable to the project area. Additionally, construction and hauling route noise would be short-term, temporary, and similar to periodic noise levels caused by agricultural equipment typically operating on rural roads and barge traffic common to Delta waterways, in the project vicinity. This impact would be **less than significant**.

b) Generation of excessive groundborne vibration or groundborne noise levels?

The project would generate temporary groundborne vibrations from hauling and riprap placement and transient groundborne vibration from construction equipment use. However, the duration of construction would cause only short-term and temporary vibrations, the nearest sensitive receptor/residence is located approximately 0.3 mile from Erosion Site 1, and there are no local or County vibration standards applicable to the project area. Therefore, this impact would be less than significant. No increase in permanent vibration levels would be generated during project operations or maintenance. Therefore, this impact would be **less than significant**.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project site is not located within 2 miles of a public airport or private airstrip. There would be **no impact**.

3.14 Population and Housing

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
X. POPULATION AND HOUSING – Would the project:					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.14.1 Environmental Setting

The project site is in unincorporated areas of Yolo and Solano counties. The population was estimated in 2019 to be 442,145 in Solano County, and 222,868 in Yolo County (DOF 2019).

3.14.2 Discussion

- a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The proposed project would not include any new developments that would support or facilitate construction of new homes or businesses or extend roadways or other infrastructure that could increase population near the proposed project. The project does not involve construction of any permanent housing. Therefore, the proposed project would have no potential to directly or indirectly induce population growth. There would be **no impact**.

- b) **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

The proposed project would not displace any houses or people. There would be **no impact**.

3.15 Public Services

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XI. PUBLIC SERVICES – Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:					
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.15.1 Environmental Setting

Due to the multiple jurisdictions converging in the project vicinity and/or mutual aid agreements, multiple entities may respond to the project site during an emergency (police, fire, ambulance). Several Fire Protection Districts (FPD), as well as the Yocha Dehe (formerly Rumsey Tribe) provide fire protection, rescue, emergency medical services, and hazardous material response within the unincorporated areas of Yolo County (Yolo County 2009). Erosion Sites 1-3 are located within the Clarksburg FPD. Six FPDs provide fire protection and emergency services in the unincorporated Solano County, the closest being the Montezuma FPD (Solano County 2008). Additionally, California Department of Forestry and Fire Protection (CALFIRE) provides fire protection services to Yolo and Solano counties during fire season (May through October). Law enforcement services in Yolo and Solano counties are provided by the Yolo County Sheriff-Coroner, and the Solano County Sheriff Department.

3.15.2 Discussion

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for public services, including fire protection, police protection, schools, or other public facilities.**

The proposed project is not growth inducing and would not result in new or more intense uses or population at the project site and would not increase the need for public services from existing conditions. There would be **no impact**.

Emergency vehicles would be able to pass along the levee crown road during land-based construction. The project would not impede or increase response times for fire protection, police protection, or other public services after the completion of construction. This impact would be **less than significant**.

3.16 Recreation

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XII. RECREATION – Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.16.1 Environmental Setting

Recreational use in close proximity of the project site are low due to the predominance of agricultural lands surrounding the project site. However, the Delta waterways are periodically used by boaters and for wildlife viewing.

3.16.2 Discussion

- a), b) **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**
Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The project is not growth inducing and would not increase the use of existing parks or recreational facilities or require the construction or expansion of recreational facilities. There would be **no impact**.

Boating and wildlife viewing is a common recreational activity in many Delta waterways. During construction, access to Sutter Slough would be limited to ensure safety of work crews and recreational boaters. Limitations to Sutter Slough would only occur during the short construction period each year (August 1 to November 30 or a shorter portion of this period) for 5 years and there are many similar Delta waterways that recreationist can access during the annual construction period. As described in Section 2 “Project Description,” prior to construction activities, signage would be posted at the Slough Entrance (near the Sutter Slough bridge off the Sacramento River) alerting boaters to downstream construction activities so they do not enter the work area. Therefore, this impact would be **less than significant**.

3.17 Transportation

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XIII. TRANSPORTATION – Would the project:					
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.17.1 Environmental Setting

The project site is in the unincorporated areas of Yolo and Solano counties. Access to the levee crown from the landside would be through a District levee gate off Jefferson Boulevard (State Route 84) and Courtland Road, then south along the publicly accessible levee road, alternately signed as Road 145/Waukeena Road/Holland Road, as shown on the haul route map (**Figure 2-4**). There are no transit or on-street bicycle/pedestrian facilities near the project site.

3.17.2 Discussion

a), b) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Construction-related activity from the proposed project may potentially temporarily disrupt the existing transportation network in the surrounding project area. During construction, all roads would stay open, and as described in Section 2 “Project Description,” a flagger would manage one-way traffic flow through the project site. Following the completion of construction activities, the road adjacent to the project site would be restored to two lanes. There are no transit or bicycle facilities that would be affected by the proposed project.

Under the annual intensive construction scenario for land-based construction, the project would generate 118,792 VMT from 958 roundtrip haul truck trips from the Foothill Materials quarry in Valley Springs. Under the annual intensive construction scenario for water-based construction, the project would generate 200 VMT by tug from 10 roundtrip tug trips from the Rio Vista stockpile. A total of 1,050 VMT from

worker vehicle trips would be generated from either the land or water-based options. VMT generation would be limited to the four-month construction period each year. No reduction in VMT from the proposed project is possible since trips would be generated for hauling riprap and worker vehicles.

Following construction, operations and maintenance primarily limited to inspections and patrols would be conducted by one or two persons driving the levee crown to check for levee integrity, debris and trash removal, security, and other purposes. Maintenance activities would occur as needed. Inspections and maintenance activities for the proposed project would primarily be coordinated and combined with existing maintenance trips by RD 999 staff or their contractor. Overall, truck trips for operations and maintenance would not significantly change from existing conditions. This impact would be **less than significant**.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project would not include any new developments that would introduce incompatible uses on roadways at the project site. There would be **no impact**.

d) Result in inadequate emergency access?

The project would not require road closures or other changes which could result in inadequate emergency access. Emergency vehicles would be able to pass along the levee crown road during land-based construction. The increased number of construction-related trucks to and from the project site during construction activities would be small and not effect emergency access. There would be **no impact**.

3.18 Tribal Cultural Resources

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XIV. TRIBAL CULTURAL RESOURCES – Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.18.1 Environmental Setting

Refer to the “Ethnographic Setting” in Section 1.8, “Cultural Resources.”

Methods and Findings

No California Native American Tribes have contacted RD 999 formally requesting consultation under Assembly Bill 52 (PRC Section 21080.3.1). However, on behalf of RD 999, GEI sent a request to the NAHC requesting a search of its Sacred Lands File for the project vicinity and a list of Assembly Bill (AB) 52 Tribal contacts. The NAHC responded on March 19, 2020 stating that the search did not identify the presence of a Native American cultural resource in the vicinity of the project site.

The NAHC provided the following AB 52 contacts for the project: Cortina Rancheria, Guidiville Indian Rancheria, United Auburn Indian Community (UAIC) of the Auburn Rancheria, Wilton Rancheria, and Yocha Dehe Wintun Nation. On July 13, 2020, RD 999 mailed AB 52 consultation letters to these Tribes.

Leland Kinter, Tribal Historic Preservation Officer for the Yocha Dehe Wintun Nation, sent a letter response to the consultation letter dated July 23, 2020. The letter stated that the Project is located in aboriginal territories of the Yocha Dehe Wintun Nation and therefore they have a cultural interest in the Project and want to engage in formal consultation with RD 999. The letter also requested a Project timeline, Project information, and any cultural studies prior to beginning consultation. The letter also provided contact information to initiate consultation.

Representatives of GEI, MBK, and RD 999 met with Laverne Bill, Yocha Dehe Wintun Nation Cultural Resource Manager, on September 24 via teleconference. Items discussed included Project components, extent of ground disturbance, cultural resource investigations to date, and Native American Tribal concerns. During the meeting Laverne Bill presented concerns regarding a resource, a habitation site, located underneath the levee. During discussion of the concern it was decided that Native American Tribal monitoring would be appropriate during the minimal ground disturbance that would occur as a result of the Project. During the meeting Laverne Bill referred to a report that stated a habitation site was located underneath the levee. GEI requested a copy of the report as it did not appear in the records search conducted for the Project. Yocha Dehe provided the report on October 7, 2020. The report consisted of a DPR site record for P-57-000034; on examination of the UTM coordinates provided in the site record, the resource is located approximately 1.5 miles north of the Project area.

On August 13, 2020, Anna Starkey, RPA, Cultural Regulatory Specialist for the UAIC, sent an email response to the consultation letter dated August 12, 2020. The letter stated that UAIC did not have any records for the area and that the Project is likely outside of the Tribal territory. Refer to Appendix D for consultation information.

On August 24, 2020, Mariah Mayberry, with Wilton Rancheria sent an email response to the consultation letter dated July 13, 2020. The letter stated Wilton Rancheria would like to discuss topics listed in California Public Resources Code section 21080.3.2(a), observe and participate in all cultural resources surveys, and receive all existing cultural resources assessments and results of records searches. The letter also provided contact information to initiate consultation. The contact person at Wilton Rancheria was contacted on multiple occasions but no response has been received from Wilton Rancheria as of the time this IS was issued for public review and comment.

No Tribal Cultural Resources are known to be present within the project area based on the negative results of the Sacred Lands File database search; the lack of previously identified Tribal Cultural Resources in the project area; and the absence of Native American archaeological sites, human remains, or other Native American cultural resources revealed during the background investigation or pedestrian survey. However, it is possible that further consultation with culturally affiliated Tribes could identify previously unidentified Tribal Cultural Resources.

3.18.2 Discussion

- a) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**
- b) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.**

Tribal Cultural Resources are either (1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that is either in or eligible for inclusion in the CRHR or a local historic register; or (2) a resource that the lead agency, at its discretion and supported by substantial evidence, chooses to treat as a Tribal Cultural Resource. In addition, a cultural landscape may also qualify as a Tribal Cultural Resource if it meets the criteria to be eligible for inclusion in the CRHR and is geographically defined in terms of the size and scope of the landscape. Other historical resources (as described in California PRC 21084.1), a unique archaeological resource (as defined in California PRC 21083.2[g]), or non-unique archaeological resources (as described in California PRC 21083.2[h]), may also be a Tribal Cultural Resource if it conforms to the criteria to be eligible for inclusion in the CRHR.

No Tribal Cultural Resources are known to be present within the project area. Though very unlikely, the possibility remains that a Tribal Cultural Resource may be revealed during project-related ground-disturbing activities or through further consultation with culturally affiliated Tribes. If this were to occur, then it would be a **potentially significant impact**. The following mitigation has been identified to address this impact:

Mitigation Measure CR-1: Address Previously Undiscovered Historic Properties, Archaeological Resources, and Tribal Cultural Resources.

Please *refer to* Impact CR-1 in Section 3.5, “Cultural Resources,” for the full text of this mitigation measure.

TCR-1: Implement Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures

The District shall implement the following measures:

- Culturally affiliated Tribes will be further consulted concerning Tribal Cultural Resources that may be impacted if these types of resources are discovered during construction. Further consultation with culturally affiliated Tribes will focus on identifying measures to avoid or minimize impacts on any such resources discovered during construction.
- Interested Tribes will be invited to have Tribal representatives monitor project related ground disturbing activities including vegetation removal.
- Should a Tribal Cultural Resource be identified in the project area during construction, the following performance standards shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of a Tribal Cultural Resource:
 - Each identified Tribal Cultural Resource will be evaluated for CRHR eligibility through application of established eligibility criteria (CCR 15064.636), in consultation with consulting Native American Tribes.
 - If a Tribal Cultural Resource is determined to be eligible for listing on the CRHR, RD 999 will avoid damaging effects to the Tribal Cultural Resource in accordance with California PRC Section 21084.3, if feasible.

Timing: Before and during construction

Responsibility: RD 999 and construction contractor(s)

Implementing Mitigation Measures CR-1 and TCR-1 would reduce the potential impact related to discovery of unknown Tribal Cultural Resources because workers on the project site would receive awareness training regarding these resources. Additionally, Culturally affiliated Tribes will be consulted prior to, and during project construction, the identification and implementation of avoidance or minimization measures would be conducted in consultation with the Tribes and any finds would be assessed by Culturally affiliated Tribes. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated.**

3.19 Utilities and Service Systems

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XV. UTILITIES AND SERVICE SYSTEMS –					
Would the project:					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1.1.1 Environmental Setting

The project site is served by Pacific Gas & Electric Company for electrical power and natural gas. The nearest landfill to the project site is the Hay Road Recology Landfill, located approximately 12 miles west of Erosion Site 7 in Solano County.

3.19.1 Discussion

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

No utility services, including wastewater treatment facilities, would need to be constructed or expanded as a result of the proposed project. Temporary portable restrooms would be provided for construction workers. The project would result in **no impact**.

Refer to Section 3.10, "Hydrology and Water Quality" for a discussion of how project activities relate to stormwater management.

- b) **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?**

The proposed project does not require a water supply. There would be **no impact**.

- c) **Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

See Question "a" above. The project would not result in a significant amount of wastewater. There would be **no impact**.

- d), e) **Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?**

The proposed project would not create substantial amounts of solid waste, and as such would not exceed the capacity of local waste management infrastructure. Minimal waste would be generated during construction and no increase in waste production would occur during the operation of the project. The project would comply with Federal, State, and local management and reduction statutes and regulations related to solid waste. The most likely site for disposal of vegetation and construction debris is the Hay Road Recology Landfill, located approximately 12 miles west of the Erosion Site 7. The Hay Road Recology Landfill is currently permitted through 2077, with a maximum capacity of 2,400 tons per day (CalRecycle 2020). The Hay Road Recology Landfill has adequate capacity to meet the project's disposal needs. This impact would be **less than significant**.

3.20 Wildfire

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XVI. WILDFIRE.					
If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.20.1 Environmental Setting

The project site is not located within a fire hazard severity zone (CALFIRE 2007a, 2007b, 2007c, and 2007d).

3.20.2 Discussion

- a), b), c), d) **Substantially impair an adopted emergency response plan or emergency evacuation plan? Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

The project site is not in a very high fire hazard severity zone. The project would include placing riprap along the bank of the levee slope for erosion control. There would be no increase in the number of users at the site that could impair emergency response or evacuation. The site is accessed through a District levee gate off Jefferson Boulevard and Courtland Road. Additionally, the temporary nature of construction and the intermittent nature of material hauling via dump trucks at the project site would not pose a risk to emergency response or evacuation during an emergency, because the levee road would remain passable by emergency vehicles during construction and the road adjacent to the erosion sites would remain open during construction. The project would not require any infrastructure that would exacerbate fire risk or the risk of flooding, slope instability, or drainage changes. There would be **no impact**.

3.21 Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XVII. MANDATORY FINDINGS OF SIGNIFICANCE – Would the project:					
e) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Authority: Public Resources Code Sections 21083, 21083.5.

Reference: Government Code Sections 65088.4.

Public Resources Code Sections 21080, 21083.5, 21095; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

3.21.1 Discussion

- a) **Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?**

The analysis conducted in this IS concludes that implementing the proposed project would not have any of these potential significant impacts on the environment with mitigation measures implemented as

written. As evaluated in Section 3.4, “Biological Resources,” impacts on biological resources would be less than significant or less than significant with mitigation incorporated. The proposed project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of an endangered, rare, or threatened species. As discussed in Section 3.5, “Cultural Resources,” the proposed project would not eliminate important examples of the major periods of California history or prehistory. This impact would be **less-than-significant with mitigation incorporated**.

- b) **Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

As discussed in this IS, the proposed project would result in less-than-significant impacts with mitigation incorporated, less-than-significant impacts, or no impacts on aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, Tribal Cultural Resources, utilities and service systems, and wildfire.

The temporary nature of the proposed project’s construction impacts would result in no impacts, less-than-significant impacts, or less than significant impacts with mitigation incorporated on the physical environment. However, cumulative impacts could result from the project combined with other approved, proposed, or in-progress projects in the region or project vicinity, including those for levee repairs and maintenance, habitat restoration, water diversion/conveyance, and channel dredging in the Delta.

The project was evaluated for potential impacts to sensitive biological communities, jurisdictional aquatic resources and special-status plant and wildlife species and was determined to have no impacts to special-status plants and less-than-significant impacts with mitigation for other biological resource. Although the project may have localized short-term effects on wildlife movement and longer-term effects on ecosystem function due to vegetation removal and installation of riprap, these project impacts would be mitigated. Additionally, the various tracts and islands in the Delta are continually undergoing levee repairs and maintenance, to support public safety goals. These include other projects addressing DWR FSRP sites and projects funded under DWR’s Delta Levees Program (Special Projects and Subventions) and Small Communities Flood Risk Reduction Program. Many of these projects receive State or Federal funding or are implemented in partnership with State agencies or conservation entities, and therefore, often require onsite mitigation or include habitat creation as part of the project. When considered cumulatively with other ongoing flood management and habitat restoration projects in the Delta, impacts to biological resources from the project would not be cumulatively considerable.

During construction, the project would have the potential to temporarily adversely affect biological resources through localized physical disturbance, noise, and impacts to water quality. These individual impacts were mitigated to less-than-significant levels by requiring general BMPs, preconstruction surveys

and habitat avoidance, on- or offsite mitigation where impacts to sensitive habitat cannot be avoided, and strict adherence to in-water work windows to protect special-status fish and wildlife species. Additionally, there were no related projects with a shared construction period identified within one quarter mile of the proposed project. Given the localized nature of these impacts, the fact that all projects in the Delta (and region) must adhere to these same standards regarding construction best practices and timing, and must fully mitigate or potential impacts to these species, this impact would not be cumulatively considerable.

There were no cultural or Tribal Cultural resources found during field surveys and there are no previously reported prehistoric resources were identified within the project area. Additionally, several other recent investigations have intersected the project area, with no resources identified. Although the Sutter Slough Levee was identified as a historical-era resource, the project would not cause the physical destruction of the levee or alter its overall design or form and it would continue to convey its historical significance as a component of the SRFCP. The overall project site as compared to the Delta is very small, and all ongoing levee repair projects requiring State or Federal funding or other permits are subject to the same mitigation requirements for potential impacts to cultural or Tribal Cultural resources. Therefore, this projects potential incremental contribution to any cumulative impacts on cultural, Tribal Cultural, or historic resources would be negligible.

The erosion repairs have been designed based on site-specific hydrologic conditions, including tidal fluctuations unique to the Delta and are compliant with strict design standards associated with Delta levees to meet State/Federal requirements for the flood system. The project design ensures that there would be no cumulatively considerable contribution to long-term erosion or siltation due to the repairs. Short term impacts to erosion or water quality have been fully mitigated by including BMPs regarding stormwater, potentially hazardous fluids/materials, and equipment management during construction. As mentioned previously, repair and maintenance of levees in the Delta is ongoing, and the need for improvements is continually evaluated by reclamation districts and overseen by USACE and DWR. All other construction projects implemented in the project vicinity would be subject to standard BMPs for stormwater and site hygiene, and levee repair projects in the vicinity would be subject to the same design standards as set forth in the O&M manual for levees associated with each project, or other design standard as approved by USACE/DWR. Therefore, the proposed project would not contribute to a cumulatively considerable increase regarding erosion, siltation, or other impacts to water quality during or after construction of the proposed project.

Emissions of criteria air pollutants and GHGs are inherently cumulative impacts and a project's individual emissions contribute to existing cumulatively significant adverse air quality and greenhouse gas impacts. In general, if a project exceeds its identified project-level significance thresholds, the project's cumulative impact would be cumulatively considerable. Criteria air pollutant emissions would remain below the project-level significance threshold with mitigation incorporated and GHG emissions would be below the project-level significance threshold.

None of the proposed project's impacts make cumulatively considerable, incremental contributions to significant cumulative impacts with incorporation of mitigation presented in this IS. This impact would be **less-than-significant with mitigation incorporated**.

c) **Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

The proposed project would result in less-than-significant impacts with mitigation incorporated for air quality and GHG emissions and would not cause substantial adverse effects on human beings, either directly or indirectly. The impact would be **less than significant with mitigation incorporated.**

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3.21 Mandatory Findings of Significance

No references cited.

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Chapter 5. Report Preparers

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Appendix A. Project Site Photographs



Photo 1: Typical Erosion Site – Type 1 Repair



Photo 2: Typical Erosion Site – Type 2 Repair



Photo 3: Typical Erosion Site – Monitoring Only Example (Site 3)



Photo 4: Typical View – Levee Crown Road

Appendix B. Air/GHG Modeling Data

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

RD 999 Levee Erosion Repair Project - Landside Option
Yolo/Solano AQMD Air District, Winter**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Off-road Equipment - construction info from client

Off-road Equipment - construction info from client

Trips and VMT - construction info from client

On-road Fugitive Dust - construction info from client

Grading - construction info from client

Construction Off-road Equipment Mitigation -

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	5.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialImported	0.00	23,950.00
tblOffRoadEquipment	HorsePower	158.00	273.00
tblOffRoadEquipment	HorsePower	97.00	170.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	2,368.00	1,916.00
tblTripsAndVMT	WorkerTripNumber	10.00	52.00
tblTripsAndVMT	WorkerTripNumber	3.00	52.00

2.0 Emissions Summary

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	1.3735	17.8096	11.8458	0.0512	0.9852	0.3688	1.3540	0.2286	0.3400	0.5686	0.0000	5,110.472 1	5,110.4721	1.1286	0.0000	5,138.686 2
Maximum	1.3735	17.8096	11.8458	0.0512	0.9852	0.3688	1.3540	0.2286	0.3400	0.5686	0.0000	5,110.472 1	5,110.472 1	1.1286	0.0000	5,138.686 2

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	1.3735	17.8096	11.8458	0.0512	0.9852	0.3688	1.3540	0.2286	0.3400	0.5686	0.0000	5,110.4721	5,110.4721	1.1286	0.0000	5,138.6862
Maximum	1.3735	17.8096	11.8458	0.0512	0.9852	0.3688	1.3540	0.2286	0.3400	0.5686	0.0000	5,110.4721	5,110.4721	1.1286	0.0000	5,138.6862

[illegible]

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3879	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3879	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/4/2021	6	30	
2	Additional On-road Trips	Grading	9/5/2021	9/10/2021	5	5	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Excavators	2	10.00	273	0.38
Site 1	Graders	1	0.00	187	0.41
Site 1	Tractors/Loaders/Backhoes	1	10.00	170	0.37
Additional On-road Trips	Graders	1	0.00	187	0.41

Trips and VMT

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	4	52.00	0.00	1,916.00	10.00	7.00	5.00	LD_Mix	HDT_Mix	HHDT
Additional On-road Trips	1	52.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Site 1 - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3097	0.0000	0.3097	0.0469	0.0000	0.0469			0.0000			0.0000
Off-Road	0.9604	8.9513	9.2615	0.0289		0.3482	0.3482		0.3204	0.3204		2,796.4180	2,796.4180	0.9044		2,819.0284
Total	0.9604	8.9513	9.2615	0.0289	0.3097	0.3482	0.6579	0.0469	0.3204	0.3673		2,796.4180	2,796.4180	0.9044		2,819.0284

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

3.2 Site 1 - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2320	8.7346	1.4136	0.0186	0.2799	0.0180	0.2979	0.0768	0.0172	0.0940		1,952.2218	1,952.2218	0.2155		1,957.6094
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1811	0.1237	1.1707	3.6300e-003	0.3956	2.6200e-003	0.3982	0.1049	2.4200e-003	0.1073		361.8323	361.8323	8.6400e-003		362.0484
Total	0.4132	8.8583	2.5843	0.0223	0.6755	0.0206	0.6961	0.1817	0.0196	0.2013		2,314.0542	2,314.0542	0.2241		2,319.6577

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3097	0.0000	0.3097	0.0469	0.0000	0.0469			0.0000			0.0000
Off-Road	0.9604	8.9513	9.2615	0.0289		0.3482	0.3482		0.3204	0.3204	0.0000	2,796.4180	2,796.4180	0.9044		2,819.0284
Total	0.9604	8.9513	9.2615	0.0289	0.3097	0.3482	0.6579	0.0469	0.3204	0.3673	0.0000	2,796.4180	2,796.4180	0.9044		2,819.0284

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

3.2 Site 1 - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2320	8.7346	1.4136	0.0186	0.2799	0.0180	0.2979	0.0768	0.0172	0.0940		1,952.2218	1,952.2218	0.2155		1,957.6094
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1811	0.1237	1.1707	3.6300e-003	0.3956	2.6200e-003	0.3982	0.1049	2.4200e-003	0.1073		361.8323	361.8323	8.6400e-003		362.0484
Total	0.4132	8.8583	2.5843	0.0223	0.6755	0.0206	0.6961	0.1817	0.0196	0.2013		2,314.0542	2,314.0542	0.2241		2,319.6577

3.3 Additional On-road Trips - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

3.3 Additional On-road Trips - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1811	0.1237	1.1707	3.6300e-003	0.3956	2.6200e-003	0.3982	0.1049	2.4200e-003	0.1073		361.8323	361.8323	8.6400e-003		362.0484
Total	0.1811	0.1237	1.1707	3.6300e-003	0.3956	2.6200e-003	0.3982	0.1049	2.4200e-003	0.1073		361.8323	361.8323	8.6400e-003		362.0484

Mitigated Construction On-Site

[illegible]

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

3.3 Additional On-road Trips - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1811	0.1237	1.1707	3.6300e-003	0.3956	2.6200e-003	0.3982	0.1049	2.4200e-003	0.1073		361.8323	361.8323	8.6400e-003		362.0484
Total	0.1811	0.1237	1.1707	3.6300e-003	0.3956	2.6200e-003	0.3982	0.1049	2.4200e-003	0.1073		361.8323	361.8323	8.6400e-003		362.0484

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

5.0 Energy Detail

Historical Energy Use: N

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Unmitigated	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

7.0 Water Detail

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7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Annual

RD 999 Levee Erosion Repair Project - Landside Option
Yolo/Solano AQMD Air District, Annual**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Off-road Equipment - construction info from client

Off-road Equipment - construction info from client

Trips and VMT - construction info from client

On-road Fugitive Dust - construction info from client

Grading - construction info from client

Construction Off-road Equipment Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	5.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialImported	0.00	23,950.00
tblOffRoadEquipment	HorsePower	158.00	273.00
tblOffRoadEquipment	HorsePower	97.00	170.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	2,368.00	1,916.00
tblTripsAndVMT	WorkerTripNumber	10.00	52.00
tblTripsAndVMT	WorkerTripNumber	3.00	52.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0207	0.2688	0.1771	7.9000e-004	0.0154	5.5300e-003	0.0210	3.6100e-003	5.0900e-003	8.7000e-003	0.0000	71.4744	71.4744	0.0152	0.0000	71.8536
Maximum	0.0207	0.2688	0.1771	7.9000e-004	0.0154	5.5300e-003	0.0210	3.6100e-003	5.0900e-003	8.7000e-003	0.0000	71.4744	71.4744	0.0152	0.0000	71.8536

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0207	0.2688	0.1771	7.9000e-004	0.0154	5.5300e-003	0.0210	3.6100e-003	5.0900e-003	8.7000e-003	0.0000	71.4744	71.4744	0.0152	0.0000	71.8536
Maximum	0.0207	0.2688	0.1771	7.9000e-004	0.0154	5.5300e-003	0.0210	3.6100e-003	5.0900e-003	8.7000e-003	0.0000	71.4744	71.4744	0.0152	0.0000	71.8536

[illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	7-30-2021	9-30-2021	0.2891	0.2891
		Highest	0.2891	0.2891

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0708	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0708	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/4/2021	6	30	
2	Additional On-road Trips	Grading	9/5/2021	9/10/2021	5	5	

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Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****Offroad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Excavators	2	10.00	273	0.38
Site 1	Graders	1	0.00	187	0.41
Site 1	Tractors/Loaders/Backhoes	1	10.00	170	0.37
Additional On-road Trips	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	4	52.00	0.00	1,916.00	10.00	7.00	5.00	LD_Mix	HDT_Mix	HHDT
Additional On-road Trips	1	52.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Annual

3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.6500e-003	0.0000	4.6500e-003	7.0000e-004	0.0000	7.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1343	0.1389	4.3000e-004		5.2200e-003	5.2200e-003		4.8100e-003	4.8100e-003	0.0000	38.0530	38.0530	0.0123	0.0000	38.3607
Total	0.0144	0.1343	0.1389	4.3000e-004	4.6500e-003	5.2200e-003	9.8700e-003	7.0000e-004	4.8100e-003	5.5100e-003	0.0000	38.0530	38.0530	0.0123	0.0000	38.3607

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3200e-003	0.1326	0.0182	2.9000e-004	4.0800e-003	2.6000e-004	4.3400e-003	1.1200e-003	2.5000e-004	1.3700e-003	0.0000	27.5296	27.5296	2.7200e-003	0.0000	27.5977
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5300e-003	1.6500e-003	0.0172	6.0000e-005	5.7400e-003	4.0000e-005	5.7800e-003	1.5300e-003	4.0000e-005	1.5600e-003	0.0000	5.0501	5.0501	1.2000e-004	0.0000	5.0531
Total	5.8500e-003	0.1343	0.0353	3.5000e-004	9.8200e-003	3.0000e-004	0.0101	2.6500e-003	2.9000e-004	2.9300e-003	0.0000	32.5797	32.5797	2.8400e-003	0.0000	32.6508

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3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.6500e-003	0.0000	4.6500e-003	7.0000e-004	0.0000	7.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1343	0.1389	4.3000e-004		5.2200e-003	5.2200e-003		4.8100e-003	4.8100e-003	0.0000	38.0530	38.0530	0.0123	0.0000	38.3607
Total	0.0144	0.1343	0.1389	4.3000e-004	4.6500e-003	5.2200e-003	9.8700e-003	7.0000e-004	4.8100e-003	5.5100e-003	0.0000	38.0530	38.0530	0.0123	0.0000	38.3607

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3200e-003	0.1326	0.0182	2.9000e-004	4.0800e-003	2.6000e-004	4.3400e-003	1.1200e-003	2.5000e-004	1.3700e-003	0.0000	27.5296	27.5296	2.7200e-003	0.0000	27.5977
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5300e-003	1.6500e-003	0.0172	6.0000e-005	5.7400e-003	4.0000e-005	5.7800e-003	1.5300e-003	4.0000e-005	1.5600e-003	0.0000	5.0501	5.0501	1.2000e-004	0.0000	5.0531
Total	5.8500e-003	0.1343	0.0353	3.5000e-004	9.8200e-003	3.0000e-004	0.0101	2.6500e-003	2.9000e-004	2.9300e-003	0.0000	32.5797	32.5797	2.8400e-003	0.0000	32.6508

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3.3 Additional On-road Trips - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.7000e-004	2.8600e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8417	0.8417	2.0000e-005	0.0000	0.8422
Total	4.2000e-004	2.7000e-004	2.8600e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8417	0.8417	2.0000e-005	0.0000	0.8422

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3.3 Additional On-road Trips - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.7000e-004	2.8600e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8417	0.8417	2.0000e-005	0.0000	0.8422
Total	4.2000e-004	2.7000e-004	2.8600e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8417	0.8417	2.0000e-005	0.0000	0.8422

4.0 Operational Detail - Mobile

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Unmitigated	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Yolo/Solano AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

RD 999 Levee Erosion Repair Project - Waterside Option

Yolo/Solano AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Off-road Equipment - Worker trips only.

Trips and VMT - construction info from client

On-road Fugitive Dust - construction info from client

Grading -

Construction Off-road Equipment Mitigation -

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	35.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblTripsAndVMT	WorkerTripNumber	3.00	12.00

2.0 Emissions Summary

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248	0.0000	83.4998	83.4998	1.9900e-003	0.0000	83.5496
Maximum	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248	0.0000	83.4998	83.4998	1.9900e-003	0.0000	83.5496

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248	0.0000	83.4998	83.4998	1.9900e-003	0.0000	83.5496
Maximum	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248	0.0000	83.4998	83.4998	1.9900e-003	0.0000	83.5496

[illegible]

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3879	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3879	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/10/2021	6	35	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	12.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248		83.4998	83.4998	1.9900e-003		83.5496
Total	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248		83.4998	83.4998	1.9900e-003		83.5496

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248		83.4998	83.4998	1.9900e-003		83.5496
Total	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248		83.4998	83.4998	1.9900e-003		83.5496

4.0 Operational Detail - Mobile

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Unmitigated	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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RD 999 Levee Erosion Repair Project - Waterside Option

Yolo/Solano AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Off-road Equipment - Worker trips only.

Trips and VMT - construction info from client

On-road Fugitive Dust - construction info from client

Grading -

Construction Off-road Equipment Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	35.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblTripsAndVMT	WorkerTripNumber	3.00	12.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605
Maximum	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605
Maximum	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605

[illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	7-30-2021	9-30-2021	0.0012	0.0012
		Highest	0.0012	0.0012

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0708	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0708	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/10/2021	6	35	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	12.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605
Total	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605
Total	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605

4.0 Operational Detail - Mobile

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Unmitigated	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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RD 999 Levee Erosion Repair Project - Waterside Option - Yolo/Solano AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated

Yolo/Solano AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Off-road Equipment - Worker trips only.

Trips and VMT - construction info from client

On-road Fugitive Dust - construction info from client

Grading -

Construction Off-road Equipment Mitigation - 14% reduction per YSAQMD guidance

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	14
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	35.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblTripsAndVMT	WorkerTripNumber	3.00	12.00

2.0 Emissions Summary

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248	0.0000	83.4998	83.4998	1.9900e-003	0.0000	83.5496
Maximum	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248	0.0000	83.4998	83.4998	1.9900e-003	0.0000	83.5496

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0418	0.0286	0.2702	8.4000e-004	0.0802	6.1000e-004	0.0808	0.0215	5.6000e-004	0.0221	0.0000	83.4998	83.4998	1.9900e-003	0.0000	83.5496
Maximum	0.0418	0.0286	0.2702	8.4000e-004	0.0802	6.1000e-004	0.0808	0.0215	5.6000e-004	0.0221	0.0000	83.4998	83.4998	1.9900e-003	0.0000	83.5496

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	12.16	0.00	12.09	11.24	0.00	10.98	0.00	0.00	0.00	0.00	0.00	0.00

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3879	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3879	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/10/2021	6	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	12.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

3.2 Site 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248		83.4998	83.4998	1.9900e-003		83.5496
Total	0.0418	0.0286	0.2702	8.4000e-004	0.0913	6.1000e-004	0.0919	0.0242	5.6000e-004	0.0248		83.4998	83.4998	1.9900e-003		83.5496

Mitigated Construction On-Site

[illegible]

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

3.2 Site 1 - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0418	0.0286	0.2702	8.4000e-004	0.0802	6.1000e-004	0.0808	0.0215	5.6000e-004	0.0221		83.4998	83.4998	1.9900e-003		83.5496
Total	0.0418	0.0286	0.2702	8.4000e-004	0.0802	6.1000e-004	0.0808	0.0215	5.6000e-004	0.0221		83.4998	83.4998	1.9900e-003		83.5496

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

5.0 Energy Detail

Historical Energy Use: N

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Unmitigated	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3879	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

7.0 Water Detail

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7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated

Yolo/Solano AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Off-road Equipment - Worker trips only.

Trips and VMT - construction info from client

On-road Fugitive Dust - construction info from client

Grading -

Construction Off-road Equipment Mitigation - 14% reduction per YSAQMD guidance

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	14
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	35.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblTripsAndVMT	WorkerTripNumber	3.00	12.00

2.0 Emissions Summary

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605
Maximum	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605
Maximum	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	12.26	0.00	12.18	12.20	0.00	11.90	0.00	0.00	0.00	0.00	0.00	0.00

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	7-30-2021	9-30-2021	0.0012	0.0012
		Highest	0.0012	0.0012

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0708	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0708	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/10/2021	6	35	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	12.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605
Total	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.5500e-003	1.0000e-005	1.5600e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605

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3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605
Total	6.8000e-004	4.4000e-004	4.6200e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.3597	1.3597	3.0000e-005	0.0000	1.3605

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Unmitigated	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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RD 999 Levee Erosion Repair Project - Waterside Option - Mitigated - Yolo/Solano AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

RD 999 Levee Erosion Repair Project - Landside Option

Sacramento Metropolitan AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Trips and VMT - construction info from client

Grading - construction info from client

Off-road Equipment - Haul trips only

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialImported	0.00	23,950.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,916.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00

2.0 Emissions Summary

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.5146	18.5633	4.4478	0.0558	1.4078	0.0667	1.4745	0.3693	0.0638	0.4331	0.0000	5,982.1313	5,982.1313	0.3457	0.0000	5,990.7745
Maximum	0.5146	18.5633	4.4478	0.0558	1.4078	0.0667	1.4745	0.3693	0.0638	0.4331	0.0000	5,982.1313	5,982.1313	0.3457	0.0000	5,990.7745

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.5146	18.5633	4.4478	0.0558	1.4078	0.0667	1.4745	0.3693	0.0638	0.4331	0.0000	5,982.1313	5,982.1313	0.3457	0.0000	5,990.7745
Maximum	0.5146	18.5633	4.4478	0.0558	1.4078	0.0667	1.4745	0.3693	0.0638	0.4331	0.0000	5,982.1313	5,982.1313	0.3457	0.0000	5,990.7745

[illegible]

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3564	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3564	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/4/2021	6	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	0.00	0.00	1,916.00	10.00	6.50	23.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1306	0.0000	0.1306	0.0198	0.0000	0.0198			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.1306	0.0000	0.1306	0.0198	0.0000	0.0198		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5146	18.5633	4.4478	0.0558	1.2772	0.0667	1.3439	0.3495	0.0638	0.4133		5,982.131 3	5,982.131 3	0.3457		5,990.774 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.5146	18.5633	4.4478	0.0558	1.2772	0.0667	1.3439	0.3495	0.0638	0.4133		5,982.131 3	5,982.131 3	0.3457		5,990.774 5

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1306	0.0000	0.1306	0.0198	0.0000	0.0198			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.1306	0.0000	0.1306	0.0198	0.0000	0.0198	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5146	18.5633	4.4478	0.0558	1.2772	0.0667	1.3439	0.3495	0.0638	0.4133		5,982.131 3	5,982.131 3	0.3457		5,990.774 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.5146	18.5633	4.4478	0.0558	1.2772	0.0667	1.3439	0.3495	0.0638	0.4133		5,982.131 3	5,982.131 3	0.3457		5,990.774 5

4.0 Operational Detail - Mobile

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Unmitigated	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0631					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0631					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Annual

RD 999 Levee Erosion Repair Project - Landside Option

Sacramento Metropolitan AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Trips and VMT - construction info from client

Grading - construction info from client

Off-road Equipment - Haul trips only

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialImported	0.00	23,950.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,916.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00

2.0 Emissions Summary

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0205	9.8000e-004	0.0215	5.4000e-003	9.4000e-004	6.3400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738
Maximum	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0205	9.8000e-004	0.0215	5.4000e-003	9.4000e-004	6.3400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0205	9.8000e-004	0.0215	5.4000e-003	9.4000e-004	6.3400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738
Maximum	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0205	9.8000e-004	0.0215	5.4000e-003	9.4000e-004	6.3400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738

[illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2021	9-30-2021	0.2746	0.2746
		Highest	0.2746	0.2746

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0650	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0650	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/4/2021	6	30	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	0.00	0.00	1,916.00	10.00	6.50	23.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.9600e-003	0.0000	1.9600e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.9600e-003	0.0000	1.9600e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0186	9.8000e-004	0.0196	5.1000e-003	9.4000e-004	6.0400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0186	9.8000e-004	0.0196	5.1000e-003	9.4000e-004	6.0400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738

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3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.9600e-003	0.0000	1.9600e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.9600e-003	0.0000	1.9600e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0186	9.8000e-004	0.0196	5.1000e-003	9.4000e-004	6.0400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0186	9.8000e-004	0.0196	5.1000e-003	9.4000e-004	6.0400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738

4.0 Operational Detail - Mobile

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

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5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Unmitigated	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Total	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Total	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

RD 999 Levee Erosion Repair Project - Landside Option - Sacramento Metropolitan AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Winter

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated

Sacramento Metropolitan AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Trips and VMT - construction info from client

Grading - construction info from client

Construction Off-road Equipment Mitigation - 14% per YSAQMD guidance

Off-road Equipment - Haul trips only

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialImported	0.00	23,950.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,916.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00

2.0 Emissions Summary

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.5146	18.5633	4.4478	0.0558	1.4078	0.0667	1.4745	0.3693	0.0638	0.4331	0.0000	5,982.131 3	5,982.131 3	0.3457	0.0000	5,990.774 5
Maximum	0.5146	18.5633	4.4478	0.0558	1.4078	0.0667	1.4745	0.3693	0.0638	0.4331	0.0000	5,982.131 3	5,982.131 3	0.3457	0.0000	5,990.774 5

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.5146	18.5633	4.4478	0.0558	1.2719	0.0667	1.3386	0.3359	0.0638	0.3997	0.0000	5,982.131 3	5,982.131 3	0.3457	0.0000	5,990.774 5
Maximum	0.5146	18.5633	4.4478	0.0558	1.2719	0.0667	1.3386	0.3359	0.0638	0.3997	0.0000	5,982.131 3	5,982.131 3	0.3457	0.0000	5,990.774 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	9.66	0.00	9.22	9.04	0.00	7.71	0.00	0.00	0.00	0.00	0.00	0.00

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3564	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3564	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/4/2021	6	30	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	0.00	0.00	1,916.00	10.00	6.50	23.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Winter

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1306	0.0000	0.1306	0.0198	0.0000	0.0198			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.1306	0.0000	0.1306	0.0198	0.0000	0.0198		0.0000	0.0000	0.0000		0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Winter

3.2 Site 1 - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5146	18.5633	4.4478	0.0558	1.2772	0.0667	1.3439	0.3495	0.0638	0.4133		5,982.131 3	5,982.131 3	0.3457		5,990.774 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.5146	18.5633	4.4478	0.0558	1.2772	0.0667	1.3439	0.3495	0.0638	0.4133		5,982.131 3	5,982.131 3	0.3457		5,990.774 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1306	0.0000	0.1306	0.0198	0.0000	0.0198			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.1306	0.0000	0.1306	0.0198	0.0000	0.0198	0.0000	0.0000	0.0000	0.0000		0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Winter

3.2 Site 1 - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5146	18.5633	4.4478	0.0558	1.1413	0.0667	1.2080	0.3161	0.0638	0.3799		5,982.131 3	5,982.131 3	0.3457		5,990.774 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.5146	18.5633	4.4478	0.0558	1.1413	0.0667	1.2080	0.3161	0.0638	0.3799		5,982.131 3	5,982.131 3	0.3457		5,990.774 5

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Unmitigated	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0631					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0631					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.3564	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

7.0 Water Detail

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7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Trips and VMT - construction info from client

Grading - construction info from client

Construction Off-road Equipment Mitigation - 14% per YSAQMD guidance

Off-road Equipment - Haul trips only

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialImported	0.00	23,950.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,916.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00

2.0 Emissions Summary

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2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0205	9.8000e-004	0.0215	5.4000e-003	9.4000e-004	6.3400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738
Maximum	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0205	9.8000e-004	0.0215	5.4000e-003	9.4000e-004	6.3400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0186	9.8000e-004	0.0196	4.9200e-003	9.4000e-004	5.8600e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738
Maximum	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0186	9.8000e-004	0.0196	4.9200e-003	9.4000e-004	5.8600e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	9.54	0.00	9.11	8.89	0.00	7.57	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2021	9-30-2021	0.2746	0.2746
		Highest	0.2746	0.2746

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0650	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0650	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/4/2021	6	30	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	0.00	0.00	1,916.00	10.00	6.50	23.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.9600e-003	0.0000	1.9600e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.9600e-003	0.0000	1.9600e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0186	9.8000e-004	0.0196	5.1000e-003	9.4000e-004	6.0400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0186	9.8000e-004	0.0196	5.1000e-003	9.4000e-004	6.0400e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.9600e-003	0.0000	1.9600e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.9600e-003	0.0000	1.9600e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0166	9.8000e-004	0.0176	4.6200e-003	9.4000e-004	5.5600e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.5900e-003	0.2768	0.0645	8.4000e-004	0.0166	9.8000e-004	0.0176	4.6200e-003	9.4000e-004	5.5600e-003	0.0000	82.0589	82.0589	4.6000e-003	0.0000	82.1738

4.0 Operational Detail - Mobile

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Unmitigated	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Total	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004
Total	0.0650	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.7000e-004	4.7000e-004	0.0000	0.0000	5.0000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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RD 999 Levee Erosion Repair Project - Landside Option - Mitigated - Sacramento Metropolitan AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

RD 999 Levee Erosion Repair Project - Landside Option - San Joaquin Valley Unified APCD Air District, Annual

RD 999 Levee Erosion Repair Project - Landside Option

San Joaquin Valley Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	45
Climate Zone	2			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Trips and VMT - construction info from client

Grading - construction info from client

Off-road Equipment - Haul trips only

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialImported	0.00	23,950.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	21.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,916.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	7.4500e-003	0.2527	0.0385	7.9000e-004	0.0186	8.4000e-004	0.0195	4.9400e-003	8.0000e-004	5.7500e-003	0.0000	74.9235	74.9235	3.9700e-003	0.0000	75.0227
Maximum	7.4500e-003	0.2527	0.0385	7.9000e-004	0.0186	8.4000e-004	0.0195	4.9400e-003	8.0000e-004	5.7500e-003	0.0000	74.9235	74.9235	3.9700e-003	0.0000	75.0227

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	7.4500e-003	0.2527	0.0385	7.9000e-004	0.0186	8.4000e-004	0.0195	4.9400e-003	8.0000e-004	5.7500e-003	0.0000	74.9235	74.9235	3.9700e-003	0.0000	75.0227
Maximum	7.4500e-003	0.2527	0.0385	7.9000e-004	0.0186	8.4000e-004	0.0195	4.9400e-003	8.0000e-004	5.7500e-003	0.0000	74.9235	74.9235	3.9700e-003	0.0000	75.0227

[illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2021	9-30-2021	0.2540	0.2540
		Highest	0.2540	0.2540

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0708	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0708	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/4/2021	6	30	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	0.00	0.00	1,916.00	10.80	7.30	21.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4000e-003	0.0000	1.4000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.4000e-003	0.0000	1.4000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.4500e-003	0.2527	0.0385	7.9000e-004	0.0172	8.4000e-004	0.0181	4.7300e-003	8.0000e-004	5.5300e-003	0.0000	74.9235	74.9235	3.9700e-003	0.0000	75.0227
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.4500e-003	0.2527	0.0385	7.9000e-004	0.0172	8.4000e-004	0.0181	4.7300e-003	8.0000e-004	5.5300e-003	0.0000	74.9235	74.9235	3.9700e-003	0.0000	75.0227

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3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4000e-003	0.0000	1.4000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.4000e-003	0.0000	1.4000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.4500e-003	0.2527	0.0385	7.9000e-004	0.0172	8.4000e-004	0.0181	4.7300e-003	8.0000e-004	5.5300e-003	0.0000	74.9235	74.9235	3.9700e-003	0.0000	75.0227
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.4500e-003	0.2527	0.0385	7.9000e-004	0.0172	8.4000e-004	0.0181	4.7300e-003	8.0000e-004	5.5300e-003	0.0000	74.9235	74.9235	3.9700e-003	0.0000	75.0227

4.0 Operational Detail - Mobile

RD 999 Levee Erosion Repair Project - Landside Option - San Joaquin Valley Unified APCD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741

RD 999 Levee Erosion Repair Project - Landside Option - San Joaquin Valley Unified APCD Air District, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

RD 999 Levee Erosion Repair Project - Landside Option - San Joaquin Valley Unified APCD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

RD 999 Levee Erosion Repair Project - Landside Option - San Joaquin Valley Unified APCD Air District, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

RD 999 Levee Erosion Repair Project - Landside Option - San Joaquin Valley Unified APCD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Unmitigated	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0708	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

RD 999 Levee Erosion Repair Project - Landside Option - San Joaquin Valley Unified APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - San Joaquin Valley Unified APCD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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RD 999 Levee Erosion Repair Project - Landside Option - San Joaquin Valley Unified APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Winter

RD 999 Levee Erosion Repair Project - Landside Option

Calaveras County AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	61
Climate Zone	1			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Trips and VMT - construction info from client

Grading - construction info from client

Off-road Equipment - Haul trips only

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialImported	0.00	23,950.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	14.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,916.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00

2.0 Emissions Summary

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.4555	15.5203	4.0399	0.0377	0.8495	0.0579	0.9074	0.2238	0.0554	0.2792	0.0000	3,945.1874	3,945.1874	0.0948	0.0000	3,947.5576
Maximum	0.4555	15.5203	4.0399	0.0377	0.8495	0.0579	0.9074	0.2238	0.0554	0.2792	0.0000	3,945.1874	3,945.1874	0.0948	0.0000	3,947.5576

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.4555	15.5203	4.0399	0.0377	0.8495	0.0579	0.9074	0.2238	0.0554	0.2792	0.0000	3,945.1874	3,945.1874	0.0948	0.0000	3,947.5576
Maximum	0.4555	15.5203	4.0399	0.0377	0.8495	0.0579	0.9074	0.2238	0.0554	0.2792	0.0000	3,945.1874	3,945.1874	0.0948	0.0000	3,947.5576

[illegible]

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4510	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.4510	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4510	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.4510	2.0000e-005	1.9400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005	0.0000	4.4300e-003

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/4/2021	6	30	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	0.00	0.00	1,916.00	10.80	7.30	14.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Winter

3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0714	0.0000	0.0714	0.0108	0.0000	0.0108			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0714	0.0000	0.0714	0.0108	0.0000	0.0108		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4555	15.5203	4.0399	0.0377	0.7781	0.0579	0.8360	0.2130	0.0554	0.2684		3,945.187 4	3,945.187 4	0.0948		3,947.557 6
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.4555	15.5203	4.0399	0.0377	0.7781	0.0579	0.8360	0.2130	0.0554	0.2684		3,945.187 4	3,945.187 4	0.0948		3,947.557 6

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Winter

3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0714	0.0000	0.0714	0.0108	0.0000	0.0108			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0714	0.0000	0.0714	0.0108	0.0000	0.0108	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4555	15.5203	4.0399	0.0377	0.7781	0.0579	0.8360	0.2130	0.0554	0.2684		3,945.187 4	3,945.187 4	0.0948		3,947.557 6
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.4555	15.5203	4.0399	0.0377	0.7781	0.0579	0.8360	0.2130	0.0554	0.2684		3,945.187 4	3,945.187 4	0.0948		3,947.557 6

4.0 Operational Detail - Mobile

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.537860	0.039600	0.182158	0.126129	0.044823	0.007613	0.022735	0.026253	0.002564	0.000680	0.005996	0.001597	0.001991

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4510	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Unmitigated	0.4510	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.4510	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003
Total	0.4510	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.1600e-003	4.1600e-003	1.0000e-005		4.4300e-003

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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RD 999 Levee Erosion Repair Project - Landside Option

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	61
Climate Zone	1			Operational Year	2022
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction info from client

Off-road Equipment - construction info from client

Trips and VMT - construction info from client

Grading - construction info from client

Off-road Equipment - Haul trips only

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialImported	0.00	23,950.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	14.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,916.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	6.6500e-003	0.2331	0.0575	5.7000e-004	0.0124	8.5000e-004	0.0132	3.2700e-003	8.1000e-004	4.0800e-003	0.0000	54.3911	54.3911	1.2300e-003	0.0000	54.4217
Maximum	6.6500e-003	0.2331	0.0575	5.7000e-004	0.0124	8.5000e-004	0.0132	3.2700e-003	8.1000e-004	4.0800e-003	0.0000	54.3911	54.3911	1.2300e-003	0.0000	54.4217

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	6.6500e-003	0.2331	0.0575	5.7000e-004	0.0124	8.5000e-004	0.0132	3.2700e-003	8.1000e-004	4.0800e-003	0.0000	54.3911	54.3911	1.2300e-003	0.0000	54.4217
Maximum	6.6500e-003	0.2331	0.0575	5.7000e-004	0.0124	8.5000e-004	0.0132	3.2700e-003	8.1000e-004	4.0800e-003	0.0000	54.3911	54.3911	1.2300e-003	0.0000	54.4217

[illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2021	9-30-2021	0.2337	0.2337
		Highest	0.2337	0.2337

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0823	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0823	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0823	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0823	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site 1	Grading	8/1/2021	9/4/2021	6	30	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 19****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site 1	Graders	1	0.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site 1	1	0.00	0.00	1,916.00	10.80	7.30	14.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Site 1 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0700e-003	0.0000	1.0700e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.0700e-003	0.0000	1.0700e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.6500e-003	0.2331	0.0575	5.7000e-004	0.0113	8.5000e-004	0.0122	3.1000e-003	8.1000e-004	3.9200e-003	0.0000	54.3911	54.3911	1.2300e-003	0.0000	54.4217
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.6500e-003	0.2331	0.0575	5.7000e-004	0.0113	8.5000e-004	0.0122	3.1000e-003	8.1000e-004	3.9200e-003	0.0000	54.3911	54.3911	1.2300e-003	0.0000	54.4217

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3.2 Site 1 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0700e-003	0.0000	1.0700e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.0700e-003	0.0000	1.0700e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.6500e-003	0.2331	0.0575	5.7000e-004	0.0113	8.5000e-004	0.0122	3.1000e-003	8.1000e-004	3.9200e-003	0.0000	54.3911	54.3911	1.2300e-003	0.0000	54.4217
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.6500e-003	0.2331	0.0575	5.7000e-004	0.0113	8.5000e-004	0.0122	3.1000e-003	8.1000e-004	3.9200e-003	0.0000	54.3911	54.3911	1.2300e-003	0.0000	54.4217

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.537860	0.039600	0.182158	0.126129	0.044823	0.007613	0.022735	0.026253	0.002564	0.000680	0.005996	0.001597	0.001991

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

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5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0823	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Unmitigated	0.0823	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0288					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0823	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0288					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0535					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0823	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

RD 999 Levee Erosion Repair Project - Landside Option - Calaveras County AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

SMAQMD Harborcraft, Dredge and Barge Emission Factor Calculator - Input Data Page

INSTRUCTIONS:

1. Enter inputs into tables A1, A2, A3, and A4 below. Required inputs must be entered to estimate emission rates, optional inputs should be entered if available.

2. After entering inputs, review status and error messages (cell E14); make changes as necessary until this cell is green indicating that inputs are ready.

3. Results may be reviewed in "MainEngineEmissRates" and "AuxEngineEmissRates" tabs, both colored yellow.

Inputs and Status

Inputs color legend	Required Input
	Optional Input
Status and error messages	OK. Default values will be applied to blank model year and HP

A1. Inventory Calendar year

Inventory Calendar Year	2021
-------------------------	------

A2. Main Engine Inputs

Required Inputs			Optional Inputs			
Vessel Name	Vessel Type	No. of Engines	Engine Model Year	Engine Rated Power (hp)	Vessel Number	Home Port
Pusher Tug	Tow Boats / Push Boats	2				
Motorized Skiff	Work Boats	2				

A4. Project Information

Inputs	
Date (mm/dd/yyyy):	7/30/2020
Project Name:	RD 999 Levee Erosion Repair Project
Project Location:	Sutter Slough, Sacramento County
Contact Person:	Annaliese Miller
Company Name:	Rincon Consultants
Mailing Address:	209 E Victoria Street, Suite B, Santa Barbara, CA 93101
Phone Number:	805-869-1323
Email Address:	amiller@rinconconsultants.com

A3. Auxiliary Engine Inputs

Required Inputs			Optional Inputs	
Vessel Name	Auxiliary Engine Type	No. of Engines	Engine Model Year	Engine Rated Power (hp)
Pusher Tug	Crane	2		
Motorized Skiff	Work Boats Generator	1		

SMAQMD Harborcraft, Dredge and Barge Emission Factor Calculator - Main Engine Emission Rates

Calendar Year: 2021 **Number of Entries:** 2

[illegible]

Rincon Calculations of Main Engine Emissions - Annual Basis

Hours of Use Per Day for Pusher Tug	6
Number of Work Days per Year for Pusher Tug	10

Hours of Use Per Day for Motorized Skiff	2
Number of Work Days per Year for Motorized Skiff	35

Calendar Year: 2021 **Number of Entries:** 2

Vessel/Engine Information								Emissions (lbs/day; estimates for each row are totals over the number of engines listed in column H for that row)									
Vessel Name	Vessel Number	Home Port	Vessel Type	Engine Model Year	Engine Rated Power (hp)	Engine Load Factor	Number of engines	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Pusher Tug			Tow Boats / Push Boats	1995	330.8333	0.68	2	2.6	2.3	64.6	4.2	14.7	0.03	3517.7	0.1	0.03	3529.7
Motorized Skiff			Work Boats	2004	364.381	0.45	2	0.3	0.3	8.5	1.0	6.7	0.01	854.6	0.03	0.01	857.6

Vessel Name	Emissions (tons/year for air pollutants, MT/year for GHGs)									
	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Pusher Tug	0.01	0.01	0.32	0.02	0.07	0.0002	16.0	0.0006	0.0001	16.0
Motorized Skiff	0.005	0.005	0.15	0.02	0.12	0.0001	13.6	0.0002	0.00003	3.9

Rincon Calculations of Auxiliary Engine Emissions - Annual Basis

Hours of Use Per Day for Crange Barge	10	Hours of Use Per Day for Motorized Skiff	2
Number of Work Days per Year for Crane Barge	35	Number of Work Days per Year for Motorized Skiff	35

Calendar Year: 2021 Number of Entries: 2

Vessel/Engine Information									Emissions (lbs/day; estimates for each row are totals over the number of engines listed in column H for that row)									
Vessel Name	Vessel Number	Home Port	Vessel Type	Auxiliary Engine Type	Engine Model Year	Engine Rated Power (hp)	Engine Load Factor	Number of Engines	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Pusher Tug			Tow Boats / Push Boats	Crane	2012	349	0.42	2	1.0	0.9	18.2	0.8	7.4	0.04	3862.7	0.2	0.03	3876.0
Motorized Skiff			Work Boats	Work Boats	1998	190	0.43	1	0.1	0.1	3.2	0.3	1.2	0.002	212.7	0.01	0.002	213.5

Vessel Name	Emissions (tons/year for air pollutants, MT/year for GHGs)									
	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Pusher Tug	0.02	0.02	0.32	0.01	0.13	0.001	61.313	0.0025	0.0005	61.523
Motorized Skiff	0.00	0.00	0.06	0.005	0.02	0.00003	3.377	0.0001	0.00003	3.3882

Rincon Summary Emission Calculations - Annual Basis

	Emissions (tons/year for air pollutants, MT/year for GHGs)									
	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Main Engine	0.02	0.02	0.5	0.04	0.2	0.0003	29.5	0.001	0.0002	19.9
Auxiliary Engine	0.02	0.02	0.4	0.02	0.2	0.001	64.7	0.003	0.0005	64.9
Total Emissions	0.04	0.03	0.8	0.1	0.3	0.001	94.2	0.003	0.001	84.8

Rincon Calculations of Main Engine Emissions - Maximum Daily Basis

Hours of Use Per Day for Pusher Tug	6	Hours of Use Per Day for Motorized Skiff	1
Number of Work Days per Year for Pusher Tug	10	Number of Work Days per Year for Motorized Skiff	35

Calendar Year: 2021 Number of Entries: 2

Vessel/Engine Information								Emissions (lbs/day; estimates for each row are totals over the number of engines listed in column H for that row)									
Vessel Name	Vessel Number	Home Port	Vessel Type	Engine Model Year	Engine Rated Power (hp)	Engine Load Factor	Number of engines	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Pusher Tug			Tow Boats / Push Boats	1995	330.8333	0.68	2	2.6	2.3	64.6	4.2	14.7	0.03	3517.7	0.1	0.03	3529.7
Motorized Skiff			Work Boats	2004	364.381	0.45	2	0.1	0.1	4.2	0.5	3.4	0.00	427.3	0.02	0.00	428.8

Vessel Name	Emissions (tons/year for air pollutants, MT/year for GHGs)									
	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Pusher Tug	0.01	0.01	0.32	0.02	0.07	0.0002	16.0	0.0006	0.0001	16.0
Motorized Skiff	0.003	0.002	0.07	0.01	0.06	0.0001	6.8	0.0001	0.00002	1.9

Rincon Calculations of Auxiliary Engine Emissions - Maximum Daily Basis

Hours of Use Per Day for Crange Barge	0	Hours of Use Per Day for Motorized Skiff	1
Number of Work Days per Year for Crane Barge	35	Number of Work Days per Year for Motorized Skiff	35

Calendar Year: 2021 **Number of Entries:** 2

Vessel/Engine Information									Emissions (lbs/day; estimates for each row are totals over the number of engines listed in column H for that row)									
Vessel Name	Vessel Number	Home Port	Vessel Type	Auxiliary Engine Type	Engine Model Year	Engine Rated Power (hp)	Engine Load Factor	Number of Engines	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Pusher Tug			Tow Boats / Push Boats	Crane	2012	349	0.42	2	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.00	0.0
Motorized Skiff			Work Boats	Work Boats	1998	190	0.43	1	0.1	0.1	1.6	0.1	0.6	0.001	106.4	0.00	0.001	106.7

Vessel Name	Emissions (tons/year for air pollutants, MT/year for GHGs)									
	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Pusher Tug	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.0000	0.0000	0.000
Motorized Skiff	0.00	0.00	0.03	0.002	0.01	0.00002	1.688	0.0001	0.00001	1.6941

Rincon Summary Emission Calculations - Maximum Daily Basis

	Maximum Daily Emissions (lbs/day)									
	PM ₁₀	PM _{2.5}	NO _x	ROG	CO	SO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Main Engine	2.7	2.4	68.8	4.7	18.0	0.0	3945.0	0.2	0.0	3958.5
Auxiliary Engine	0.1	0.1	1.6	0.1	0.6	0.0	106.4	0.0	0.0	106.7
Total Emissions	2.8	2.5	70.4	4.8	18.6	0.04	4051.3	0.2	0.0	4065.3

Appendix C. Biological Resources Database Searches



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Saxon (3812146) OR Courtland (3812135) OR Clarksburg (3812145) OR Florin (3812144) OR Liberty Island (3812136) OR Bruceville (3812134) OR Rio Vista (3812126) OR Thornton (3812124) OR Isleton (3812125))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Anthicus antiochensis</i> Antioch Dunes anthicid beetle	IICOL49020	None	None	G1	S1	
<i>Anthicus sacramento</i> Sacramento anthicid beetle	IICOL49010	None	None	G1	S1	
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branchinecta mesovallensis</i> midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
<i>Brasenia schreberi</i> watershield	PDCAB01010	None	None	G5	S3	2B.3
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Carex comosa</i> bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Cicuta maculata</i> var. <i>bolanderi</i> Bolander's water-hemlock	PDAP10M051	None	None	G5T4T5	S2?	2B.1
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	PDAP10Z130	None	None	G2	S2	1B.2
<i>Extriplex joaquinana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3S4	WL
<i>Falco peregrinus anatum</i> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
Great Valley Valley Oak Riparian Forest Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
<i>Hypomesus transpacificus</i> Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
<i>Lasiurus blossevillei</i> western red bat	AMACC05060	None	None	G5	S3	SSC
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	PDFAB250D2	None	None	G5T2	S2	1B.2



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Legenere limosa</i> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<i>Lepidium latipes var. heckardii</i> Heckard's pepper-grass	PDBRA1M0K1	None	None	G4T1	S1	1B.2
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	PDAP119030	None	Rare	G2	S2	1B.1
<i>Limosella australis</i> Delta mudwort	PDSCR10030	None	None	G4G5	S2	2B.1
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Melospiza melodia</i> song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
<i>Neostapfia colusana</i> Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
<i>Northern Hardpan Vernal Pool</i> Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S4	
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
<i>Phalacrocorax auritus</i> double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
<i>Plagiobothrys hystriculus</i> bearded popcornflower	PDBOR0V0H0	None	None	G2	S2	1B.1
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
<i>Puccinellia simplex</i> California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
<i>Sagittaria sanfordii</i> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<i>Scutellaria galericulata</i> marsh skullcap	PDLAM1U0J0	None	None	G5	S2	2B.2
<i>Scutellaria lateriflora</i> side-flowering skullcap	PDLAM1U0Q0	None	None	G5	S2	2B.2
<i>Sidalcea keckii</i> Keck's checkerbloom	PDMAL110D0	Endangered	None	G2	S2	1B.1
<i>Spirinchus thaleichthys</i> longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Sylvilagus bachmani riparius</i> riparian brush rabbit	AMAE01021	Endangered	Endangered	G5T1	S1	
<i>Symphyotrichum lentum</i> Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Thamnophis gigas</i> giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
<i>Trifolium hydrophilum</i> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
<i>Tuctoria mucronata</i> Crampton's tuctoria or Solano grass	PMPOA6N020	Endangered	Endangered	G1	S1	1B.1
Valley Oak Woodland Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 69



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad< IS (Saxon (3812146)< OR Courtland (3812135)< OR Clarksburg (3812145)< OR Florin (3812144)< OR Liberty Island (3812136)< OR Bruceville (3812134)< OR Rio Vista (3812126)< OR Thornton (3812124)< OR Isleton (3812125))
 AND Taxonomic Group< IS (Fish< OR Amphibians< OR Reptiles< OR Birds< OR Mammals< OR Mollusks< OR Arachnids< OR Crustaceans< OR Insects)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Anthicus antiochensis</i> Antioch Dunes anthicid beetle	IICOL49020	None	None	G1	S1	
<i>Anthicus sacramento</i> Sacramento anthicid beetle	IICOL49010	None	None	G1	S1	
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branchinecta mesoallensis</i> midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3S4	WL
<i>Falco peregrinus anatum</i> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
<i>Hypomesus transpacificus</i> Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
<i>Lasiurus blossevillei</i> western red bat	AMACC05060	None	None	G5	S3	SSC
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Melospiza melodia</i> song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S4	
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
<i>Phalacrocorax auritus</i> double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
<i>Spirinchus thaleichthys</i> longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
<i>Sylvilagus bachmani riparius</i> riparian brush rabbit	AMAEB01021	Endangered	Endangered	G5T1	S1	
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Thamnophis gigas</i> giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 37



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Query Criteria: Quad IS (Saxon (3812146) OR Courtland (3812135) OR Clarksburg (3812145) OR Florin (3812144) OR Liberty Island (3812136) OR Bruceville (3812134) OR Rio Vista (3812126) OR Thornton (3812124) OR Isleton (3812125))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Phalacrocorax auritus

Element Code: ABNFD01020

double-crested cormorant

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** G5

State: None

State: S4

Other: CDFW_WL-Watch List, IUCN_LC-Least Concern

Habitat: **General:** COLONIAL NESTER ON COASTAL CLIFFS, OFFSHORE ISLANDS, AND ALONG LAKE MARGINS IN THE INTERIOR OF THE STATE.

Micro: NESTS ALONG COAST ON SEQUESTERED ISLETS, USUALLY ON GROUND WITH SLOPING SURFACE, OR IN TALL TREES ALONG LAKE MARGINS.

Occurrence No.	22	Map Index:	11286	EO Index:	13106	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1988-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1995-12-07		

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.38685 / -121.49190	Accuracy:	1/5 mile
UTM:	Zone-10 N4249814 E631712	Elevation (ft):	5
PLSS:	T06N, R04E, Sec. 12, SW (M)	Acres:	0.0

Location: SE ARM OF NORTH STONE LAKE, APPROX 6 MI S OF SACRAMENTO.

Detailed Location: 8 NESTS WITH APPROXIMATELY 20 ADULT BIRDS IN THE AREA; 2 NESTS CONTAINING YOUNG OBSERVED.

Ecological: HABITAT CONSISTS OF A LARGE COTTONWOOD GROVE SURROUNDED BY A FRESHWATER MARSH BELOW.

General: GREAT BLUE HERON AND GREAT EGRET ALSO NEST HERE. COUNTY OF SACRAMENTO LEASES THIS PROPERTY TO A PRIVATE PARTY.

Owner/Manager: SAC COUNTY, PVT

Occurrence No.	38	Map Index:	66450	EO Index:	66554	Element Last Seen:	2005-03-26
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	2005-03-26		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2006-09-27		

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.44164 / -121.48454	Accuracy:	80 meters
UTM:	Zone-10 N4255905 E632254	Elevation (ft):	10
PLSS:	T07N, R04E, Sec. 24 (M)	Acres:	0.0

Location: NORTHERN ISLAND ON BLACK CROWN LAKE, JUST UPSTREAM (EAST) OF I-5, 6.5 MILES NW OF ELK GROVE.

Detailed Location:

Ecological: NEST TREES WERE POPULUS FREMONTII GROWING ON THE ISLAND. SURROUNDING AREA IS MANAGED SEASONAL WETLANDS AND RIPARIAN/GRASSLAND RESTORATION SITES.

General: 2 ACTIVE DCCO NESTS PRESENT DURING 2005.

Owner/Manager: SRCSD-BUFFERLANDS



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Occurrence No.	39	Map Index:	66452	EO Index:	66556	Element Last Seen:	2005-03-25
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-03-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-09-27
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44723 / -121.48163				Accuracy:	80 meters	
UTM:	Zone-10 N4256530 E632498				Elevation (ft):	5	
PLSS:	T07N, R05E, Sec. 19, NW (M)				Acres:	0.0	
Location:	ALONG MORRISON CREEK, 0.7 MILE UPSTREAM (EAST) OF I-5, 6.5 MILES NW OF ELK GROVE.						
Detailed Location:							
Ecological:	HABITAT IS MATURE MIXED RIPARIAN, DOMINATED BY POPULUS FREMONTII, QUERCUS LOBATA, SALIX GOODDINGII. ROOKERY INCLUDES GREAT BLUE HERON & GREAT EGRET NESTS. SURROUNDING AREA IS MANAGED SEASONAL WETLANDS & RIPARIAN/GRASSLAND RESTORATION SITE.						
General:	28 ACTIVE DCCO NESTS PRESENT DURING 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Ardea herodias

Element Code: ABNGA04010

great blue heron

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5
	State: None		State: S4
	Other: CDF_S-Sensitive, IUCN_LC-Least Concern		
Habitat:	General: COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.		
	Micro: ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.		

Occurrence No.	1	Map Index: 11286	EO Index: 13052	Element Last Seen:	1988-05-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1988-05-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1995-11-02

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.38685 / -121.49190	Accuracy:	1/5 mile
UTM:	Zone-10 N4249814 E631712	Elevation (ft):	5
PLSS:	T06N, R04E, Sec. 12, SW (M)	Acres:	0.0

Location: NORTH STONE LAKE, NEAR JUNCTION OF SE ARM AND MAIN LAKE BODY, APPROXIMATELY 6 MI S OF SACRAMENTO.

Detailed Location: 16 NESTS WITH ADULTS IN THEM ON 1 FEB 88; 54 NESTS WITH ADULTS COUNTED ON 2 MAY 88.

Ecological: HABITAT CONSISTS OF A LARGE COTTONWOOD GROVE SURROUNDED BY FRESHWATER MARSH.

General: COUNTY OF SACRAMENTO LEASES THE AREA TO A PRIVATE PARTY.

Owner/Manager: SAC COUNTY, PVT

Occurrence No.	85	Map Index: 66449	EO Index: 66552	Element Last Seen:	2005-03-25
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	2005-03-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-10-04

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.44405 / -121.48516	Accuracy:	1/10 mile
UTM:	Zone-10 N4256172 E632196	Elevation (ft):	10
PLSS:	T07N, R04E, Sec. 24 (M)	Acres:	0.0

Location: ALONG LOWER MORRISON CREEK, JUST UPSTREAM OF I-5, 6.5 MILES NW OF ELK GROVE.

Detailed Location:

Ecological: HABITAT CONSISTS OF MATURE MIXED RIPARIAN; DOMINATED BY POPULUS FREMONTII, QUERCUS LOBATA, AND SALIX GOODINGII. ROOKERY SITE INCLUDES NESTING GREAT BLUE HERONS, GREAT EGRETS, AND DOUBLE-CRESTED CORMORANTS.

General: 46 ACTIVE GBHE NESTS PRESENT DURING 2005.

Owner/Manager: SRCSD-BUFFERLANDS



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Ardea alba

Element Code: ABNGA04040

great egret

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5
	State: None		State: S4
	Other: CDF_S-Sensitive, IUCN_LC-Least Concern		
Habitat:	General: COLONIAL NESTER IN LARGE TREES.		
	Micro: ROOKERY SITES LOCATED NEAR MARSHES, TIDE-FLATS, IRRIGATED PASTURES, AND MARGINS OF RIVERS AND LAKES.		

Occurrence No.	1	Map Index: 11286	EO Index: 25947	Element Last Seen:	1988-05-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1988-05-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1995-11-02

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.38685 / -121.49190	Accuracy:	1/5 mile
UTM:	Zone-10 N4249814 E631712	Elevation (ft):	5
PLSS:	T06N, R04E, Sec. 12, SW (M)	Acres:	0.0

Location: SE ARM OF NORTH STONE LAKE, NEAR JCT OF MAIN BODY OF LAKE, APPROX 6 MILES SOUTH OF SACRAMENTO.

Detailed Location:

Ecological: GREAT BLUE HERONS AND DOUBLE-CRESTED CORMORANTS ALSO NEST AT THIS ROOKERY SITE.

General: ONE GREAT EGRET NEST FOUND ON 1 FEB 88; 11 ACTIVE NESTS COUNTED ON 2 MAY 88. PROPERTY IS OWNED BY SACRAMENTO COUNTY, BUT LEASED TO A PRIVATE PARTY.

Owner/Manager: SAC COUNTY, PVT

Occurrence No.	33	Map Index: 66449	EO Index: 66553	Element Last Seen:	2005-03-25
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	2005-03-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-09-28

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.44405 / -121.48516	Accuracy:	1/10 mile
UTM:	Zone-10 N4256172 E632196	Elevation (ft):	10
PLSS:	T07N, R04E, Sec. 24 (M)	Acres:	0.0

Location: ALONG LOWER MORRISON CREEK, JUST UPSTREAM (EAST) OF I-5, 6.5 MILES NW OF ELK GROVE.

Detailed Location:

Ecological: HABITAT CONSISTS OF MATURE MIXED RIPARIAN; DOMINATED BY POPULUS FREMONTII, QUERCUS LOBATA, AND SALIX GOODINGII. ROOKERY SITE INCLUDES NESTING GREAT BLUE HERONS, GREAT EGRETS, AND DOUBLE-CRESTED CORMORANTS.

General: 44 ACTIVE GBEG NESTS PRESENT DURING 2005.

Owner/Manager: SRCSD-BUFFERLANDS

Nycticorax nycticorax

Element Code: ABNGA11010

black-crowned night heron

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5
	State: None		State: S4
	Other: IUCN_LC-Least Concern		
Habitat:	General: COLONIAL NESTER, USUALLY IN TREES, OCCASIONALLY IN TULE PATCHES.		
	Micro:		



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ROOKERY SITES LOCATED ADJACENT TO FORAGING AREAS: LAKE MARGINS, MUD-BORDERED BAYS, MARSHY SPOTS.

Occurrence No.	15	Map Index:	64809	EO Index:	64888	Element Last Seen:	2005-02-01
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-02-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-06-05
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43208 / -121.48017				Accuracy:	80 meters	
UTM:	Zone-10 N4254851 E632653				Elevation (ft):	7	
PLSS:	T07N, R05E, Sec. 30, NW (M)				Acres:	0.0	
Location:	NICHOLAS POND, 0.3 MILE NORTH OF LAGUNA BOULEVARD AND 0.4 MILE EAST OF I-5, ELK GROVE.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF AN OPEN-WATER POND WITH AN ISLAND IN THE MIDDLE; THE HERON ROOKERY IS FOUND ON THE ISLAND, WHICH IS VEGETATED BY SALIX GOODINGII.						
General:	42 INDIVIDUALS OBSERVED AT THIS ROOKERY ON 1 FEB 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	16	Map Index:	64810	EO Index:	64889	Element Last Seen:	2005-03-16
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2005-03-16	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2006-06-05	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44527 / -121.44861				Accuracy:	80 meters	
UTM:	Zone-10 N4256360 E635383				Elevation (ft):	7	
PLSS:	T07N, R05E, Sec. 20, E (M)				Acres:	0.0	
Location:	FISHHEAD LAKE, 0.2 MILE WEST OF FRANKLIN BOULEVARD & 0.5 MILE NORTH OF SIMS ROAD, ELK GROVE.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF A MANAGED MITIGATION WETLAND. VEGETATION INCLUDES EMERGENT MARSH PLANTS (TULE AND CATTAILS) ALONG CHANNEL EDGES, WITH ASSOCIATED RIPARIAN (WILLOWS AND COTTONWOODS).						
General:	12 INDIVIDUALS OBSERVED AT THIS ROOKERY ON 16 MAR 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	17	Map Index:	64811	EO Index:	64890	Element Last Seen:	2005-03-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-03-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-06-05
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44833 / -121.45610				Accuracy:	80 meters	
UTM:	Zone-10 N4256689 E634724				Elevation (ft):	7	
PLSS:	T07N, R05E, Sec. 20, NW (M)				Acres:	0.0	
Location:	FISHHEAD LAKE, 0.3 MILE NE OF THE INTERSECTION OF SIMS ROAD & LAGUNA STATION ROAD, ELK GROVE.						
Detailed Location:							
Ecological:	HABITAT SURROUNDING ROOKERY CONSISTS OF A MANAGED MITIGATION WETLAND. VEGETATION INCLUDES EMERGENT MARSH PLANTS (TULE AND CATTAILS) ALONG CHANNEL EDGES, WITH ASSOCIATED RIPARIAN (WILLOWS AND COTTONWOODS).						
General:	13 INDIVIDUALS OBSERVED AT THIS ROOKERY ON 16 MAR 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						

<i>Elanus leucurus</i>	Element Code: ABNKC06010		
white-tailed kite			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S3S4
	Other: BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern		
Habitat:	General: ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.		
	Micro: OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.		

Occurrence No.	19	Map Index:	24809	EO Index:	22270	Element Last Seen:	1992-05-30
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1992-05-30	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1994-02-15	
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32638 / -121.56253				Accuracy:	80 meters	
UTM:	Zone-10 N4243006 E625647				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 32, SE (M)				Acres:	0.0	
Location:	0.3 MILE WSW OF WILSON ROAD AND 0.3 MILE SE OF COURTLAND.						
Detailed Location:							
Ecological:	NEST WAS LOCATED IN VEGETATION LINING AN AGRICULTURAL DRAINAGE DITCH; SURROUNDING HABITAT CONSISTS OF FARMLAND.						
General:	ONE OR BOTH ADULTS WERE OBSERVED FOR ABOUT 2 MONTHS IN THIS AREA. ON 30 MAY 1992, BOTH ADULTS WERE OBSERVED, ONE CARRYING A SNAKE TOWARD VEGETATION WHERE NEST WAS PRESUMED TO BE LOCATED.						
Owner/Manager:	PVT						



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Occurrence No.	48	Map Index:	25472	EO Index:	27031	Element Last Seen:	1993-05-15
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1993-05-15	Record Last Updated:	1994-01-31
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.41486 / -121.72216	Accuracy:	80 meters				
UTM:	Zone-10 N4252619 E611558	Elevation (ft):	30				
PLSS:	T07N, R02E, Sec. 35, NW (M)	Acres:	0.0				
Location:	SW CORNER OF THE INTERSECTION OF MIDWAY AND BULKLEY ROADS, 10.5 MILES EAST OF DIXON.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF VARIOUS EUCALYPTUS, PINE, AND POPLARS, BORDERED BY FALLOW PASTURE THAT IS PART OF A HOUSING COMPOUND FOR FARM WORKERS.						
General:	2 ADULTS FLEDGED 4 YOUNG IN 1993; 2ND, 3RD, 4TH, AND 5TH KITE NESTS TO THE EAST AND WEST OF THIS NEST FAILED DUE TO SWAINSON'S HAWK DOMINATION OF THE TERRITORY.						
Owner/Manager:	PVT						
Occurrence No.	49	Map Index:	25470	EO Index:	11806	Element Last Seen:	1993-04-25
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1993-04-25	Record Last Updated:	1995-11-02
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.49283 / -121.69287	Accuracy:	1/5 mile				
UTM:	Zone-10 N4261307 E613992	Elevation (ft):	30				
PLSS:	T08N, R03E, Sec. 31, SW (M)	Acres:	0.0				
Location:	EAST SIDE OF ROAD 104, SOUTH OF THE INTERSECTION OF TREMONT ROAD, YOLO COUNTY PARK.						
Detailed Location:							
Ecological:	NEST TREE IS A EUCALYPTUS WITHIN A HEDGEROW; FORAGING HABITAT CONSISTS OF "MANAGED" NATIVE VEGETATION, BORDERED BY AGRICULTURAL FIELDS TO THE NORTH, WEST, AND SOUTH.						
General:	2 ADULTS FLEDGED 3 YOUNG IN 1993; NESTING SWAINSON'S HAWK NEARBY SOMETIMES OBSERVED IN CONFLICT WITH THE KITES (ALWAYS THE KITES PURSUING THE HAWKS).						
Owner/Manager:	YOL COUNTY						



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Occurrence No.	151	Map Index:	78441	EO Index:	79362	Element Last Seen:	2008-04-23
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2008-04-23	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-03-25	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.46494 / -121.45206			Accuracy:	80 meters		
UTM:	Zone-10 N4258538 E635045			Elevation (ft):	12		
PLSS:	T07N, R05E, Sec. 17, NE (M)			Acres:	0.0		
Location:	BACKYARD OF RESIDENCE ON CHINQUAPIN WAY, ADJACENT TO NORTH SIDE OF SACRAMENTO COUNTY SANITATION DISTRICT BUFFERLANDS.						
Detailed Location:	"NEST IS LOCATED IN A TALL PINE TREE IN THE BACKYARD OF A RESIDENCE THAT ABUTS THE NORTH LEVEE OF UNIONHOUSE CREEK." MAPPED TO LIKELY NEST TREE VISIBLE IN 2009 AERIAL THAT IS ABOUT 28 M NORTH OF PROVIDED COORDINATES ON LEVEE.						
Ecological:	DENSE RESIDENTIAL DEVELOPMENTS BORDERED BY UNDEVELOPED, ANNUAL GRASSLANDS OF THE BUFFERLANDS.						
General:	2 ADULTS OBSERVED AT NEST ON 23 APR 2008. THE NEST HAS BEEN REPORTED AS ACTIVE THE PAST 2-3 YEARS (2005-2006-2007?).						
Owner/Manager:	PVT, SRCSD-BUFFERLANDS						

Accipiter cooperii

Element Code: ABNKC12040

Cooper's hawk

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G5
	State:	None		State:	S4
	Other:	CDFW_WL-Watch List, IUCN_LC-Least Concern			
Habitat:	General:	WOODLAND, CHIEFLY OF OPEN, INTERRUPTED OR MARGINAL TYPE.			
	Micro:	NEST SITES MAINLY IN RIPARIAN GROWTHS OF DECIDUOUS TREES, AS IN CANYON BOTTOMS ON RIVER FLOOD-PLAINS; ALSO, LIVE OAKS.			

Occurrence No.	99	Map Index:	62278	EO Index:	62315	Element Last Seen:	2005-08-XX
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2005-08-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-08-11	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44027 / -121.44555			Accuracy:	80 meters		
UTM:	Zone-10 N4255810 E635660			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 21, SE (M)			Acres:	0.0		
Location:	WEST SIDE OF FRANKLIN BOULEVARD, 0.2 MILE NORTH OF SIMS ROAD, BETWEEN ELK GROVE AND SACRAMENTO.						
Detailed Location:	NEST TREE IS LOCATED ALONG THE DRIVEWAY OF A RESIDENCE ON THE EASTERN BORDER OF THE SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	NEST TREE WAS AN OLIVE; NEST WAS ONLY 30' FROM FRANKLIN BOULEVARD. SITE IS BORDERED BY THE BUFFERLANDS TO THE WEST AND RESIDENTIAL TO THE EAST.						
General:	ACTIVE NEST PRESENT ON 15 JUN 2005; 2 JUVENILES WERE OBSERVED AT THE SITE INTO EARLY AUG 2005 (2 FLEDGED).						
Owner/Manager:	SRCSD-BUFFERLANDS						

Buteo swainsoni

Element Code: ABNKC19070

Swainson's hawk

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G5
	State:	Threatened		State:	S3
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern			



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Habitat:	General:	BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.					
	Micro:	REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.					
Occurrence No.	10	Map Index:	11187	EO Index:	27299	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-06-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-07
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.34296 / -121.53413			Accuracy:	1/5 mile		
UTM:	Zone-10 N4244885 E628101			Elevation (ft):	5		
PLSS:	T06N, R04E, Sec. 27, NW (M)			Acres:	0.0		
Location:	SOUTH SIDE OF SNODGRASS SLOUGH, ABOUT 0.25 MI E OF HWY 160 CROSSING; SE SIDE SACRAMENTO RIVER 2 MI ENE OF COURTLAND.						
Detailed Location:	LOCATIONS FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS: "SNODGRASS SLOUGH & 160, 0.25 MI E JCT ON S SIDE SLOUGH" (1979-1982); 1994 FLYOVER OBSERVATION WAS "300 YDS NORTH LAMBERT RD, 0.4 MI EAST OF HWY 160."						
Ecological:	1979, 1980, & 1988 NESTS WERE IN 50-60' COTTONWOOD SURROUNDED BY RIPARIAN/AGRICULTURAL LAND USE.						
General:	DFG SWHA TERRITORY #SA004. ACTIVE NEST OBSERVED IN 1979 (2 YOUNG) AND 1980 (1 YOUNG). TWO ADULTS OBSERVED IN JULY 1982 BUT NO NEST FOUND. ACTIVE NEST OBS IN 1988 (3 YOUNG). 1 ADULT OBS SOARING 16 JUN 1994, NO NEST FOUND.						
Owner/Manager:	PVT						
Occurrence No.	11	Map Index:	11441	EO Index:	27298	Element Last Seen:	1994-07-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-04
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23419 / -121.40699			Accuracy:	3/5 mile		
UTM:	Zone-10 N4232999 E639419			Elevation (ft):	15		
PLSS:	T05N, R05E, Sec. 35, SW (M)			Acres:	0.0		
Location:	ALONG GRIZZLY SLOUGH, FROM NEW HOPE ROAD CROSSING TO VICINITY OF CONFLUENCE WITH DRY CREEK.						
Detailed Location:	TERRITORIES #SA008, SA081, & SA061 FROM CDFW SWHA DATABASE, MAPPED TO UTMS & "GRIZZLY SLOUGH-NEW HOPE" & "DRY CRK, 1 MI E MOKELUMNE R." #SJ022: 1984 FLYOVER 1 MI E THORNTON ON MOKELUMNE R. SITE "NH1" OF 2004 THESIS NEAR NEW HOPE RD BRIDGE.						
Ecological:	1979, 1985 NESTS IN OAK TREES. 1986 NEST 40' UP IN 50' OAK. TWO ACTIVE NESTS IN 1987: SA061 AT NEW HOPE CROSSING, IN OAK; SA008 AT DRY CREEK, 40' UP 53' OAK. LAND USE RIPARIAN/AGRICULTURE/PASTURE.						
General:	1979: 2 ADULTS(A) ON NEST OBSERVED. 1982, '84: SWHA OBS BUT NO ACTIVE NEST. 1985, '86: 2A & 1 YOUNG(Y) OBS IN NEST. 1987: 2A, 0Y AT SA061; 2A, 1Y AT SA008. 1994: 2A & 1 FLEDGLING OBS. 2002, '03: TERRITORIAL SWHA OBS, BUT NO NEST FOUND.						
Owner/Manager:	PVT, UNKNOWN						



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Occurrence No.	22	Map Index:	10992	EO Index:	27282	Element Last Seen:	2000-07-27
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-06
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.23316 / -121.60184			Accuracy:	nonspecific area		
UTM:	Zone-10 N4232610 E622367			Elevation (ft):	15		
PLSS:	T05N, R03E, Sec. 36 (M)			Acres:	213.0		
Location:	VICINITY OF THE HOWARD LANDING FERRY CROSSING ON STEAMBOAT SLOUGH, NORTH OF HOWARD LANDING, 5 MILES NORTH OF ISLETON.						
Detailed Location:	1994: ABOUT 1/4 MI S OF FERRY ON GRAND ISLAND (E) SIDE; COORDINATES FROM CDFW SWAINSON'S HAWK DATABASE.1999: AT FERRY STATION ON RYER ISLAND (W) SIDE; FROM MAP ATTACHED TO SURVEY FORM. 2000: SURVEYORS ATTEMPTED TO REVISIT 1994 SITE.						
Ecological:	1979-88: NEST IN COTTONWOOD; LAND USE RIPARIAN/AGRICULTURAL. 1999: COPULATION & FORAGING PERCH IN OAK (DETERMINED FROM PHOTOS) ON VEGETATED LEVEE, ADJACENT TO RIPARIAN FOREST & AGRICULTURAL FIELDS. 2000: NEST TREE NOT FOUND.						
General:	DFG TERRITORY #SA012. ACTIVE NEST 1979, '81, '82, '85-88 W/YOUNG OBS '81, '82, '85, '86, '87. 1994: PAIR OBS NEAR NEST 28 APR, 1 JUV NEAR NEST TREE 7 JUN. 1999: PAIR OBS COPULATING 21 APR. 2000: 2 ADULTS FLUSHED BUT NO NEST FOUND 27 JUL.						
Owner/Manager:	PVT						

Occurrence No.	80	Map Index:	11386	EO Index:	27211	Element Last Seen:	2003-04-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25301 / -121.42824			Accuracy:	nonspecific area		
UTM:	Zone-10 N4235056 E637524			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 28, NE (M)			Acres:	10.0		
Location:	ALONG THE MOKELUMNE RIVER, FROM 0.75 TO 1 MI E OF I-5 CROSSING & 0.6 MI NE OF BARBER RD AT CAMERON RD.						
Detailed Location:	NEAR TERRITORY #SJ002 FROM 1994 CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. MAPPED TO UTMS GIVEN IN 2004 THESIS FOR NEST SITES MR7 AND MR9.						
Ecological:	1988: NEST TREE SPECIES NOT GIVEN. SURROUNDING HABITAT RIPARIAN/AGRICULTURAL. 2003: MR7 NEST IN COTTONWOOD. MR9 NEST IN VALLEY OAK. SURROUNDING HABITAT DESCRIBED AS VALLEY RIPARIAN.						
General:	1979, '84, '87: SWHA OBS, NO NESTS FOUND. 1988: 2 ADULTS OBS AT NEST, SUCCESS NOT RECORDED. 2003: MR7 NESTING PAIR OBS REPEATEDLY, INCUBATION OBS BUT 0 YOUNG PRODUCED. MR9 BREEDING PAIR AT NEST, INCUBATION OBS APR 30, NEST SUCCESS UNKNOWN.						
Owner/Manager:	PVT						



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Occurrence No.	82	Map Index:	11355	EO Index:	27212	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20402 / -121.45029				Accuracy:	1/5 mile	
UTM:	Zone-10 N4229587 E635686				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 08, SE (M)				Acres:	0.0	
Location:	ALONG BEAVER SLOUGH JUST WEST OF BLOSSOM ROAD, BETWEEN I-5 AND MOKELUMNE RIVER ABOUT 2 MILES SW OF THORNTON.						
Detailed Location:	1979-1983: LOCATION FROM 1994 CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS STATED AS "BEAVER SLOUGH-BLOSSOM RD." MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	1979-1983: SURROUNDING LAND USE WAS AGRICULTURE. 2009: NEST IN RIPARIAN TREE.						
General:	DFG SWHA TERRITORY #SJ005. 1 ADULT OBSERVED IN 1979 AND 1983, BUT NO NESTS FOUND. NO BIRDS OR NESTS FOUND IN 1980 OR 1982. 1 SWAINSON'S HAWK OBSERVED FLYING INTO A NEST ON 22 APR 2009; NEST SUCCESS UNKNOWN.						
Owner/Manager:	PVT						

Occurrence No.	114	Map Index:	11221	EO Index:	7546	Element Last Seen:	1993-07-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1993-07-15
Occ. Type:	Natural/Native occurrence			Trend:	Stable	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.47324 / -121.52077				Accuracy:	1/5 mile	
UTM:	Zone-10 N4259361 E629036				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 10, SE (M)				Acres:	0.0	
Location:	SOUTHWEST BANK OF THE SACRAMENTO RIVER, FROM RM-47.8 TO 48.55, ABOUT 1 MILE UPSTREAM OF FREEPORT BEND, SACRAMENTO.						
Detailed Location:	TERRITORY #YO025 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED APPROXIMATELY TO PROVIDED TRS AND "1 MI W OF FREEPORT BEND."						
Ecological:	1984-1990: NEST(S) IN COTTONWOODS WITHIN RIPARIAN HABITAT; SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURAL FIELDS INCLUDING ALFALFA AND CORN.						
General:	1981: 2 SWHA OBSERVED SOARING. NEST FIRST FOUND IN 1984, ACTIVE EVERY YEAR WITH YOUNG FLEDGED IN 1984 (1 YOUNG), 1985 (1), 1986 (1), 1988 (2), & 1990 (1). ACTIVE NEST OBS IN 1993, SUCCESS UNKNOWN.						
Owner/Manager:	PVT						



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Occurrence No.	120	Map Index:	10952	EO Index:	27187	Element Last Seen:	1981-07-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1984-06-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.16296 / -121.62134			Accuracy:	1/5 mile		
UTM:	Zone-10 N4224794 E620777			Elevation (ft):			
PLSS:	T04N, R03E, Sec. 26 (M)			Acres:	0.0		
Location:	1 MILE SW OF ISLETON, ON THE SACRAMENTO RIVER.						
Detailed Location:							
Ecological:							
General:	DFG SWHA #SA021. TWO ADULTS OBSERVED ON 17 JUL 1981. SITE INACTIVE 1980-1984.						
Owner/Manager:	UNKNOWN						
Occurrence No.	121	Map Index:	10966	EO Index:	27185	Element Last Seen:	1984-06-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1984-06-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Isleton (3812125), Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.19463 / -121.61468			Accuracy:	1 mile		
UTM:	Zone-10 N4228317 E621308			Elevation (ft):	5		
PLSS:	T04N, R03E, Sec. 14 (M)			Acres:	0.0		
Location:	1 MILE SOUTH OF WALKER LANDING, ON GRAND ISLAND ROAD, EAST OF STEAMBOAT SLOUGH.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF GOOD RIPARIAN.						
General:	DFG SWHA #SA020. OBSERVED FROM 2 DIFFERENT LOCATIONS W/IN THIS AREA. NEST FOUND IN 1983. 1 ADULT OBS PERCHING 1984.						
Owner/Manager:	PVT						
Occurrence No.	135	Map Index:	11303	EO Index:	27174	Element Last Seen:	2004-06-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-06-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-11-03
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.37032 / -121.47524			Accuracy:	80 meters		
UTM:	Zone-10 N4248004 E633197			Elevation (ft):	10		
PLSS:	T06N, R05E, Sec. 18, SW (M)			Acres:	0.0		
Location:	EAST SIDE OF I-5, 0.35 MILE SOUTH OF THE HOOD/FRANKLIN EXIT, 1.25 MILE SW OF FRANKLIN.						
Detailed Location:							
Ecological:	2004 NEST TREE WAS A LEAFLESS (DEAD) WILLOW; SURROUNDED BY GRAZING LAND IN ALL DIRECTIONS.						
General:	DFG SWHA #SA018. 1 ADULT SOARING ABOVE FIELD IN 1981. ACTIVE NEST OBSERVED ON 8 JUN 2004; AT LEAST 1 PARTIALLY-FEATHERED YOUNG OBSERVED ON 24 JUN 2004.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	167	Map Index:	11458	EO Index:	27132	Element Last Seen:	1987-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-12
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21685 / -121.39189				Accuracy:	1/5 mile	
UTM:	Zone-10 N4231098 E640775				Elevation (ft):	10	
PLSS:	T04N, R05E, Sec. 11, NE (M)				Acres:	0.0	
Location:	ALONG THE MOKELUMNE RIVER NEAR THE W END OF FOREST LK RD; ABOUT 1 MI NW OF RAY RD AT KILE RD & 1.7 MI SE OF THORNTON.						
Detailed Location:	TERRITORY #SJ023 IN CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS; MAPPED TO GIVEN TRS AND COMMENTS: "ACCESS FROM...WEST END OF FOREST LAKE (RD), LEVEE RD."						
Ecological:	1987 NEST TREE WAS AN OAK. SURROUNDING HABITAT DESCRIBED AS RIPARIAN, PASTURE, AND AGRICULTURE/CROPLANDS.						
General:	1984, 1985, 1986: ADULT SWAINSON'S HAWKS OBSERVED BUT NO NEST FOUND. 1987: 2 ADULTS OBSERVED AT NEST WITH TWO YOUNG. EXACT DATE NOT RECORDED.						
Owner/Manager:	PVT						
Occurrence No.	168	Map Index:	11464	EO Index:	27130	Element Last Seen:	2003-03-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-03-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20635 / -121.38239				Accuracy:	nonspecific area	
UTM:	Zone-10 N4229947 E641626				Elevation (ft):	15	
PLSS:	T04N, R05E, Sec. 12, S (M)				Acres:	32.0	
Location:	SOUTH OF THE MOKELUMNE RIVER, N SIDE OF KILE RD (WALNUT GROVE RD) ABOUT 0.5 MI W OF RAY RD & 2.4 MI SE OF THORNTON PO.						
Detailed Location:	1984-94: TERRITORY SJ024/SJ015 FROM CDFW DATABASE OF 1979-1994 SWHA OBSERVATIONS, PER GIVEN TRS. 2002-03: MAPPED TO COORDINATES GIVEN IN 2004 THESIS.						
Ecological:	1984: HABITAT AGRICULTURAL. 2002-03: HABITAT DESCRIBED AS VALLEY OAK WOODLAND. 2003 NEST IN GROVE OF VALLEY OAKS BEHIND RESIDENCE ON KILE RD; DESCRIBED AS "LAST YEAR'S TREE" THOUGH GIVEN LOCATIONS ARE ABOUT 185 M APART.						
General:	1984: 5 SWHA OBS SOARING WITH 3 RED-TAILED HAWKS. 2002: NESTING PAIR OBS THROUGH SEASON, 0 FLEDGED. 2003: PAIR OBS PERCHED NEAR NEST, SUCCESS UNKNOWN.						
Owner/Manager:	PVT						



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Occurrence No.	170	Map Index:	11031	EO Index:	27129	Element Last Seen:	2001-06-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2001-06-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29004 / -121.58287				Accuracy:	80 meters	
UTM:	Zone-10 N4238946 E623931				Elevation (ft):	20	
PLSS:	T05N, R04E, Sec. 07, SE (M)				Acres:	0.0	
Location:	STEAMBOAT SLOUGH, 0.3 MILE SOUTH OF SUTTER ISLAND CROSS ROAD AND 1 MILE WEST OF HIGHWAY 160 ALONG THE SACRAMENTO RIVER.						
Detailed Location:	1983: DETECTION AT T5N R2E S18, NE1/4 OF SW1/4. 1987: SW1/4 OF NE1/4 OF SAME SECTION, AT RM 25L. 1988: S1/2 OF SAME SECTION. 2000-2001: COORDINATES OF NEST SITE OR COORDS OF OBSERVATION POINT PLUS BEARING & DISTANCE FROM NEST GIVEN.						
Ecological:	1987-88: NEST 45' UP IN 55' COTTONWOOD (CW). LAND USE RIPARIAN/AG. 2000: NEST IN 55' CW, SURROUNDING LAND USE ORCHARD. 2001: NEST IN 80' CW, ADJACENT TO A LEVEE W/PAVED ROAD; OVERSTORY RIPARIAN COMPONENT; SURROUNDING LAND USE AGRICULTURAL.						
General:	DFG SWHA #SA034. 1983: 1 ADULT (A) OBS, NO NEST FOUND. '84: NO HAWKS. '87: 1A + 2 YOUNG (Y) OBS 15 JUN. '88: 2A AT NEST OBS. 2000: 2 FLEDGED Y OBS 14 JUL. 1 SWHA OBS ON W SIDE SLOUGH, 27 JUL. '01: 2A & 1Y OBS ON 22 JUN, YOUNG BANDED.						
Owner/Manager:	PVT						

Occurrence No.	171	Map Index:	11383	EO Index:	27127	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.29584 / -121.41947				Accuracy:	nonspecific area	
UTM:	Zone-10 N4239821 E638210				Elevation (ft):	15	
PLSS:	T05N, R05E, Sec. 10, S (M)				Acres:	9.0	
Location:	RANCH ON EAST SIDE OF BRUCEVILLE ROAD, ABOUT 0.3 MILE N OF TWIN CITIES ROAD INTERSECTION & 0.6 MILE S OF CAMP ROAD.						
Detailed Location:	1994: UTMS FOR TERRITORY "SA" FROM CDFW DATABASE OF SWHA OBSERVATIONS (1982 DETECTION AT SA027 NEARBY). 2003: COORDINATES FROM CDFW DATABASE OF SWHA NEST RECORDS, 2000-04. 2009: POINT IN CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2003: NEST IN 70' COTTONWOOD SURROUNDED BY CROPLAND. 2009: NEST IN 35' TREE CODED AS "OTHER EXOTIC;" FALLOW LAND TO EAST, ALFALFA TO WEST.						
General:	1982: 1 ADULT OBS S OF FRANKLIN FIELD; NO NEST FOUND. 1994: DEFENSIVE ADULT PAIR WITH PERCHED FLEDGLING OBS, NEST SUSPECTED. 2000: NO NEST, 0 SWHA OBS. 2003: NEST WITH 2 YOUNG OBS ON 2 JUL. 2009: NEST WITH YOUNG OBS ON 28 APR.						
Owner/Manager:	PVT						



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Occurrence No.	173	Map Index:	11421	EO Index:	27128	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-07
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28909 / -121.42224			Accuracy:	nonspecific area		
UTM:	Zone-10 N4239069 E637980			Elevation (ft):	15		
PLSS:	T05N, R05E, Sec. 15, NW (M)			Acres:	35.0		
Location:	SOUTH SIDE OF TWIN CITIES RD, JUST WEST OF BRUCEVILLE RD INTERSECTION & ABOUT 0.8 MILE EAST OF FRANKLIN BLVD.						
Detailed Location:	1981: TERRITORY SA022 FROM 1994 CDFW SWHA DATABASE. 1999: DETECTION MARKED ON TOPO MAP. MAPPED TO COORDINATES FROM 2001 FIELD SURVEY FORM, CDFW DATABASE OF SWHA NEST RECORDS FROM 2000-2004, & CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	1999, 2001: NEST TREE IS A WILLOW IN A RIPARIAN SWALE; SURROUNDING HABITAT RUDERAL/PASTURE. 2003: 2 ACTIVE NESTS OBSERVED, 1 AT 1999-2001 SITE, IN A WILLOW, & 1 IN 30' VALLEY OAK ABOUT 0.25 MI TO W. 2009: NEST AT/NEAR 1999-2003 WILLOW SITE.						
General:	1981: 1 ADULT IN FIELD WITH PREY; NEST NOT OBS. 1999: NEST WITH 2 JUV. 2000: 9 AD & 3 JUV FORAGING, NO NEST OBS. 2001: NEST WITH 2 JUV. 2002: 3 BIRDS, 1 INCUBATING NEST. 2003: MALE WITH FOOD FOR MATE, NEST NOT OBS. 2009: NEST WITH JUV.						
Owner/Manager:	PVT, UNKNOWN						

Occurrence No.	174	Map Index:	11327	EO Index:	27126	Element Last Seen:	2010-04-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-04-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-07
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26836 / -121.46395			Accuracy:	nonspecific area		
UTM:	Zone-10 N4236707 E634371			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 20, SW (M)			Acres:	145.0		
Location:	COSUMNES RIVER PRESERVE, S SIDE LOST SLOUGH; ABOUT 1 MI NW OF I-5 AT MOKELUMNE RIVER & 1 MI S OF I-5 AT TWIN CITIES RD.						
Detailed Location:	1982, '94: FROM CDFW DATABASE OF SWHA OBSERVATIONS: TERITORIES #SA026 & "SA" (NO # ASSIGNED). 1999: POINT DRAWN ON MAP OF SWHA OBS. 2003: FROM CDFW DATABASE OF NEST RECORDS. 2009, '10: FROM CDFW AND DWR SHAPEFILES.						
Ecological:	AREA OF HIGH NESTING DENSITY. 2003: 2 NESTS IN 50' COTTONWOODS (CW). 2009: 5 NEST TREES DESCRIBED; 2 CW (30' & 50'), 2 VALLEY OAKS (30' & 35') & 1 "OTHER NATIVE" (30'). PREDOMINANT LAND USES: SEASONAL WETLAND, RIPARIAN, CROPS, FALLOW.						
General:	1982: SWHA OBS, NO NEST OBS. 1994: 2 ACTIVE NESTS. 1999: 1 NEST W/2 YOUNG (Y). 2000: TERRITORIAL PAIR, NO NEST OBS. 2003: 2 NESTS, 1 W/1 DOWNY Y 16 JUN. 2009: 8-14 NESTS RECORDED, Y OBS IN 2 NESTS; 8 APR-2 JUL. 2010: 2 W/NEST MATERIAL.						
Owner/Manager:	PVT						



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Occurrence No.	175	Map Index:	11455	EO Index:	27125	Element Last Seen:	1987-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26546 / -121.39607				Accuracy:	1/5 mile	
UTM:	Zone-10 N4236485 E640315				Elevation (ft):	10	
PLSS:	T05N, R05E, Sec. 23, SE (M)				Acres:	0.0	
Location:	COSUMNES RIVER, 2 MILES SOUTH OF TWIN CITIES ROAD.						
Detailed Location:	MAPPED TO TRS GIVEN FOR TERRITORY SA043 IN 1994 CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. STATED LOCATION "COSUMNES RIVER, TWIN CITIES RD" LIES ABOUT 2 MI NE, BUT WAS LIKELY GIVEN AS THE NEAREST MAJOR LANDMARK/ACCESS POINT.						
Ecological:	RIPARIAN AREA SUROUNDED BY CROPS AND GRASSLAND.						
General:	1984, 1985, 1986: SWAINSON'S HAWKS OBSERVED BUT NO NEST FOUND. 1987: 2 ADULTS AND 2 YOUNG OBSERVED AT NEST.						
Owner/Manager:	TNC						

Occurrence No.	179	Map Index:	11308	EO Index:	27120	Element Last Seen:	2003-05-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37432 / -121.48247				Accuracy:	80 meters	
UTM:	Zone-10 N4248438 E632558				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 13, NE (M)				Acres:	0.0	
Location:	SOUTH SIDE OF HOOD FRANKLIN RD, JUST WEST OF I-5 OFFRAMP, ABOUT 1.5 MILES W OF FRANKLIN.						
Detailed Location:	TERRITORIES #SA011 AND #SA072 FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS AT "I-5, HOOD FRANKLIN RD." MAPPED TO COORDINATES FROM CDFW DATABASE OF SWHA NEST RECORDS FROM 2000-2004.						
Ecological:	1980-84: HABITAT DESCRIBED AS GRASSLANDS, AGRICULTURAL LAND. 2003: NEST IN 45' TREE CODED AS "OTHER EXOTIC" (=NOT EUCALYPTUS OR WALNUT), SURROUNDED BY PASTURE.						
General:	1979, 1980, 1984, 1992: ADULTS OBSERVED IN GENERAL AREA, NESTS NOT FOUND. ACTIVE NEST OBS 15 MAY 2003, NO YOUNG RECORDED.						
Owner/Manager:	PVT, UNKNOWN						



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Occurrence No.	186	Map Index:	11157	EO Index:	7592	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.48051 / -121.54844				Accuracy:	nonspecific area	
UTM:	Zone-10 N4260129 E626609				Elevation (ft):	15	
PLSS:	T07N, R04E, Sec. 04 (M)				Acres:	89.0	
Location:	BABEL SLOUGH, FROM CONFLUENCE WITH SACRAMENTO RIVER SW ABOUT 0.9 MILE.						
Detailed Location:	1984-94: 3 TERRITORIES FROM CDFW DATABASE OF SWHA OBSERVATIONS: #YO061 AT RM49.5; #YO200 AT RM49.6, & YO201 (SEE ALSO OCC#633), AT RM49.8. 2005 OBS ON S SIDE BABEL SLOUGH.						
Ecological:	DENSELY ACTIVE NESTING/COMMUNAL ROOSTING AREA. 1984-94: NESTS IN MED TO TALL COTTONWOODS(CW), IN DENSE CW-DOMINATED RIPARIAN, 0-200' FROM RIVER'S EDGE. 2005: SUSPECTED NESTS IN SYCAMORES. '07: NESTS IN CWS. ALFALFA, WHEAT, ROW CROPS NEARBY.						
General:	YEAR/#ACTIVE NESTS/#FLEDGED: 1984/1/1, 1985/1/1, 1986-87/1/?, 1988/1/2, 1990/2/1, 1991/3/1, 1993/2/3, 1994/1/2. 159 SWHA ROOSTING 20 AUG 1991. 2005/3/2, 2006/1/?, 2007/4/4 YOUNG OBSERVED.						
Owner/Manager:	PVT, UNKNOWN						

Occurrence No.	188	Map Index:	11255	EO Index:	27112	Element Last Seen:	2003-06-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-08
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.43211 / -121.50266				Accuracy:	80 meters	
UTM:	Zone-10 N4254822 E630690				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 26, NE (M)				Acres:	0.0	
Location:	EAST SIDE OF SACRAMENTO RIVER, ABOUT 0.8 MI SW OF I-5 AT MORRISON CREEK & 1.7 MI NNE OF SCRIBNER RD AT HWY 160.						
Detailed Location:	TERRITORY #SA023 FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. MAPPED TO COORDINATES FROM CDFW NEST RECORDS DATABASE, 2000-2004.						
Ecological:	1982: GOOD HABITAT WITH LARGE COTTONWOODS IN SWAMPY AREA ON N SIDE OF LEVEE. 2003: NEST IN 60' COTTONWOOD WITH RIPARIAN TO THE EAST AND PASTURE TO THE WEST.						
General:	1982: 2 ADULTS OBSERVED CARRYING PREY. 1985: 2 ADULTS OBSERVED IN VICINITY, AT RM 45(L). 2003: ACTIVE NEST OBSERVED ON 10 JUN, NO YOUNG DOCUMENTED.						
Owner/Manager:	PVT						



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Occurrence No.	189	Map Index:	11369	EO Index:	27110	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2009-07-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2012-12-19		
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43603 / -121.45706			Accuracy:	80 meters		
UTM:	Zone-10 N4255323 E634663			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 29, NW (M)			Acres:	0.0		
Location:	BETWEEN DWIGHT RD & SIMS RD ON EAST SIDE OF RAILROAD TRACKS, SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Detailed Location:	1979 DETECTION TERRITORY #SA0005 AT "SHELDON & J8 RDS," FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. MAPPED TO COORDINATES FROM TABLE OF SWHA NEST SITES ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS, 2009.						
Ecological:	1979: SURROUNDING HABITAT WAS AGRICULTURAL LAND. 2009: NEST IN GOODDING'S WILLOW.						
General:	1979: 1 ADULT OBS JUL 26, NO NEST FOUND. NO ACTIVITY IN 1980 OR 1982. 2009: ACTIVE NEST MONITORED MAY-JUL FLEDGED 2 YOUNG.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	192	Map Index:	11143	EO Index:	27108	Element Last Seen:	2016-06-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2016-06-01		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2018-01-26		
Quad Summary:	Clarksburg (3812145), Sacramento West (3812155)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.49593 / -121.55941			Accuracy:	nonspecific area		
UTM:	Zone-10 N4261825 E625627			Elevation (ft):	14		
PLSS:	T08N, R04E, Sec. 32, SE (M)			Acres:	75.0		
Location:	ALONG THE SACRAMENTO RIVER AT GARCIA BEND, RM 50.7R.						
Detailed Location:	SOUTH POLYGON MAPPED GENERALLY TO TRS, UTMS, & DESCRIPTION FOR TERRITORY #SA033 IN CDFW DATABASE OF 1979-1994 SWHA OBSERVATIONS: "SACRAMENTO RIVER RM 50.7R - GARCIA BEND." NORTH POLYGON MAPPED TO COORDINATES GIVEN FOR 2016 DETECTION.						
Ecological:	1983-1994: NEST(S) IN COTTONWOODS; SURROUNDING HABITAT INCLUDED RIPARIAN, SPARSE RIPARIAN, RESIDENTIAL, & AGRICULTURAL. 2016: NEST IN OAK.						
General:	1983: 1 ADULT OBS ON NEST. 1986: 2 SWHA OBS IN AREA. 1987: ACTIVE NEST OBS. 1988: ACTIVE NEST FLEDGED 1 YOUNG. 1992, 1993: NO HAWKS OR NESTS OBSERVED. 1994: 2 ADULTS OBSERVED ON 14 JUN, NEST NOT CONFIRMED. 2016: NESTING PAIR OBSERVED.						
Owner/Manager:	PVT						



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Occurrence No.	212	Map Index:	11233	EO Index:	27089	Element Last Seen:	2009-05-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-25
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.39741 / -121.50806			Accuracy:	nonspecific area		
UTM:	Zone-10 N4250963 E630281			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 02, E (M)			Acres:	87.0		
Location:	CANAL FOLLOWING RR TRACKS ON E SIDE OF THE SACRAMENTO RIVER, ABOUT 0.9 MILE SSE OF SCRIBNER RD AT SOUTH RIVER ROAD.						
Detailed Location:	JUST NORTHWEST OF STONE LAKE. MAPPED TO 2003 SITE FROM CDFW NEST RECORDS AND FROM 2009 DWR NEST RECORD.						
Ecological:	1984: SURROUNDING HABITAT RIPARIAN/AGRICULTURAL. 1985: "LITTLE RIPARIAN LEFT IN THIS AREA." 2003: NEST IN 50' VALLEY OAK WITH PASTURE TO THE EAST AND RIPARIAN TO THE WEST (NORTH POLY). 2009: HABITAT DESCRIBED AS RIPARIAN TREE (SOUTH POLY).						
General:	1984: 2 ADULTS OBSERVED PERCHED TOGETHER; NO NEST FOUND. 1985, 1986: 1 ADULT OBS SOARING, NEST NOT FOUND. ADULT MALE OBS RETRIEVING FOOD TO UNSEEN NEST ON 10 JUN 2003; NEST SUCCESS UNKNOWN. 2009: 2 NESTING SWAINSON'S HAWKS OBS ON 19 MAY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	218	Map Index:	11192	EO Index:	27084	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.43549 / -121.53024			Accuracy:	nonspecific area		
UTM:	Zone-10 N4255158 E628277			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 27, NW (M)			Acres:	162.0		
Location:	SACRAMENTO RIVER AT RM 43.2(R), ON THE NORTH SIDE OF PUMPHOUSE RD (RD 39), 1 MILE NORTH OF CLARKSBURG.						
Detailed Location:	TERRITORIES #YO056 & "YO" (NO # ASSIGNED) FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. NEST SITE(S) FROM 1985-94 ABOUT 0.5 MILE N OF ORIGINAL NEST TREE. SITE YO-93 FROM ESTEP 2008 LOCATED ALONG RD 39.						
Ecological:	1984-94: NEST(S) IN COTTONWOOD IN CW-DOMINATED RIPARIAN WITHIN CROPLAND. 1985-86: HABITAT "POOR...RIP-RAP ACTIVITY ALL AROUND [NEST TREE]." 2007: NEST TREE NOT DIRECTLY OBS; TERRITORY IN RIPARIAN WITHIN ALFALFA/VINEYARDS/IRRIGATED CROPS.						
General:	1984: NEST WITH 1 YOUNG OBSERVED. 1985: NEST FLEDGED 1 YOUNG. 1986: NO SWHA OBS. 1987: 1 ADULT OBS SOARING. 1988: NEST FLEDGED 1. 1994: NEST FLEDGED 2. 2007: NESTING TERRITORY DETECTED, NESTING OUTCOME UNKNOWN/UNCONFIRMED.						
Owner/Manager:	PVT						



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Occurrence No.	220	Map Index:	11089	EO Index:	20039	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.33483 / -121.57076			Accuracy:	80 meters		
UTM:	Zone-10 N4243933 E624913			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 29, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF THE SACRAMENTO RIVER, RM 34.4(R), VICINITY OF COURTLAND ROAD AT SOUTH RIVER ROAD.						
Detailed Location:	VICINITY OF TERRITORY #YO082/#YO037 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO COORDINATES FOR SITE YO-100 FROM 2008 ESTEP REPORT.						
Ecological:	1982: NO NEST BUT SUITABLE HABITAT NEARBY; LAND USE RIPARIAN/AGRICULTURAL. 1985: "NO SUITABLE NESTING HABITAT;" DENUDED RIPARIAN & AG. 1988: NEST IN LONE VALLEY OAK IN MIDDLE OF CULTIVATED FIELD. 2007: NEST IN VALLEY OAK; RURAL RESIDENTIAL.						
General:	1982, 1985: 1 ADULT OBSERVED SOARING, BUT NO NEST FOUND (#YO037).1988: 2 ADULTS AND 1 JUVENILE OBSERVED AT NEST (#YO082). 1994: PAIR OBS FORAGING & PERCHING ON LONE OAK ON 13 JUL; NO NEST SEEN IN THIS TREE. 2007: NEST WITH 2 YOUNG OBSERVED.						
Owner/Manager:	PVT						

Occurrence No.	267	Map Index:	11134	EO Index:	27041	Element Last Seen:	2009-07-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-07-15
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.36306 / -121.55873			Accuracy:	nonspecific area		
UTM:	Zone-10 N4247082 E625915			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 17, SE (M)			Acres:	24.0		
Location:	ELK SLOUGH, ABOUT 0.4 MILE SSE OF NETHERLANDS ROAD AT WAUKEENA RD AND 2 MILES W OF HOOD.						
Detailed Location:	1983: VICINITY OF TERRITORY #YO083 FROM CDFW DATABASE. 1994: 2 DETECTIONS ON SAME DAY, PROB SAME NEST; MAPPED TO COORDS. 2000: COORDS FROM FSF, CDFW DATABASE. '07: ESTEP SITE YO-97, ON E SIDE SLOUGH. '09: 2 NEST SITES, 1 SAME AS 2000 LOC.						
Ecological:	1983: NEST IN LARGE COTTONWOOD. 1994: NEST IN COTTONWOOD SURROUNDED BY CROPLAND. 2000: NEST IN 100' VALLEY OAK IN CROPLAND. 2007: NEST IN COTTONWOOD. 2009: N NEST IN VALLEY OAK; S NEST POSS. IN SAME TREE AS 2000. SURROUNDED BY FALLOW LAND.						
General:	1983: 2 ADULTS & 2 EGGS IN THE NEST OBSERVED. 1994: NEST WITH 2 YOUNG OBS. 2000: NEST WITH 1 FEATHERED YOUNG OBS ON 30 JUN. 2007: ACTIVE NEST OBS; SUCCESS UNKNOWN. 2009: ADULT(S) & YOUNG OBS IN N NEST 7 JUL; & IN S NEST ON 23 JUL.						
Owner/Manager:	PVT						



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Occurrence No.	311	Map Index:	21029	EO Index:	9168	Element Last Seen:	2005-07-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-06-11
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.45660 / -121.74697				Accuracy:	specific area	
UTM:	Zone-10 N4257221 E609328				Elevation (ft):	40	
PLSS:	T07N, R02E, Sec. 15, NW (M)				Acres:	7.0	
Location:	2.75 MILES NORTH OF MIDWAY ROAD, 8 MILES EAST OF DIXON.						
Detailed Location:	TERRITORIES #SL006 AND "SL" (NO # ASSIGNED) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 6 SITE.						
Ecological:	1992, 1994, 2000, AND 2001 NEST WERE LOCATED IN A EUCALYPTUS TREE ADJACENT TO A RURAL FARM HOUSE. 2002, 2004, AND 2005 NEST LOCATED IN A LARGE LOCUST IN THE NE PART OF THE FARMSTEAD.						
General:	NEST-BUILDING 7 APR 1992. ADULTS & 1 YOUNG OBSERVED JUL 1994. PAIR FEEDING 2 DOWNY YOUNG 8 JUN 2000. 1 FLEDGED, 2001. INCUBATION ON MAY 2002. 2 DOWNY YOUNG ON APR (UNCLEAR 2002 OR 3). DEAD DOWNY CHICK UNDER NEST 13 JUL 2004. 2 FLEDGED 2005.						
Owner/Manager:	PVT						

Occurrence No.	312	Map Index:	21028	EO Index:	10033	Element Last Seen:	1990-07-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1990-07-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1992-04-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41306 / -121.39896				Accuracy:	1/5 mile	
UTM:	Zone-10 N4252860 E639779				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 35, SE (M)				Acres:	0.0	
Location:	ALONG BIGHORN ROAD, 0.3 MI NORTH OF ELK GROVE BLVD AND 0.5 MI WEST OF HWY 99, 1.5 MI WEST OF ELK GROVE.						
Detailed Location:	BIRDS WERE FIRST OBSERVED USING SNAGS ADJACENT TO BIGHORN ROAD, LATER NESTING IN VALLEY OAKS BEHIND SNAGS. AFTER YOUNG FLEDGED, THE BIRDS RANGED NORTH OVER FIELDS NEAR THE MARSH ON ELK GROVE CREEK.						
Ecological:	HABITAT SURROUNDING NEST TREE AND NEARBY SNAGS IS OPEN GRASSLAND.						
General:	THE PAIR OF HAWKS WAS OBSERVED FROM 20 APRIL THROUGH 2 JULY 1990, THROUGH THEIR BREEDING PERIOD. AT LEAST ONE YOUNG FLEDGED, AFTER WHICH THEY MOVED TO SOME TREES ON STOCKTON BLVD, NORTH OF DUNISCH ROAD.						
Owner/Manager:	PVT						



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Occurrence No.	395	Map Index:	21806	EO Index:	8363	Element Last Seen:	1992-07-16
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	1992-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1999-10-07
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44257 / -121.49948				Accuracy:	80 meters	
UTM:	Zone-10 N4255987 E630949				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 24 (M)				Acres:	0.0	
Location:	EAST BANK OF SACRAMENTO RIVER, 1 MILE SOUTH OF FREEPORT.						
Detailed Location:	NEST TREE IS LOCATED ON THE EAST SIDE OF THE LEVEE IN AN ISOLATED STAND OF TREES ALONG THE ACCESS ROAD TO BEACH LAKE.						
Ecological:	NEST TREE IS A VALLEY OAK (QUERCUS LOBATA); ADJACENT AGRICULTURAL FIELDS INCLUDE SAFFLOWER AND ALFALFA.						
General:	DFG SWHA #SA044. 1 ADULT/1 JUVENILE OBSERVED ON NEST ON 16 JUL 1992; 2 ADULTS PRESENT ON 20 JUL 1992.						
Owner/Manager:	PVT-BEACH LAKE PROPERTIES						

Occurrence No.	496	Map Index:	23016	EO Index:	20006	Element Last Seen:	2003-05-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.34640 / -121.55794				Accuracy:	1/5 mile	
UTM:	Zone-10 N4245234 E626014				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 29, NE (M)				Acres:	0.0	
Location:	N SIDE SACRAMENTO RIVER, ABOUT 0.1 MILE W OF RM-35.6(R) & 0.2 MILE NE OF THE JUNCTION OF ROAD 143 AND SOUTH RIVER ROAD.						
Detailed Location:	1988: TERRITORY #Y0084; LOCATION DESCRIBED IN CDFW 1992 SWAINSON'S HAWK DATABASE & ON FIELD SURVEY FORM. 2003: COORDINATES FROM CDFW 2000-2004 DATABASE OF SWAINSON'S HAWK NEST RECORDS.						
Ecological:	1988: NEST TREE IS A FARMHOUSE OAK TREE, SURROUNDED BY FARMLAND. 2003: NEST IN 75' VALLEY OAK ON RIVER ROAD, 100 YARDS SOUTH OF RESIDENCE ENTRANCE. ORCHARDS TO NE & SE AND CROPLAND TO NW & SW.						
General:	2 ADULTS AND 3 JUVENILES OBSERVED AT NEST IN 1988. UNKNOWN NUMBERS OF ADULTS & 1 FEATHERED YOUNG OBSERVED AT NEST ON 12 MAY 2003.						
Owner/Manager:	PVT						



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Occurrence No.	508	Map Index:	23234	EO Index:	7587	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2013-02-12		
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.47199 / -121.51119			Accuracy:	1/5 mile		
UTM:	Zone-10 N4259235 E629874			Elevation (ft):	20		
PLSS:	T07N, R04E, Sec. 11, SW (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, RM 47.5-47.2(R), VICINITY OF FREEPORT BEND, SACRAMENTO.						
Detailed Location:	1986-1990: TERRITORY #YO198 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. 2007: MAPPED TO SITE YO-88 FROM 2008 ESTEP REPORT.						
Ecological:	1986-90 NEST IN LARGE COTTONWOOD 15' FROM THE RIVER; SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURAL FIELDS (ALFALFA, SAFFLOWER, WHEAT). 2007: NEST IN COTTONWOOD; SURROUNDINGS INCLUDED ALFALFA, IRRIGATED CROPLAND, AND VINEYARDS.						
General:	NEST WITH ONE YOUNG OBSERVED IN 1986. NEST WITH ONE ADULT & TWO YOUNG OBS IN 1987. 3 FLEDGED IN 1988. PAIR OBSERVED NESTING, BUT NO YOUNG FLEDGED IN 1990. POSSIBLE BREEDING PAIR OBS IN 1991. NEST WITH TWO YOUNG OBS DURING 2007 SURVEY.						
Owner/Manager:	PVT						

Occurrence No.	509	Map Index:	23233	EO Index:	7588	Element Last Seen:	1994-06-30
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1994-06-30		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2013-01-08		
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.47267 / -121.53396			Accuracy:	1/5 mile		
UTM:	Zone-10 N4259279 E627886			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 10, SW (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, RM 48.55-48.8(R), ABOUT 1.5 MILES EAST OF FREEPORT BEND, SACRAMENTO.						
Detailed Location:	TERRITORY #YO199 FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. LOCATIONS GIVEN "RM 48.8R" (1990) & "RM 48.55R" (1991, '93, '94). FIELD SURVEY FORMS FOR 1990, 1991 DETECTIONS GIVE SIMILAR INFORMATION.						
Ecological:	1990: NEST IN SMALL LOCUST. 1991: NEST IN LARGE OAK TREE WITHIN A GROUP OF 3 ISOLATED TREES IN A FARMYARD. SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURAL FIELDS (TOMATOES AND WHEAT). SAME NEST TREE MAY HAVE BEEN USED IN 1993 & 1994.						
General:	ADULT SWHA, BUT NO NESTS OBSERVED 1981-82. 1990: ACTIVE NEST OBSERVED 8 AUG; NO YOUNG FLEDGED. 1991: NEST HATCHED 2 YOUNG, FLEDGED 1. 1993: ACTIVE NEST OBSERVED, NEST FAILED. 1994: ACTIVE NEST FAILED BEFORE HATCHING.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	566	Map Index:	23236	EO Index:	12768	Element Last Seen:	2006-08-03
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2006-08-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-05-06	
Quad Summary:	Isleton (3812125), Courtland (3812135)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.24934 / -121.60362			Accuracy:	nonspecific area		
UTM:	Zone-10 N4234402 E622184			Elevation (ft):	5		
PLSS:	T05N, R03E, Sec. 25 (M)			Acres:	97.0		
Location:	STEAMBOAT SLOUGH, JUST S OF THE SUTTER SLOUGH CONFLUENCE & ABOUT 0.4 MI N OF HOWARD LANDING FERRY, 5 MILES W OF LOCKE.						
Detailed Location:	1988: TRS & DESCRIPTION "RM 21.6R" GIVEN ON FIELD SURVEY FORM & IN CDFW SWAINSON'S HAWK DATABASE. 2006: 2 NEST SITES; S SITE AT "E RYER ROAD 0.4 MILE N OF FERRY, 1.5 MILE S OF ELEVATOR ROAD," & N SITE AT "W BASE OF LEVEE, E RYER RD."						
Ecological:	1988: NEST TREE IS A FARMYARD WALNUT. 2006: 2 NEST SITES. SOUTH: PRESUMED NEST SITE IS SMALL TREE ON RIVER SIDE OF LEVEE. NORTH: NEST AT 95% HEIGHT OF NEARLY DEAD BLACK WALNUT; MIXED PASTURE AND ALFALFA TO WEST.						
General:	1988: DFG SWHA TERRITORY #YO154/SL017; 2 ADULTS FLEDGED 2 YOUNG. 2006, SOUTH SITE: 2 ADULTS OBSERVED CARRYING NESTING MATERIAL ON 5 MAY; ALSO OBS 22 MAY AND 29 JUN. SUCCESS OF NEST UNKNOWN. 2006, NORTH SITE: PAIR FLEDGED 2 YOUNG BY 3 AUG.						
Owner/Manager:	PVT, UNKNOWN						

Occurrence No.	598	Map Index:	23628	EO Index:	18421	Element Last Seen:	2005-08-26
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2005-08-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-04-10	
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.49485 / -121.69739			Accuracy:	80 meters		
UTM:	Zone-10 N4261526 E613595			Elevation (ft):	30		
PLSS:	T08N, R02E, Sec. 36, E (M)			Acres:	0.0		
Location:	SOUTH SIDE OF TREMONT ROAD, 0.1 MILE WEST OF ROAD 104, 7 MILES SOUTH OF DAVIS.						
Detailed Location:	DFG SWHA SO019/SL019. MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 13 SITE. ALSO DOCUMENTED IN CDFW NEST RECORDS; UNCLEAR IF OBSERVATIONS WERE FROM 2002, 2003, OR BOTH YEARS.						
Ecological:	2004 NEST LOCATED AT THE 80% HEIGHT OF THE EASTMOST TREE IN A CONTINUOUS ROW OF BLACK WALNUTS; SURROUNDING FORAGING HABITAT CONSISTED OF CULTIVATED LAND TO THE SOUTH AND RUDERAL TO THE NORTH, ACROSS TREMONT ROAD.						
General:	2 FLEDGED IN 1988. NEST MONITORED APR-SEP 2001; 3 FLEDGED. MONITORED APR-JUL 2002; 2 FLEDGED. POSSIBLY ACTIVE IN 2003 (RECORDS UNCLEAR). MONITORED MAR-AUG 2004; 1 FLEDGED. MONITORED 3 MAR-26 AUG 2005; ADULTS PRESENT, BUT NO CHICKS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	631	Map Index:	23882	EO Index:	7543	Element Last Seen:	1994-08-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.46488 / -121.50493			Accuracy:	80 meters		
UTM:	Zone-10 N4258455 E630433			Elevation (ft):	15		
PLSS:	T07N, R04E, Sec. 14, NE (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, RM 46.70(R), JUST DOWNSTREAM FROM FREEPORT BEND, ABOUT 0.65 MILE NORTH OF FREEPORT BRIDGE.						
Detailed Location:	TERRITORIES #YO032 & #YO198 FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. 1982: INCIDENTAL OBS AT RM 46.2. 1993, 1994: UTMS GIVEN FOR NEST SITE AT RM 46.7, "0.5 MILES NORTH OF FREEPORT BRIDGE."						
Ecological:							
General:	1982: 1 ADULT OBSERVED, NEST NOT FOUND. 1984: NO SWHA OR NESTS OBS. 1993: 2 ADULTS AND 2 JUVENILES OBSERVED AT NEST ON 15 JUL. 1994: PAIR FLEDGED 2 YOUNG FROM NEST.						
Owner/Manager:	UNKNOWN						
Occurrence No.	633	Map Index:	23880	EO Index:	7545	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.49034 / -121.55551			Accuracy:	80 meters		
UTM:	Zone-10 N4261210 E625976			Elevation (ft):	15		
PLSS:	T07N, R04E, Sec. 04, NW (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, RM 50.25(R), 0.6 MILE UPSTREAM FROM BABEL SLOUGH JUNCTION, SW OF SACRAMENTO.						
Detailed Location:	1993 NEST ASSIGNED TO TERRITORY #YO201 FROM CDFW DATABASE OF 1979-1994 SWHA OBSERVATIONS (OBS ATTRIBUTED TO YO201 ALSO MAPPED AT OCCURRENCE #186). MAPPED TO COORDINATES GIVEN FOR SITE YO-80 IN 2008 ESTEP REPORT.						
Ecological:	2007 NEST IN COTTONWOOD IN RIPARIAN HABITAT, ADJACENT TO IRRIGATED CROPLAND AND ALFALFA.						
General:	2 ADULTS AND 2 JUVENILES OBSERVED AT NEST SITE ON 15 JUL 1993. NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	679	Map Index:	33359	EO Index:	29194	Element Last Seen:	2009-04-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34233 / -121.49442			Accuracy:	nonspecific area		
UTM:	Zone-10 N4244871 E631572			Elevation (ft):	5		
PLSS:	T06N, R04E, Sec. 25 (M)			Acres:	40.0		
Location:	STONE LAKES NWR; ON THE EAST SHORE OF S STONE LAKE 1 TO 1.4 MILES NORTH OF LAMBERT ROAD, 6 MILES EAST OF COURTLAND.						
Detailed Location:	1992: TERRITORY SA076 FROM CDFW SWHA DATABASE. 1995: NEST MARKED ON PROVIDED MAP. 2003: LAT/LONG FROM CDFW DATABASE OF NEST RECORDS, 2000-2004. 2009: NESTING SITES PER DWR FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 SURVEY DATA.						
Ecological:	1995: NEST TREE IN MARSH BORDERING STONE LAKE. 2003: NEST IN 40' WILLOW ABOUT 0.2 MI OUTSIDE REFUGE BOUNDARY. 2009: NESTING HABITAT DESCRIBED AS RIPARIAN TREE(S). SURROUNDING LAND USES INCLUDE WILDLIFE REFUGE, HUNTING, PASTURE, AGRICULTURE.						
General:	1992: BREEDING PAIR OBSERVED IN VICINITY BY CDFW SURVEYORS. 1995: 2 ADULTS & 1 JUVENILE OBS AT NEST ON 20 JUN. 2003: NEST WITH 1 FEATHERED YOUNG OBS ON 11 JUN. 2009: PAIR OBS BUILDING NEST ON 6 APR; NESTING SWHA OBS ON 16 APR.						
Owner/Manager:	USFWS-STONE LAKES NWR, PVT						

Occurrence No.	751	Map Index:	41756	EO Index:	41756	Element Last Seen:	1994-06-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento						
Lat/Long:	38.24428 / -121.39038			Accuracy:	80 meters		
UTM:	Zone-10 N4234144 E640854			Elevation (ft):	10		
PLSS:	T05N, R05E, Sec. 02, NW (M)			Acres:	0.0		
Location:	SW SIDE OF BEAR SLOUGH, 0.5 MILE NORTH OF NEW HOPE ROAD, 2 MILES NE OF THORNTON.						
Detailed Location:	MAPPED TO UTMS GIVEN FOR TERRITORY "SA" (NO # ASSIGNED) FROM 1994 CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. CDFW SURVEYOR REVISITED SITE ONCE IN 2000.						
Ecological:	1994 NEST TREE IS A COTTONWOOD, WITH THE NEST UP ABOUT 50 FEET; SURROUNDED BY AGRICULTURE. LIKELY NEST TREE LOCATED IN 2000 BUT NO NEST SEEN; WHITE-TAILED KITE & UNIDENTIFIED HAWK SEEN IN VICINITY.						
General:	LIGHT MORPH MALE AND FEMALE OBSERVED NESTING ON 2 JUN 1994. NO NESTS OR SWAINSON'S HAWKS POSITIVELY IDENTIFIED ON 24 JUL 2000, POSSIBLY DUE TO THE SURVEY BEING LATE IN THE SEASON.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	752	Map Index:	41757	EO Index:	41757	Element Last Seen:	1994-07-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-16
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.22606 / -121.52931				Accuracy:	80 meters	
UTM:	Zone-10 N4231919 E628728				Elevation (ft):	10	
PLSS:	T04N, R04E, Sec. 03, NE (M)				Acres:	0.0	
Location:	EAST SIDE OF GEORGIANA SLOUGH, 1 MILE SOUTHWEST OF THE BRIDGE CROSSING SOUTH OF WALNUT GROVE.						
Detailed Location:	1994: TERRITORY "SA" (NO # ASSIGNED) OF CDFW SWHA DATABASE AT "GEORGIANA SLOUGH, 1 MI S OF BRIDGE." 2000: OBS POINT AT "RACETRACK RD...JUST S OF ITS DEPARTURE FROM GEORGIANA SLOUGH." MAPPED TO 1994 PROVIDED COORDINATES.						
Ecological:	1994: NEST TREE WAS A COTTONWOOD ON EAST SIDE OF SLOUGH; SURROUNDING LAND USE WAS AGRICULTURE. 2000: AREA HAS SUITABLE TREES FOR NESTING.						
General:	1994: 1 FEMALE OBS PERCHED NEAR NEST, 2 JUVENILES OBS BRANCHING ON 7 JUL. 2 FLEDGED CHICKS OBS 21 JUL. 2000: NO NEST LOCATED, NO SWAINSON'S HAWKS SEEN ON 27 JUL, POSSIBLY DUE TO THE SURVEY BEING LATE IN THE SEASON.						
Owner/Manager:	UNKNOWN						

Occurrence No.	753	Map Index:	41766	EO Index:	41766	Element Last Seen:	1994-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31363 / -121.57472				Accuracy:	80 meters	
UTM:	Zone-10 N4241574 E624603				Elevation (ft):	10	
PLSS:	T05N, R04E, Sec. 05, NW (M)				Acres:	0.0	
Location:	EAST SIDE OF THE SACRAMENTO RIVER, 0.3 MILE SOUTH OF THE PAINTERSVILLE BRIDGE, ABOUT 1 MILE SSW OF COURTLAND.						
Detailed Location:	1994: NEST TREE WAS LOCATED 100 YARDS EAST OF RIVER ROAD ALONG A DRIVEWAY. COORDINATES FROM CDFW SWAINSON'S HAWK DATABASE. 2000: SURVEYOR REVISITED COORDINATES FROM CDFW DATABASE.						
Ecological:	1994 NEST TREE WAS A COTTONWOOD.						
General:	1994: 2 ADULTS AND 1 FEATHERED JUVENILE OBSERVED AT THE NEST ON 7 JUL. 2000: NO NEST LOCATED AND NO SWAINSON'S HAWKS OBSERVED ON 27 JUL, POSSIBLY DUE TO THE SURVEY BEING LATE IN THE SEASON.						
Owner/Manager:	PVT						



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Occurrence No.	754	Map Index:	41767	EO Index:	41767	Element Last Seen:	1994-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-30
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17152 / -121.64345			Accuracy:	80 meters		
UTM:	Zone-10 N4225715 E618826			Elevation (ft):	10		
PLSS:	T04N, R03E, Sec. 21, SE (M)			Acres:	0.0		
Location:	SOUTH SIDE OF THE SACRAMENTO RIVER, AT THE ENTRANCE TO VIERRAS RESORT, 2.5 MILES ENE OF RIO VISTA.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW 1994 SWAINSON'S HAWK DATABASE.						
Ecological:	1994: NEST TREE WAS A COTTONWOOD; SURROUNDED BY AGRICULTURE.						
General:	2 ADULTS AND 1 JUVENILE OBSERVED AT THE NEST ON 7 JUL 1994. SITE RESURVEYED ON 27 JUL 2000 FROM ACROSS RIVER, 1 SWAINSON'S HAWK OBS SOARING, NEST NOT SEEN; SURVEY WAS LATE IN THE SEASON.						
Owner/Manager:	PVT						

Occurrence No.	755	Map Index:	41768	EO Index:	41768	Element Last Seen:	2003-07-01
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-13
Quad Summary:	Thornton (3812124), Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.24553 / -121.47868			Accuracy:	nonspecific area		
UTM:	Zone-10 N4234151 E633124			Elevation (ft):	10		
PLSS:	T05N, R05E, Sec. 30 (M)			Acres:	22.0		
Location:	ALONG THE MOKELUMNE RIVER, ABOUT 1.7 MILES NNW OF WALNUT GROVE RD AT VAIL RD AND 2 MILES ENE OF WALNUT GROVE PO.						
Detailed Location:	1994 LOCATION FROM CDFW DATABASE OF SWHA OBSERVATIONS, TERRITORY "SA" (NO # ASSIGNED) ABOUT 0.6 MI W OF THE N END OF VAIL RD. 2003 NEST SITE IS ABOUT 0.3 MI FURTHER SOUTH, ABOUT 0.6 MILE W OF THE W END OF BARBER RD.						
Ecological:	2003: NEST AT TOP OF 50' JUNIPER. HABITAT CONSISTED OF RIPARIAN AND UPLAND, PRIMARILY VALLEY OAK WOODLAND/RIPARIAN, DOMINATED BY VALLEY OAKS, COTTONWOODS, SYCAMORES, & BLACK WALNUT. VINEYARDS TO S AND CROPLAND TO N.						
General:	1994: ACTIVE NEST OBSERVED ON 13 JUL. 2003: 1 FEATHERED JUVENILE OBS IN NEST ON 12 MAY; ADULT FEMALE ON NEST WITH 1 NESTLING OBS 1 JUL; A SECOND PAIR OBS, BUT NO NEST FOUND, ON NORTH/WEST SIDE OF RIVER.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	757	Map Index:	41770	EO Index:	41770	Element Last Seen:	1994-07-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-07-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27985 / -121.38050			Accuracy:	1/10 mile		
UTM:	Zone-10 N4238106 E641649			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 13, SE (M)			Acres:	0.0		
Location:	ALONG COSUMNES RIVER, ABOUT 0.7 MI S OF TWIN CITIES RD CROSSING & 3 MI SE OF FRANKLIN FIELD, COSUMNES RIVER PRESERVE.						
Detailed Location:	TERRITORIES SA062 (1987) AND "SA" (# NOT ASSIGNED, 1994) FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. TRS GIVEN FOR SA062, MAPPED TO COORDINATES GIVEN FOR "SA."						
Ecological:	HABITAT DESCRIBED AS RIPARIAN/AGRICULTURE/PASTURE.						
General:	2 ADULTS AND 2 YOUNG OBSERVED AT NEST IN 1987. ACTIVE NEST OBSERVED ON 13 JUL 1994.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	766	Map Index:	41785	EO Index:	41785	Element Last Seen:	2000-07-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.17635 / -121.58978			Accuracy:	1/5 mile		
UTM:	Zone-10 N4226322 E623518			Elevation (ft):	20		
PLSS:	T04N, R04E, Sec. 19 (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, ABOUT 0.5 MILE NORTH OF THE ISLETON BRIDGE, NE OF ISLETON.						
Detailed Location:	TERRITORY SA063 IN CDFW DATABASE; MAPPED TO 1994 UTMS & "0.5 MI N OF ISLETON BRIDGE...19573 HWY 160, ON E SIDE OF RIVER." THAT ADDRESS IS IN COURTLAND; ISLETON RD WAS LIKELY MEANT. 2000: "ISLETON RD...~0.20 MI N OF BRIDGE ON E SIDE."						
Ecological:	1988 NEST TREE WAS A 60' EUCALYPTUS, SURROUNDING LAND USE WAS AGRICULTURE. 1994 NEST TREE WAS A COTTONWOOD. 2000 NEST TREE WAS A 60' EUCALYPTUS; SURROUNDED BY RIPARIAN TO THE NW AND SW, AND ROW CROPS TO THE NE AND SE.						
General:	2 ADULTS AND 3 JUVENILES OBSERVED IN 1988. 2 ADULTS OBSERVED NESTING ON 6 JUL 1994. 2 ADULTS OBSERVED DEFENDING NEST FROM A RED-TAILED HAWK ON 22 JUL 2000.						
Owner/Manager:	PVT						



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Occurrence No.	767	Map Index:	41786	EO Index:	41786	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-30
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16860 / -121.62760				Accuracy:	80 meters	
UTM:	Zone-10 N4225411 E620219				Elevation (ft):	20	
PLSS:	T04N, R03E, Sec. 27 (M)				Acres:	0.0	
Location:	WEST END OF LONG ISLAND, IN THE SACRAMENTO RIVER, 1 MILE WNW OF ISLETON.						
Detailed Location:	TERRITORY SA064 FROM CDFW 1979-1994 SWAINSON'S HAWK OBSERVATIONS DATABASE AT "SACRAMENTO RIVER, LONG ISLAND."						
Ecological:	1988: NEST TREE WAS A COTTONWOOD; SURROUNDED BY RESIDENTIAL. 1994: POSSIBLE NEST TREE IN COTTONWOOD, SURROUNDED BY AGRICULTURAL LAND. 2000: DOMINANT TREE SPP WERE ASH, LIVE OAK, SYCAMORE. BARN OWL OBSERVED.						
General:	1988: PAIR OBSERVED NESTING. 1994: 1 LIGHT-MORPH MALE & 1 DARK-MORPH MALE OBSERVED PERCHING, SOARING ON 28 APR; NEST IN COTTONWOOD OBS BUT NO ACTIVITY THERE. 2000: SITE REVISITED ON 27 JUL, NO NEST OR SWHA OBS (POSSIBLY DUE TO LATE SURVEY).						
Owner/Manager:	PVT						

Occurrence No.	804	Map Index:	42911	EO Index:	42911	Element Last Seen:	1999-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-07-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-05-11
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25963 / -121.44292				Accuracy:	80 meters	
UTM:	Zone-10 N4235768 E636228				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 21, SW (M)				Acres:	0.0	
Location:	WEST SIDE OF THORNTON ROAD AND NORTH OF THE MOKELUMNE RIVER, 3.5 MILES NW OF THORNTON.						
Detailed Location:							
Ecological:							
General:	NEST SITE CONFIRMED, 2 JUL 1999.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	807	Map Index:	42791	EO Index:	42791	Element Last Seen:	2009-04-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.22526 / -121.45220				Accuracy:	nonspecific area	
UTM:	Zone-10 N4231941 E635479				Elevation (ft):	3	
PLSS:	T04N, R05E, Sec. 05, NE (M)				Acres:	24.0	
Location:	ALONG WALNUT GROVE ROAD JUST WEST OF BLOSSOM ROAD INTERSECTION, 1.5 MILES WEST OF THORNTON.						
Detailed Location:	1994: UTMS FROM DFG SWHA DATABASE, TERRITORY #SJ114 "1/4 MI SW OF FOUR CORNERS NEAR THORNTON." 2000: NEW NEST LOC. FROM FIELD SURVEY FORMS, "ABOUT 1850' W OF BLOSSOM RD, ~30' S OF THE ROAD ALIGNMENT." 2009: DFG DATABASE OF 2009 SURVEY DATA.						
Ecological:	1994: NEST IN 50' COTTONWOOD(CW) AMONG SCATTERED MATURE TREES IN AG FIELDS. 2000: '94 NEST EMPTY; NEW NEST IN CW IN TREES ALONG WALNUT GROVE RD. VINEYARD S, LETTUCE NW, FALLOW NE. '09: NEST IN 40' CW, ALFALFA S, VINEYARD NW, RESIDENTIAL NE.						
General:	1994: 2 ADULTS & 1 YOUNG OBSERVED AT NEST ON 14 JUL, ADULTS SEEN FORAGING NEAR NEST ON 22 JUL. 2000: NEST-BUILDING & COPULATION OBS ON 11 APR; PAIR OBS AT NEST WITH 3 DOWNY YOUNG ON 20 JUN. 2009: ADULT(S) & YOUNG OBSERVED AT NEST ON APR 29.						
Owner/Manager:	PVT						

Occurrence No.	812	Map Index:	42914	EO Index:	42914	Element Last Seen:	2011-04-05
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2011-04-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-07
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.29020 / -121.43821				Accuracy:	nonspecific area	
UTM:	Zone-10 N4239168 E636582				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 16, NW (M)				Acres:	22.0	
Location:	VICINITY OF FRANKLIN BOULEVARD AT TWIN CITIES RD, ABOUT 0.5 MILE N OF LOST SLOUGH & 0.9 MILE SW OF FRANKLIN FIELD.						
Detailed Location:	1994: TERRITORY SA00* FROM DFG SWHA DATABASE; FORAGING GROUNDS SW OF INTERSECTION. 1999-2000: NEST TREE ALONG TWIN CITIES RD ABOUT 220M E OF INTERSECTION. 2002, '09, '11: NEST TREE(S) ALONG E SIDE OF FRANKLIN RD, 170-270M S OF INTERSECTION.						
Ecological:	2000: NEST TREE DESCRIBED AS 30' WILLOW WITH CORN/PASTURE TO EAST AND GRASSLAND TO WEST. 2002: NEST IN 50' WILLOW, IN PASTURE. NEST WAS ABANDONED AFTER 10 MAY, SURVEYOR SUSPECTED THE BIRDS WERE SHOT. 2009: NEST IN 25' WILLOW, IN PASTURE.						
General:	47 ADULTS & JUVS FORAGING ON 22 AUG 1994. 1999: NEST W/2 YOUNG. 2000: 1 SWHA PERCHED NEAR NEST ON 26 JUL. 2002: SWHA ON NEST, VACANT BY 10 MAY. 2009: NEST W/YOUNG. 2011: 4 TERRITORIAL SWHAS, COPULATION OBSERVED NEAR NEST ON 5 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	814	Map Index:	42917	EO Index:	42917	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.30435 / -121.42023			Accuracy:	80 meters		
UTM:	Zone-10 N4240765 E638128			Elevation (ft):	15		
PLSS:	T05N, R05E, Sec. 10, N (M)			Acres:	0.0		
Location:	WEST SIDE OF BRUCEVILLE ROAD JUST SOUTH OF CAMP ROAD INTERSECTION, ON THE EAST SIDE OF FRANKLIN FIELD.						
Detailed Location:	1999 NEST SITE DRAWN ON PHOTOCOPIED TOPO MAP ON W SIDE BRUCEVILLE RD, S OF FRANKLIN FIELD; HISTORIC AERIALS SHOW NO TREES IN AREA. MAPPED TO POINT FROM DFG SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	1999: NEST "STRAIGHT OVERHEAD"= IN ROADSIDE TREE? 2009: NEST IN 35' EUCALYPTUS WITH CROPLAND TO EAST AND RESIDENTIAL/URBAN TO WEST (BUILDINGS ASSOCIATED WITH FRANKLIN FIELD).						
General:	NEST WITH 2 CHICKS OBSERVED IN 1999. NEST WITH YOUNG OBSERVED ON 28 APR 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	815	Map Index:	42918	EO Index:	42918	Element Last Seen:	1999-07-07
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1999-07-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-07
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26011 / -121.40868			Accuracy:	80 meters		
UTM:	Zone-10 N4235872 E639222			Elevation (ft):	15		
PLSS:	T05N, R05E, Sec. 23, SW (M)			Acres:	0.0		
Location:	0.5 MILE NORTH OF THE COSUMNES RIVER, 1.25 MILES SSE OF THE INTERSECTION OF DESMOND ROAD AND BRUCEVILLE ROAD.						
Detailed Location:	TRS GIVEN FOR 1985-87 DETECTIONS AT TERRITORY #SA049 FROM DFG DATABASE OF SWAINSON'S HAWK OBSERVATIONS (CA. 1994). MAPPED TO NEST LOCATION MARKED ON ANNOTATED TOPO QUAD (2000).						
Ecological:							
General:	SWHA OBSERVED IN 1985, 1986, & 1987. 1 ADULT WITH NEST OBSERVED, 7 JUL 1999.						
Owner/Manager:	TNC						



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Occurrence No.	816	Map Index:	42919	EO Index:	42919	Element Last Seen:	1999-07-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-05-11
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27708 / -121.39236				Accuracy:	80 meters	
UTM:	Zone-10 N4237780 E640618				Elevation (ft):	20	
PLSS:	T05N, R05E, Sec. 13, SE (M)				Acres:	0.0	
Location:	0.9 MILE SOUTH OF TWIN CITIES ROAD AND 1.5 MILES EAST OF THE DESMOND ROAD/BRUCEVILLE ROAD JUNCTION, NORTH OF THORNTON.						
Detailed Location:							
Ecological:	NEST TREE IS AN OAK.						
General:	2 ADULTS WITH A NEST OBSERVED, 7 JUL 1999.						
Owner/Manager:	UNKNOWN						

Occurrence No.	817	Map Index:	42920	EO Index:	42920	Element Last Seen:	2004-05-27
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-05-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-28
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35728 / -121.44714				Accuracy:	nonspecific area	
UTM:	Zone-10 N4246599 E635676				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 20, SE (M)				Acres:	22.0	
Location:	SOUTHEAST CORNER OF CORE RD/FRANKLIN BLVD INTERSECTION, ABOUT 1.6 MILES S OF FRANKLIN & 5 MILES SW OF ELK GROVE.						
Detailed Location:	1994: FORAGING TERRITORY SA00* FROM DFG SWHA DATABASE. TWO NEST SITES: SW SITE ACTIVE 1999, MARKED ON TOPO. NE SITE ACTIVE 2003 (FROM DFG DATABASE OF NEST RECORDS 2000-04) & 2004 (FROM FIELD SURVEY FORM).						
Ecological:	1994: GROUP OF 71 SWHA OBSERVED FORAGING ON ALFALFA FIELD AT CORNER OF CORE & FRANKLIN. 1999: NEST TREE WAS A WILLOW. 2003: NEST IN 30' WILLOW. 2004: NEST TREE WAS A BLACK WILLOW. SURROUNDING HABITAT WAS IRRIGATED ALFALFA & PASTURE LAND.						
General:	1999: 1 SWHA OBSERVED ON NEST ON 30 JUN. 2000: SURVEYOR UNABLE TO LOCATE NEST. 2003: NEST WITH 1 FEATHERED YOUNG OBS ON 8 MAY. 2004: ACTIVE NEST; PAIR HATCHED 2 CHICKS, 1 SUCCESSFULLY FLEDGED.						
Owner/Manager:	UNKNOWN, PVT						



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Occurrence No.	823	Map Index:	43288	EO Index:	43288	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23228 / -121.49023			Accuracy:	1/10 mile		
UTM:	Zone-10 N4232665 E632138			Elevation (ft):	3		
PLSS:	T05N, R04E, Sec. 36, SE (M)			Acres:	0.0		
Location:	EAST SIDE OF THE MOKELUMNE RIVER, ABOUT 0.5 MILE NORTH OF THE WALNUT GROVE ROAD BRIDGE AND 3.5 MILES WEST OF THORNTON.						
Detailed Location:	2000: COORDINATES & DESCRIPTION FROM FIELD SURVEY FORM. 2009: DWR NEST SITE FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010; EXACT LOCATION OF NEST TREE UNKNOWN/NOT RECORDED.						
Ecological:	2000: NESTING ACTIVITY WAS CENTERED AROUND A LARGE COTTONWOOD. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	NESTING PAIR OBSERVED ON 11-12 APR 2000. 1 NESTING SWAINSON'S HAWK OBSERVED ON 14 MAY 2009.						
Owner/Manager:	TNC, UNKNOWN						
Occurrence No.	927	Map Index:	44021	EO Index:	44021	Element Last Seen:	2005-08-26
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.41587 / -121.72237			Accuracy:	80 meters		
UTM:	Zone-10 N4252731 E611538			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 35, NW (M)			Acres:	0.0		
Location:	SOUTH SIDE OF MIDWAY ROAD, 0.1 MILE WEST OF BULKLEY ROAD, 10 MILES ESE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 3. NEST TREE IS THE LARGEST WALNUT IN A ROW OF WALNUTS, ON THE SOUTH SIDE OF MIDWAY ROAD, JUST EAST OF A POWER POLE.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE NE, NW, AND SW, AND CULTIVATED LAND TO THE SE.						
General:	2 ADULTS OBSERVED NESTING ON 28 APR 2000. POSSIBLE NEST IN 2002 IN A LOCUST ON THE WEST SHOULDER, JUST SOUTH OF MIDWAY. NEST MONITORED 12 APR-10 AUG 2004; 2 YOUNG FLEDGED. NEST MONITORED 20 MAR-26 AUG 2005; 2 FLEDGED.						
Owner/Manager:	SOL COUNTY						



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Occurrence No.	933	Map Index:	45481	EO Index:	45481	Element Last Seen:	2001-06-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2001-06-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2001-08-07
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43830 / -121.39070				Accuracy:	80 meters	
UTM:	Zone-10 N4255673 E640451				Elevation (ft):	34	
PLSS:	T07N, R05E, Sec. 23, SE (M)				Acres:	0.0	
Location:	NORTH SIDE OF SHELDON ROAD, 0.5 MILE EAST OF HIGHWAY 99, BETWEEN ELK GROVE AND SACRAMENTO.						
Detailed Location:							
Ecological:	NEST TREE IS A EUCALYPTUS; SURROUNDED BY ANNUAL GRASSLAND, HAY PRODUCTION, AND URBAN DEVELOPMENT.						
General:	2 ADULTS AND 1 JUVENILE OBSERVED AT THE NEST ON 2 JUN 2001.						
Owner/Manager:	PVT						

Occurrence No.	992	Map Index:	47315	EO Index:	47315	Element Last Seen:	2009-04-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-08
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.37623 / -121.52571				Accuracy:	80 meters	
UTM:	Zone-10 N4248589 E628777				Elevation (ft):	12	
PLSS:	T06N, R04E, Sec. 15, NE (M)				Acres:	0.0	
Location:	ALONG THE WEST BANK OF THE SACRAMENTO RIVER, JUST NORTH OF COUNTY RD 142, 0.6 MILE NNW OF HOOD.						
Detailed Location:	1994: COORDINATES FOR TERRITORY "YO" (NO # ASSIGNED) FROM DFG DATABASE OF OBSERVATIONS 1979-94. 2000: COORDINATES FROM FIELD SURVEY FORM & DFG DATABASE OF SITES 2000-04. 2009: POINT FROM DFG SHAPEFILE OF NESTS RECORDED FROM 2009.						
Ecological:	1994: NEST IN VALLEY OAK. 2000: NEST IN VALLEY OAK 80+ FT IN HEIGHT; SURROUNDED BY ROW CROPS. 2009: NEST IN 45' VALLEY OAK SURROUNDED BY RESIDENTIAL, WITH CROPLAND TO THE SOUTHWEST.						
General:	1994: 2 ADULTS AND 2 JUVENILES OBSERVED AT NEST ON 13 JUL. 2000: 2 ADULTS OBSERVED (1 PERCHED, 1 SOARING) WITH 1 FEATHERED YOUNG ON 30 JUN. 2009: NEST WITH YOUNG OBSERVED ON 29 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1001	Map Index:	50639	EO Index:	50639	Element Last Seen:	2002-04-29
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-03-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44285 / -121.40474			Accuracy:	80 meters		
UTM:	Zone-10 N4256157 E639217			Elevation (ft):	30		
PLSS:	T07N, R05E, Sec. 23, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF HIGHWAY 99, 0.4 MILE NNW OF SHELDON ROAD, 2 MILES NW OF ELK GROVE.						
Detailed Location:							
Ecological:	NEST TREE IS A VALLEY OAK; NEST IS LOCATED ON THE SOUTH-FACING PORTION OF THE NEST TREE.						
General:	THE PAIR WAS OBSERVED COPULATING ON 18 APR 2002, AND THE FEMALE WAS OBSERVED INCUBATING ON 29 APR 2002.						
Owner/Manager:	PVT						
Occurrence No.	1010	Map Index:	50670	EO Index:	50670	Element Last Seen:	2009-07-XX
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44655 / -121.46428			Accuracy:	nonspecific area		
UTM:	Zone-10 N4256480 E634013			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 19, E (M)			Acres:	14.0		
Location:	ALONG BUFFERLANDS RD (=LAGUNA STATION RD), 0.3-0.6 MI N OF SIMS RD, AT THE SACRAMENTO COUNTY WASTEWATER TREATMENT PLANT.						
Detailed Location:	2003, 2004 NEST TREE ON W SIDE OF BUFFERLANDS RD ABOUT 0.3 MI N OF SIMS RD, MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-04 SWHA NEST RECORDS. 2002, 2009 NEST SITE ABOUT 1/4 MILE FURTHER NORTH, MAPPED TO COORDS & POINT MARKED ON TOPO.						
Ecological:	2002: NEST IN ISOLATED EUCALYPTUS NEXT TO HAY FIELDS. 2003: NEST LOW IN 70' EUC SURROUNDED BY PASTURE W/COMMERCIAL TO NE. 2004: NEST IN LARGE EUC IN RUDERAL GRASSLAND. 2009: NEST IN EUC. AT WATER TREATMENT PLANT/CO-GENERATION POWER PLANT.						
General:	BUFFERLANDS STAFF (ROGER JONES) REPORTED THAT SWHA NESTED HERE IN PREVIOUS YEARS. 2 ADULTS OBSERVED NESTING ON 1 MAY 2002. NEST WITH 2 FEATHERED YOUNG OBS 13 MAY 2003. PAIR FLEDGED 2 YOUNG IN 2004 AND 2009.						
Owner/Manager:	SRCSD						



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Occurrence No.	1011	Map Index:	50672	EO Index:	50672	Element Last Seen:	2002-05-01
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2002-05-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-03-20
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36169 / -121.42630			Accuracy:	80 meters		
UTM:	Zone-10 N4247118 E637489			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 22, NW (M)			Acres:	0.0		
Location:	0.25 MILE NORTH OF CORE ROAD AND 0.5 MILE WEST OF BRUCEVILLE ROAD, SOUTH OF SACRAMENTO.						
Detailed Location:							
Ecological:	NEST TREE IS AN ISOLATED TREE ALONG THE EDGE OF AN ALFALFA FIELD, ALONG AN IRRIGATION CANAL; SURROUNDED BY ALFALFA FIELDS AND AN OPEN AREA FOR VEHICLE STORAGE.						
General:	2 ADULTS OBSERVED NESTING ON 1 MAY 2002.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1012	Map Index:	50673	EO Index:	50673	Element Last Seen:	2002-05-29
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-05-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-03-20
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14174 / -121.42414			Accuracy:	80 meters		
UTM:	Zone-10 N4222714 E638093			Elevation (ft):	1		
PLSS:	T03N, R05E, Sec. 03, NW (M)			Acres:	0.0		
Location:	UPLAND CANAL, 0.5 MILE SE OF SYCAMORE SLOUGH, 5.5 MILES SOUTH OF THORNTON.						
Detailed Location:							
Ecological:	NEST TREE IS A COTTONWOOD, GROWING NEXT TO UPLAND CANAL, IN A SMALL STAND OF 4-5 TREES; SURROUNDED BY AGRICULTURE (ALFALFA AND ASPARAGUS).						
General:	PREY DELIVERY TO THE NEST OBSERVED ON 29 MAY 2002; NESTLINGS COULD NOT BE SEEN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1020	Map Index:	50720	EO Index:	50720	Element Last Seen:	2006-08-10
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2006-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-08
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.28414 / -121.60471			Accuracy:	nonspecific area		
UTM:	Zone-10 N4238262 E622031			Elevation (ft):	10		
PLSS:	T05N, R03E, Sec. 13, NE (M)			Acres:	21.0		
Location:	NE CORNER OF RYER ISLAND, ON RYER RD E JUST S OF CONFLUENCE OF MINER & SUTTER SLOUGHS & 1.5 MI ESE OF RYER AVE BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN ON FIELD SURVEY FORMS. RESSEGUIE'S COURTLAND 9 SITE.						
Ecological:	1999: NEST TREE WAS A SCRAGGLY, OLD SYCAMORE; SURROUNDED BY WATERWAYS AND AGRICULTURE. 2006: NEST WAS AT 80% HEIGHT OF TALL BLACK WALNUT JUST WEST OF ROAD; ALFALFA FIELDS TO WEST AND SLOUGH TO EAST.						
General:	2 ADULTS AND 1 JUVENILE OBSERVED AT THE NEST ON 4 JUL 1999. 2 ADULTS FLEDGED 1 YOUNG; SITE VISITED 10 TIMES FROM 16 MAR - 10 AUG 2006.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1024	Map Index:	50759	EO Index:	50759	Element Last Seen:	2005-08-22
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-08-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48402 / -121.67717			Accuracy:	80 meters		
UTM:	Zone-10 N4260350 E615375			Elevation (ft):	25		
PLSS:	T07N, R03E, Sec. 06, NE (M)			Acres:	0.0		
Location:	WEST SIDE OF ROAD 105, 0.25 MILE SOUTH OF ROAD 36, 5 MILES SE OF DAVIS.						
Detailed Location:	NEST TREE WAS LOCATED IN THE SE CORNER OF A "MIGRANT LABOR CAMP." 2001 NEST WAS FOUND AT THE 95% HEIGHT OF THIS SLENDER TREE. 2002 NEST WAS IN A SMALL PINE NEAR THE SOUTH EDGE OF THE CAMP. 2005 NEST TREE WAS IN A BLUE GUM SOUTH OF THE PINE.						
Ecological:	VARIOUS TREES USED FOR NESTING; 2002 TREE WAS A SMALL PINE. AREA SURROUNDED BY ALFALFA (EAST, SE), WHEAT (SOUTH), & THE CAMP (NORTH, WEST). THE "CAMP" APPEARS TO HAVE BE REDEVELOPED WITH MOBILE OR MODULAR HOMES AROUND 2002 (AERIALS) - 2004.						
General:	NEST MONITORED, 8 APR-24 SEP 2001; NEST DISAPPEARED BEFORE 28 MAY 2001. NEST MONITORED 4 APR-17 JUL 2002; 0 FLEDGED. INACTIVE IN 2004 (POORLY OBSERVED). NEST MONITORED 26 FEB-22 AUG 2005; 2 FLEDGED.						
Owner/Manager:	PVT						



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Occurrence No.	1027	Map Index:	50763	EO Index:	50763	Element Last Seen:	2009-06-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-28
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24009 / -121.66565			Accuracy:	80 meters		
UTM:	Zone-10 N4233296 E616771			Elevation (ft):	10		
PLSS:	T05N, R03E, Sec. 32, NE (M)			Acres:	0.0		
Location:	SOUTH END OF PROSPECT ISLAND, ALONG MINER SLOUGH, 6 MILES NNE OF RIO VISTA.						
Detailed Location:	MAPPED TO COORDINATES FOR NEST TREE FROM 1999 FIELD SURVEY FORM. MULTIPLE DETECTIONS REPORTED FROM VICINITY IN DWR SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010; EXACT NEST TREE LOCATIONS UNCLEAR, NOT MAPPED.						
Ecological:	1999 NEST TREE WAS LOCATED WITHIN A DIMINISHED RIPARIAN AREA, ALONG A LEVEE AND SLOUGH; GOOD FORAGING CROPS NEARBY; SURROUNDED BY AGRICULTURE AND RESTORED WETLANDS.						
General:	2 ADULTS AND 1 CHICK OBSERVED AT THE NEST ON 21 JUN 1999. MULTIPLE OBSERVATIONS OF SWAINSON'S HAWK PAIR EXHIBITING NESTING/TERRITORIAL BEHAVIOR, APR-JUN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1051	Map Index:	50835	EO Index:	50835	Element Last Seen:	2009-05-07
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-05-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-06
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16027 / -121.43267			Accuracy:	nonspecific area		
UTM:	Zone-10 N4224758 E637310			Elevation (ft):	3		
PLSS:	T04N, R05E, Sec. 28, SE (M)			Acres:	49.0		
Location:	WHITE SLOUGH WILDLIFE AREA, JUST NORTH OF WOODBRIDGE RD ABOUT 1.6 MILES W OF I-5 JUNCTION, AND 4.3 MILES S OF THORNTON.						
Detailed Location:	2001: UTMS APPROXIMATE FOR LOCATION DESCRIBED AS "ALONG CANAL AT WHITE SLOUGH WA, ABOUT 410 M N OF WOODBRIDGE RD." 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	2001: NEST TREE A WILLOW SURROUNDED BY PASTURE AND CROPLAND FORAGING AREAS. 2009: NEST TREE A WILLOW, IN "VERY THIN" RIPARIAN ADJACENT TO PASTURE.						
General:	1 ADULT OBSERVED AT THE NEST SITE ON 25 JUN 2001. NESTING PAIR OBSERVED ON 16 APR AND 7 MAY 2009, INCUBATION OBS BUT NEST SUCCESS NOT CONFIRMED.						
Owner/Manager:	DFG-WHITE SLOUGH WA						



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Occurrence No.	1052	Map Index:	50836	EO Index:	50836	Element Last Seen:	2009-05-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-05-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.13786 / -121.41726				Accuracy:	nonspecific area	
UTM:	Zone-10 N4222294 E638703				Elevation (ft):	5	
PLSS:	T03N, R05E, Sec. 03, SW (M)				Acres:	35.0	
Location:	WHITE SLOUGH WA; ABOUT 0.2 MILE W OF COTTA (=VICTOR) RD AT UPLAND CANAL, 7 MILES W OF LODI.						
Detailed Location:	2001: COORDINATES FROM FIELD SURVEY FORM, NEST TREE LOCATION "BESIDE COTTA RD [=VICTOR RD ON TOPOS] JUST EAST OF UPLAND CANAL." 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	2001: NEST IN A COTTONWOOD; SURROUNDING FORAGING HABITAT CONSISTS OF CROPLAND. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2001: 1 ADULT OBSERVED AT THE NEST SITE ON 25 JUN. 2009: 2 NESTING SWAINSON'S HAWKS OBSERVED ON 12 MAY.						
Owner/Manager:	UNKNOWN, DWR						
Occurrence No.	1055	Map Index:	50839	EO Index:	50839	Element Last Seen:	2001-07-06
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2001-07-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-04-02
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.32062 / -121.46361				Accuracy:	80 meters	
UTM:	Zone-10 N4242506 E634305				Elevation (ft):	10	
PLSS:	T05N, R05E, Sec. 05 (M)				Acres:	0.0	
Location:	NORTH SIDE OF LAMBERT ROAD, ABOUT 15 METERS WEST OF POINT PLEASANT ROAD, 2 MILES NW OF FRANKLIN FIELD.						
Detailed Location:							
Ecological:	NEST TREE IS A COTTONWOOD; SURROUNDED BY URBAN RESIDENTIAL AND VINEYARDS.						
General:	1 ADULT OBSERVED AT THE NEST ON 1 JUL 2001.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1104	Map Index:	50993	EO Index:	50993	Element Last Seen:	2009-07-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-10
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.40296 / -121.58340				Accuracy:	specific area	
UTM:	Zone-10 N4251476 E623692				Elevation (ft):	1	
PLSS:	T06N, R04E, Sec. 06, NW (M)				Acres:	7.6	
Location:	WEST SIDE OF JEFFERSON BOULEVARD, 0.3 MILE SOUTH OF GAFFNEY AVENUE, 7 MILES SW OF SACRAMENTO.						
Detailed Location:	2001: COORDINATES FROM FIELD SURVEY FORM. 2004-2006: NEST LOCATIONS REPORTED IN FIELD SURVEY FORMS, RESSEGUIE'S "CLARKSBURG 16" SITE. 2009: POINT FROM DFG SHAPEFILE OF SWHA NEST RECORDS.						
Ecological:	2001: NEST IN 35' JUNIPER. 2004, 2005: NEST IN LARGE SYCAMORE; ALFALFA TO N/W/E & CULTIVATED FIELDS S. RIVER OTTER FOUND DOR, 7 MAY '05. 2006: NEST IN RAGGED SYCAMORE AT W EDGE OF SITE. 2009: NEST IN 35' NATIVE TREE; ALFALFA N & CROPS S.						
General:	2001: 2 ADULTS & 1 JUVENILE (BANDED) OBSERVED AT NEST ON 22 JUN. 2004: NEST MONITORED 27 JUL-3 AUG; 4 YOUNG FLEDGED. 2005: ACTIVE NEST MONITORED APR-AUG; NO YOUNG OBS. 2006: NEST FLEDGED 1 YOUNG. 2009: NEST WITH YOUNG OBS 14 JUL.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1105	Map Index:	50994	EO Index:	50994	Element Last Seen:	2009-07-23
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-07-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.38480 / -121.54263				Accuracy:	specific area	
UTM:	Zone-10 N4249516 E627284				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 09, SE (M)				Acres:	19.0	
Location:	ALONG ELK SLOUGH, FROM CO RD 142 AT RD 144 NORTH 0.6 MILE, ABOUT 2.5 MILES SSW OF CLARKSBURG.						
Detailed Location:	MAPPED TO COORDINATES FROM FIELD SURVEY FORM AND CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 1999 SITE ACROSS FROM BOGLE VINEYARDS. 3-4 NEST SITES IN 2009.						
Ecological:	1999: NEST IN A COTTONWOOD WITHIN A RIPARIAN CORRIDOR ALONG A LEVEE FACILITY; SURROUNDED BY MIXED CROPLAND. 2009: 3 NESTS IN 35-40' VALLEY OAKS SURROUNDED BY FALLOW/RUDERAL LAND. POSSIBLE 4TH NEST IN RESIDENTIAL AREA AT END OF NISHIA LN.						
General:	1999: 2 ADULTS & 3 JUVENILES OBSERVED AT NEST ON 4 JUL. 2009: ADULT(S) OBS SOARING/PERCHING NEAR NISHIA LN ON 29 APR; DEFENSIVE ACTIVITY AT S NEST, 12 JUN; YOUNG OBS IN MIDDLE NEST, 21 JUN; YOUNG OBS IN N NEST, 23 JUL.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1146	Map Index:	51071	EO Index:	51071	Element Last Seen:	2001-04-19
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2001-04-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-04-22

Quad Summary: Thornton (3812124)

County Summary: San Joaquin

Lat/Long:	38.17351 / -121.40065	Accuracy:	80 meters
UTM:	Zone-10 N4226275 E640091	Elevation (ft):	15
PLSS:	T04N, R05E, Sec. 26 (M)	Acres:	0.0

Location: WEST SIDE OF I-5, 0.1 MILE SW OF THE INTERSECTION OF ACAMPO ROAD, NORTH OF WOODBRIDGE ROAD, NORTH OF STOCKTON.

Detailed Location:

Ecological: NEST TREE IS A EUCALYPTUS; SURROUNDED BY AGRICULTURE.

General: 2 ADULTS OBSERVED NEST-BUILDING ON 19 APR 2001.

Owner/Manager: UNKNOWN

Occurrence No.	1147	Map Index:	51072	EO Index:	51072	Element Last Seen:	2007-XX-XX
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23

Quad Summary: Courtland (3812135)

County Summary: Yolo

Lat/Long:	38.37090 / -121.57829	Accuracy:	specific area
UTM:	Zone-10 N4247926 E624193	Elevation (ft):	5
PLSS:	T06N, R04E, Sec. 18, N (M)	Acres:	17.0

Location: VICINITY OF THE INTERSECTION OF JEFFERSON BOULEVARD & NETHERLANDS ROAD, GREENDALE.

Detailed Location: 1992: TERRITORY #YO221 IN DFG DATABASE. 2001: GIVEN COORDINATES JUST W OF INTERSECTION & S OF DITCH. 2004: SAME LOC AS '01. RESSEGUIE SITE COURTLAND 1. 2005: NEW SITE COURTLAND 6 0.2 MI TO E. 2007: ESTEP SITE YO-53, CA 0.1 MI E OF '05 TREE.

Ecological: 2001: NEST TREE IN 85' ROADSIDE COTTONWOOD (CW); ALFALFA NEARBY. '04: NEST AT 2/3 HEIGHT ON NE SIDE OF CW. '05: AERIALS SHOW '04 NEST TREE REMOVED; NEW NEST IN BLACK WALNUT, NEW VINEYARD N, RUDERAL/VINEYARD S. '07: NEST IN ROADSIDE WALNUT.

General: 1992: 2 ADULTS OBS FORAGING IN VICINITY. 2001: 2 ADULTS AND 1 NESTLING OBSERVED (YOUNG BANDED) ON 22 JUN. 2004: NEST MONITORED 28 MAR-3 AUG; 2 YOUNG FLEDGED. 2005: NEW NEST MONITORED 21 APR-9 AUG; 1 YOUNG FLEDGED. 2007: NEST W/1 YOUNG OBS.

Owner/Manager: UNKNOWN



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Occurrence No.	1148	Map Index:	51076	EO Index:	51076	Element Last Seen:	2007-XX-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-25
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31472 / -121.69814				Accuracy:	specific area	
UTM:	Zone-10 N4241536 E613811				Elevation (ft):	10	
PLSS:	T06N, R02E, Sec. 36, SE (M)				Acres:	10.0	
Location:	VICINITY OF LOOKOUT SLOUGH & SHAG SLOUGH CONFLUENCE, 2.5 MILES WEST OF THE SACRAMENTO RIVER DEEP WATER CHANNEL.						
Detailed Location:	TWO NEST SITES. NW SITE ACTIVE IN 2001-2005, MAPPED TO UTMS FROM FIELD SURVEY FORMS FOR RESSEGUIE SITE LIBERTY ISLAND 1. SE SITE ACTIVE IN 2007, AT "LIBERTY FARMS HQ," MAPPED TO COORDINATES FOR SITE YO-116 FROM 2008 ESTEP REPORT.						
Ecological:	2002/04 NEST AT 75% HEIGHT ON N SIDE OF TALLEST COTTONWOOD ON N SIDE OF LOOKOUT SLOUGH. 2005 NEST ON W SIDE OF SAME TREE. PASTURE TO N & S. '07 NEST IN EUCALYPTUS AT RURAL RESIDENCE ADJACENT TO SEASONAL WETLAND, IRRIGATED PASTURE, CROPLAND.						
General:	NEST MONITORED 27 APR-25 JUL 2001; 2 FLEDGED. MONITORED 4 APR-23 JUL 2002; 1 FLEDGED. MONITORED 18 MAR-15 AUG 2004; ACTIVE THROUGH 18 MAY/NO SIGHTINGS THEREAFTER. MONITORED 9 MAY-16 JUL 2005; 1 FLEDGED. ACTIVE NEST/SUCCESS UNKNOWN IN 2007.						
Owner/Manager:	PVT						

Occurrence No.	1149	Map Index:	51077	EO Index:	51077	Element Last Seen:	2005-07-29
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.49388 / -121.70479				Accuracy:	80 meters	
UTM:	Zone-10 N4261409 E612951				Elevation (ft):	35	
PLSS:	T08N, R02E, Sec. 36, S (M)				Acres:	0.0	
Location:	SOUTH SIDE OF TREMONT ROAD, 0.5 MILE WEST OF MACE BOULEVARD, 4 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 1 SITE. NEST SITE DOCUMENTED IN CDFW NEST RECORDS WAS AT SAME LOCATION. NEST TREE WAS LOCATED IN THE SW CORNER OF A CHURCH YARD; NEST WAS NOT VISIBLE FROM THE ROAD.						
Ecological:	NEST AT 90% HEIGHT OF A PINE; SURROUNDING FORAGING HABITAT CONSISTED OF CORN TO THE WEST, ALFALFA TO THE SOUTH AND EAST, AND WHEAT TO THE NORTH ACROSS THE ROAD.						
General:	NEST MONITORED MAR-JUL 2001; 2 FLEDGED. MONITORED 4 APR-15 JUL 2002; NO ACTIVE NEST FOUND. ACTIVE, INCUBATION OBS 5 JUN 2003. ADULTS DEFENDED TREE IN 2004, BUT EARLY DISTURBANCE CAUSED ABANDONMENT. MONITORED 1 APR-29 JUL 2005; 2 FLEDGED.						
Owner/Manager:	PVT						



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Occurrence No.	1150	Map Index:	51078	EO Index:	51078	Element Last Seen:	2001-04-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-06-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.41314 / -121.72177			Accuracy:	80 meters		
UTM:	Zone-10 N4252429 E611594			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 35, NW (M)			Acres:	0.0		
Location:	WEST SIDE OF BULKLEY ROAD, 0.2 MILE SOUTH OF MIDWAY ROAD, 6 MILES SE OF DIXON.						
Detailed Location:	NEST TREE WAS LOCATED NEAR THE CENTER OF A ROW OF SMALL, DECIDUOUS TREES ALONG A DITCH LEVEE; NEST LOCATED AT THE 80% HEIGHT OF THE NEST TREE.						
Ecological:	NEST TREE WAS A LOCUST; SURROUNDING FORAGING HABITAT CONSISTED OF CORN TO THE WEST, ALFALFA TO THE EAST, WHEAT TO THE NW, AND SUDAN GRASS TO THE NE.						
General:	NEST SITE MONITORED BETWEEN 27 MAR-18 AUG 2001; NO RAPTORS SEEN AT THIS SITE AFTER 29 APR 2001. INACTIVE IN 2002, 2004, AND 2005.						
Owner/Manager:	PVT						
Occurrence No.	1151	Map Index:	51080	EO Index:	51080	Element Last Seen:	2005-07-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.49517 / -121.74037			Accuracy:	80 meters		
UTM:	Zone-10 N4261509 E609846			Elevation (ft):	45		
PLSS:	T08N, R02E, Sec. 34, SE (M)			Acres:	0.0		
Location:	SOUTH SIDE OF TREMONT ROAD, 0.4 MILE WEST OF EGGERT ROAD, EAST OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 5 SITE, ALSO RECORDED IN CDFW NEST RECORDS.						
Ecological:	NESTS WERE IN 2 SMALL LOCUSTS ON S SIDE OF ROAD, SURROUNDED BY CULTIVATED LAND. OTHER SURVEYORS IN 2000 AND 2002 IDENTIFIED THE NEST TREE AS WALNUT AND WILLOW, RESPECTIVELY.						
General:	NEST WITH 1 PARTIALLY-FEATHERED CHICK OBSERVED ON 29 JUN 2000. 3 FLEDGED IN 2001. 1 FLEDGED IN 2002. ADULT SWHA OBSERVED 0.3 MI TO W, BUT NO NEST FOUND IN 2004. 2 FLEDGED IN 2005.						
Owner/Manager:	PVT						



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Occurrence No.	1152	Map Index:	51083	EO Index:	51083	Element Last Seen:	2005-07-16
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-20
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40931 / -121.70899				Accuracy:	specific area	
UTM:	Zone-10 N4252019 E612716				Elevation (ft):	25	
PLSS:	T07N, R02E, Sec. 36, NW (M)				Acres:	8.1	
Location:	0.1 MILE WEST OF YOLANO ROAD, 6 MILES SE OF DIXON.						
Detailed Location:	2001 NEST TREE IS THE TALLEST SYCAMORE IN THE EASTERN 1/3 OF THE RIPARIAN STRIP WEST OF YOLANO ROAD; NEST LOCATED AT THE 75% HEIGHT OF THE TREE CENTER. 2002 NEST FOUND IN THE FIRST RIPARIAN TREE WEST OF THE GAP; NEST AT 75% HEIGHT.						
Ecological:	TWO SYCAMORES WERE USED AS NEST TREES; SURROUNDING FORAGING HABITAT CONSISTED OF A LARGE HAY STORAGE AREA TO THE NORTH AND CORN TO THE SOUTH. ELEMENT OCCURRENCE #1158 AND #1152 WERE BOTH ACTIVE AND SUCCESSFULLY FLEDGED IN 2004.						
General:	NEST MONITORED 8 APR-25 JUL 2001; 3 FLEDGED. NEST MONITORED 4 APR-1 AUG 2002; POSSIBLY 2 MISSED FLEDGLINGS, 23 JUL 2002. NEST MONITORED 7 APR-5 AUG 2004; 2 FLEDGED. NEST MONITORED 22 APR-16 JUL 2005; 2 FLEDGED.						
Owner/Manager:	PVT						

Occurrence No.	1153	Map Index:	51084	EO Index:	51084	Element Last Seen:	2005-08-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40128 / -121.69953				Accuracy:	80 meters	
UTM:	Zone-10 N4251140 E613554				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 01, NE (M)				Acres:	0.0	
Location:	SOUTH SIDE OF KING ROAD, 0.3 MILE WEST OF WEST LEVEE ROAD, 7 MILES SE OF DIXON.						
Detailed Location:	SITE IS LOCATED AT FARMSTEAD #8364; NEST IS AT THE 95% HEIGHT OF THE MAIN TOP OF THE NE WILLOW, IN THE NE PORTION OF THE FARMSTEAD. SITE IS BARELY VISIBLE FROM THE ROAD.						
Ecological:	NEST TREE WAS A WILLOW; SURROUNDING FORAGING HABITAT CONSISTED OF A EXTENSIVE ALFALFA TO THE NORTH OF THE ROAD, PASTURE CLOSE TO THE FARMSTEAD SOUTH OF THE ROAD, AND CORN IN MOST OF THE AREA SOUTH OF THE ROAD.						
General:	NEST SITE MONITORED 8 APR-10 JUL 2001; 2 FLEDGED. NEST MONITORED 4 APR-28 JUL 2002; 1 FLEDGED. NEST MONITORED 7 APR-28 JUL 2004; 2 FLEDGED. NEST MONITORED 11 APR-24 AUG 2005; 3 FLEDGED.						
Owner/Manager:	PVT						



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Occurrence No.	1154	Map Index:	51085	EO Index:	51085	Element Last Seen:	2005-08-22
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.42018 / -121.74250			Accuracy:	80 meters		
UTM:	Zone-10 N4253185 E609774			Elevation (ft):	35		
PLSS:	T07N, R02E, Sec. 27, SW (M)			Acres:	0.0		
Location:	0.25 MILE NORTH OF MIDWAY ROAD AND 0.35 MILE EAST OF SIKES ROAD, 4 MILES SE OF DIXON.						
Detailed Location:	2001 NEST WAS LOCATED AT THE 90% HEIGHT, ON THE NORTH SIDE OF A LARGE BLACK WALNUT, JUST NW OF THE #7755 FARMSTEAD HOUSE.						
Ecological:	NEST TREE WAS A LARGE BLACK WALNUT; SURROUNDING FORAGING HABITAT CONSISTED OF SUDAN GRASS TO THE NW AND EAST, AND ALFALFA TO THE SW.						
General:	NEST MONITORED BETWEEN 29 APR-3 AUG 2001; 1 FLEDGED. SWHA PRESENT IN APR-MAY 2004, BUT THE ONLY NEST SEEN CONTAINED GHOW CHICKS. NEST MONITORED 23 APR-22 AUG 2005; 1 FLEDGED.						
Owner/Manager:	PVT						
Occurrence No.	1155	Map Index:	51086	EO Index:	51086	Element Last Seen:	2005-06-19
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-06-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.44897 / -121.72236			Accuracy:	80 meters		
UTM:	Zone-10 N4256404 E611488			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 14, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF BULKLEY ROAD, 0.25 MILE SOUTH OF HACKMAN ROAD, 5 MILES EAST OF DIXON.						
Detailed Location:	2001 NEST TREE LOCATED AT THE FRONT OF THE #7901 FARMSTEAD HOUSE; NEST FOUND AT THE 85% HEIGHT OF THE NEST TREE. 2002 NEST LOCATED AT 2/3 HEIGHT OF THE LOCUST AT THE NE CORNER OF THE RED BARN.						
Ecological:	NEST TREE WAS A LONE, TALL PINE (2001, 2004-2005); SURROUNDING FORAGING HABITAT CONSISTED OF PASTURE TO THE SOUTH, CULTIVATED TO THE EAST AND WEST, AND ALFALFA TO THE NE.						
General:	NEST MONITORED 29 APR-25 JUL 2001; 2 FLEDGED. NEST MONITORED 4 APR-23 JUL 2002; INCUBATION NOTED ON 3 MAY 2002, BUT NO LATER SIGHTINGS. NEST MONITORED 7 APR-28 JUL 2004; 1 FLEDGED. NEST-BUILDING OBSERVED 19 JUN 2005; NO LATER SIGHTINGS.						
Owner/Manager:	PVT						



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Occurrence No.	1156	Map Index:	51087	EO Index:	51087	Element Last Seen:	2002-07-28
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48671 / -121.69480			Accuracy:	80 meters		
UTM:	Zone-10 N4260625 E613833			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 01, NE (M)			Acres:	0.0		
Location:	SOUTH SIDE OF ROAD 36, IN THE JOG OF ROAD 104, 7 MILES NE OF DIXON.						
Detailed Location:	NEST LOCATED AT 2/3 HEIGHT, ON THE SOUTH SIDE, OF THE LONE TALL PINE, ON THE WEST SIDE OF THE FARMSTEAD.						
Ecological:	NEST TREE WAS A LONE, TALL PINE; SURROUNDING FORAGING HABITAT CONSISTED OF PASTURE TO THE WEST, WITH A FARMSTEAD TO THE SOUTH AND EAST.						
General:	NEST MONITORED 30 APR-10 AUG 2001; 1 FLEDGED. NEST SITE MONITORED 4 APR-28 JUL 2002; ONE SIGHTING OF A BUTEO ON THE NEST, AND A SWHA FLEDGLING OF UNKNOWN ORIGIN NEARBY, 5 JUL 2002. INACTIVE IN 2004 AND 2005.						
Owner/Manager:	PVT						
Occurrence No.	1157	Map Index:	51088	EO Index:	51088	Element Last Seen:	2005-08-24
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48044 / -121.74991			Accuracy:	80 meters		
UTM:	Zone-10 N4259863 E609036			Elevation (ft):	40		
PLSS:	T07N, R02E, Sec. 03, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF SIKES ROAD, 1 MILE SOUTH OF TREMONT ROAD, 4 MILES NE OF DIXON.						
Detailed Location:	MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 20 SITE. 2001-2002 NEST TREE WAS THE SECOND BLACK WALNUT FROM THE NORTH, IN A ROW BETWEEN THE ROAD AND DITCH TO THE WEST; NEST FOUND AT THE 90% HEIGHT, NORTH OF CENTER.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDING FORAGING HABITAT CONSISTED OF TOMATOES TO THE WEST AND BARE DIRT (AFTER WHEAT HARVEST) TO THE EAST.						
General:	NEST MONITORED 29 MAY-3 AUG 2001; 1 FLEDGED. MONITORED 15 APR-5 AUG 2002; INCUBATION, 1 PART-FEATHERED CHICK OBS BUT 0 FLEDGED. MONITORED 9 APR-13 JUL 2004; 1 FLEDGED. MONITORED 11 APR-24 AUG 2005; NEST FOUND, SITE DEFENDED, BUT 0 FLEDGED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1158	Map Index:	51090	EO Index:	51090	Element Last Seen:	2004-08-05
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40906 / -121.71138			Accuracy:	80 meters		
UTM:	Zone-10 N4251989 E612508			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 36, NW (M)			Acres:	0.0		
Location:	0.25 MILE WEST OF YOLANO ROAD, 6 MILES SE OF DIXON.						
Detailed Location:	2001 NEST TREE WAS NEAR THE UPSTREAM (WEST) END OF THE RIPARIAN STRIP; NEST IS AT THE 85% HEIGHT OF THE NEST TREE, ON THE NORTH SIDE, HANGING OVER THE DIRT FARM ROAD.						
Ecological:	NEST TREE WAS AN ARIZONA ASH; SURROUNDING FORAGING HABITAT CONSISTED OF TOMATOES TO THE NORTH AND CORN TO THE SOUTH. ELEMENT OCCURRENCE #1158 AND #1152 WERE BOTH ACTIVE AND SUCCESSFULLY FLEDGED IN 2004.						
General:	NEST MONITORED 23 JUN-24 SEP 2001; 2 FLEDGED. NEST SITE MONITORED 2 MAY-28 JUL 2002; NO NEST FOUND, BUT 2 SWHA OF UNKNOWN AGE FLUSHED 23 JUL 2002. NEST MONITORED 7 APR-5 AUG 2004; 1 FLEDGED. INACTIVE IN 2005.						
Owner/Manager:	PVT						
Occurrence No.	1159	Map Index:	51099	EO Index:	51099	Element Last Seen:	2005-08-10
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48380 / -121.72373			Accuracy:	80 meters		
UTM:	Zone-10 N4260267 E611314			Elevation (ft):	35		
PLSS:	T07N, R02E, Sec. 02, NW (M)			Acres:	0.0		
Location:	WEST SIDE OF BULKLEY ROAD, 0.8 MILE SOUTH OF TREMONT ROAD, 6 MILES NE OF DIXON.						
Detailed Location:	2001-2002 NEST TREE WAS A SMALL PINE BETWEEN TWO PALMS; NEST WAS LOCATED AT THE 90% HEIGHT, ON THE NE SIDE OF THE NEST TREE. 2004-2005 NEST TREE WAS THE PALM JUST SW OF THE PINE USED IN 2001-2002.						
Ecological:	NEST TREE WAS A PALM (PREVIOUSLY A PINE); SURROUNDING FORAGING HABITAT CONSISTED OF ALFALFA IN ALL DIRECTIONS.						
General:	NEST MONITORED 11 JUL-3 AUG 2001; 1 FLEDGED. NEST MONITORED 4 APR-15 JUL 2002; 3 FLEDGED. NEST MONITORED 7 APR-10 AUG 2004; 1 FLEDGED. NEST MONITORED 11 APR-10 AUG 2005; 2 FLEDGED.						
Owner/Manager:	PVT						



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Occurrence No.	1160	Map Index:	51102	EO Index:	51102	Element Last Seen:	2005-08-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40921 / -121.70650			Accuracy:	80 meters		
UTM:	Zone-10 N4252011 E612934			Elevation (ft):	25		
PLSS:	T07N, R02E, Sec. 36, NW (M)			Acres:	0.0		
Location:	EAST SIDE OF YOLANO ROAD, 6 MILES SE OF DIXON.						
Detailed Location:	2001 NEST TREE WAS LOCATED OPPOSITE THE END OF THE MAJOR RIPARIAN STRIP; NEST FOUND AT THE 2/3 HEIGHT OF THE NEST TREE, ON THE NE SIDE. 2002 NEST LOCATED AT 3/4 HEIGHT ON THE SE SIDE OF THE NEST TREE.						
Ecological:	NEST TREE WAS A COTTONWOOD; SURROUNDING FORAGING HABITAT CONSISTED OF ALFALFA TO THE SE, CORN TO THE SW, AND TREES, FARMSTEAD, CORPORATION YARD TO THE NW AND NE.						
General:	NEST MONITORED 25 JUL-18 AUG 2001; 0 FLEDGED. NEST MONITORED 4 APR-15 AUG 2002; APPARENT INCUBATION ON 2 MAY 2002, BUT NONE FLEDGED. INACTIVE IN 2004. NEST MONITORED 22 APR-26 AUG 2005; 1 FLEDGED.						
Owner/Manager:	PVT						
Occurrence No.	1169	Map Index:	51132	EO Index:	51132	Element Last Seen:	2009-04-21
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146), Dixon (3812147)						
County Summary:	Solano						
Lat/Long:	38.42781 / -121.75132			Accuracy:	specific area		
UTM:	Zone-10 N4254022 E608992			Elevation (ft):	40		
PLSS:	T07N, R02E, Sec. 28, NE (M)			Acres:	11.0		
Location:	0.2 MILE SOUTH OF MILLER ROAD, 2 MILES EAST OF HIGHWAY 113, EAST OF DIXON.						
Detailed Location:	2002 NEST TREE WAS A BLACK WALNUT SOUTH OF THE FARMSTEAD AND WELL WEST OF SIKES ROAD. 2004 NEST LOCATED AT THE 75% HEIGHT, ON THE SE SIDE, OF A BLACK WALNUT SOUTH OF THE HOUSE. RESSEGUIE'S DIXON 52 SITE.						
Ecological:	NEST TREES WERE BLACK WALNUTS; SURROUNDING FORAGING HABITAT CONSISTED OF WHEAT TO THE NORTH AND SOUTH, AND SUNFLOWERS TO THE EAST.						
General:	NEST-BUILDING AND COPULATION BUT NO CHICKS OBSERVED 1 APR-10 AUG 2001. 2 FLEDGED 21 APR-17 JUL 2002. 1 FLEDGED 9 APR-10 AUG 2004. 1 FLEDGED 1 MAR-17 JUL 2005. NEST WITH YOUNG OBS ON 21 APR 2009.						
Owner/Manager:	PVT						



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Occurrence No.	1188	Map Index:	51163	EO Index:	51163	Element Last Seen:	2003-06-25
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2003-06-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-10
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40886 / -121.40985				Accuracy:	specific area	
UTM:	Zone-10 N4252377 E638835				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 03, NE (M)				Acres:	8.0	
Location:	SOUTH SIDE OF ELK GROVE BOULEVARD, JUST WEST OF WYMARK DRIVE IN ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM DFG DATABASE OF SWAINSON'S HAWK NEST RECORDS, 2000-2004. 2001, 2002, AND 2003 NESTS APPEAR TO BE IN SAME OR ADJACENT TREES.						
Ecological:	2000: NEST IN 30' WILLOW. 2001-03: NEST IN 50-60' VALLEY OAK. HABITAT WAS PASTURE/FALLOW/GRASSLAND TO S AND RESIDENTIAL TO N, BUT DEVELOPMENT SOUTH OF ELK GROVE BLVD IS REPLACING FORAGING HABITAT. SITE WAS GOOD EXCELLENT; NOW POOR (2013).						
General:	2000: ACTIVE NEST, BUT NO YOUNG, OBSERVED 31 MAY. 2001: ACTIVE NEST, INCUBATION OBS 20 MAY. 2002: NEST WITH 1 YOUNG OBS 16 MAY, NESTING PAIR OBS 4 JUN. 2003: NEST WITH 1 FEATHERED YOUNG OBS 25 JUN. CNDDDB NOTE 5/2013: MAY BE EXTIRPATED.						
Owner/Manager:	PVT						

Occurrence No.	1227	Map Index:	51742	EO Index:	51742	Element Last Seen:	2003-06-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-06-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-10
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.35093 / -121.57303				Accuracy:	nonspecific area	
UTM:	Zone-10 N4245716 E624687				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 20, SW (M)				Acres:	7.0	
Location:	EAST SIDE OF ELK SLOUGH, ABOUT 0.7 MILE SE OF JEFFERSON BLVD AT N COURTLAND RD AND 1.3 MILES N OF COURTLAND.						
Detailed Location:	YEAR 2000 NEST DETAILED WITH COORDINATES, BEARING, AND DISTANCE; APPEARS TO HAVE BEEN ON THE EAST SIDE OF THE SLOUGH. YEAR 2003 NEST APPEARS TO BE ON EAST SIDE OF SLOUGH AND IS LIKELY THE SAME LOCATION. BOTH LIKELY VIEWED FROM WAUKEENA RD.						
Ecological:	2000: NEST AT TOP OF A CLUMP OF MISTLETOE IN A 60' COTTONWOOD; SURROUNDING LAND USE CROPLAND TO NE & SE, ORCHARD/VINEYARD TO NW & SW. 2003: NEST IN MISTLETOE CLUMP ON 40' COTTONWOOD SURROUNDED BY ORCHARDS.						
General:	1 PARTIALLY-FEATHERED YOUNG OBSERVED IN THE NEST, TERRITORIAL ADULT(S) OBS ON 14 JUL 2000. 2 DOWNY YOUNG OBS IN NEST ON 2 JUN 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1288	Map Index:	53333	EO Index:	53333	Element Last Seen:	2005-07-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.49173 / -121.69586			Accuracy:	80 meters		
UTM:	Zone-10 N4261181 E613733			Elevation (ft):	35		
PLSS:	T08N, R02E, Sec. 36, SE (M)			Acres:	0.0		
Location:	WEST SIDE OF MACE BOULEVARD, 0.25 MILE NORTH OF THE JOG IN MACE BOULEVARD, 4 MILES SSE OF DAVIS.						
Detailed Location:	2001-2004 NEST TREE WAS THE FIRST BLACK WALNUT ON THE WEST SHOULDER, NORTH OF THE DIRT FARM ROAD LEADING WEST; THIS NEST TREE DISAPPEARED IN 2004. 2005 NEST TREE WAS THE FIRST BLACK WALNUT REMAINING NORTH OF THE DIRT ROAD.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE WEST AND RUDERAL TO THE EAST, ACROSS THE ROAD.						
General:	SUCCESSFUL NEST AT THIS SITE LIKELY MISSED IN 2001. NEST MONITORED 4 JUL-23 JUL 2002; 1 FLEDGED. NEST TREE WITH A SMALL NEST DISAPPEARED BETWEEN 11 JUN-13 JUL 2004. NEST MONITORED 30 MAR-10 AUG 2005; INCUBATION OBS ON 31 MAY, BUT 0 FLEDGED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1294	Map Index:	53567	EO Index:	53567	Element Last Seen:	2005-08-22
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-28
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.47732 / -121.67573			Accuracy:	80 meters		
UTM:	Zone-10 N4259608 E615511			Elevation (ft):	25		
PLSS:	T07N, R03E, Sec. 06, SE (M)			Acres:	0.0		
Location:	WEST SIDE OF ROAD 105, 0.7 MILE SOUTH OF ROAD 36, 5.4 MILES SE OF DAVIS.						
Detailed Location:	NEST TREE WAS THE BLACK WALNUT AT THE SE CORNER OF THE FARMSTEAD AT 31680 ROAD 105. MAPPED TO COORDINATES FROM FIELD SURVEY FORMS, RESSEGUIE SITE SAXON 2.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE SOUTH, NE, AND WEST, AND SAFFLOWER TO THE SE.						
General:	NEST SITE LIKELY OCCUPIED IN 2001. NEST MONITORED 4 APR-15 AUG 2002; 1 CHICK OBSERVED ON 15 AUG 2002; 1 FLEDGED. NEST MONITORED 18 MAR-13 JUL 2004; 1 FLEDGED. NEST MONITORED 28 FEB-22 AUG 2005; OCCUPIED, BUT NO CHICK DETECTED.						
Owner/Manager:	PVT						



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Occurrence No.	1324	Map Index:	56451	EO Index:	56467	Element Last Seen:	2005-07-30
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:			2005-07-30
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2011-09-28

Quad Summary: Saxon (3812146)

County Summary: Solano

Lat/Long:	38.39688 / -121.73187	Accuracy:	80 meters
UTM:	Zone-10 N4250612 E610736	Elevation (ft):	25
PLSS:	T06N, R02E, Sec. 03, NE (M)	Acres:	0.0

Location: 0.2 MILE NORTH OF THE INTERSECTION OF TREFOIL ROAD AND ETZEL ROAD, 5.5 MILES SE OF DIXON.

Detailed Location: RESSEGUIE'S SAXON 14. 2004 NEST LOCATED AT THE 80% HEIGHT OF A LOCUST IN THE SE CORNER OF A GROVE OF TREES. 2005 NEST WAS LOCATED IN A WALNUT IN THE SE PART OF THE GROVE.

Ecological: NEST TREE WAS A LOCUST; SURROUNDED BY CULTIVATED LAND TO THE WEST, ALFALFA CLOSE, THEN PASTURE.

General: SITE SUSPECTED IN 2001, BUT NOT CONFIRMED. NEST MONITORED 18 MAR-5 AUG 2004; 1 FLEDGED. NEST MONITORED 30 MAR-30 JUL 2005; 1 ADVANCED DEAD CHICK FOUND BELOW NEST AND 1 FLEDGED.

Owner/Manager: PVT

Occurrence No.	1325	Map Index:	56452	EO Index:	56468	Element Last Seen:	2005-08-21
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:			2005-08-21
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2011-09-28

Quad Summary: Saxon (3812146)

County Summary: Solano

Lat/Long:	38.41371 / -121.73993	Accuracy:	80 meters
UTM:	Zone-10 N4252471 E610008	Elevation (ft):	30
PLSS:	T07N, R02E, Sec. 34, NW (M)	Acres:	0.0

Location: 0.2 MILE SOUTH OF MIDWAY ROAD, 0.5 MILE EAST OF SIKES ROAD, 5 MILES SE OF DIXON.

Detailed Location: RESSEGUIE'S SAXON 21. 2004 NEST TREE LOCATED WITHIN A CLUMP OF TREES ALONG A PRIVATE DIRT ROAD. NEST/BIRDS DIFFICULT TO SEE.

Ecological: NEST TREE WAS A LOCUST; SUNFLOWERS GROWING TO THE WEST AND A HARVESTED WHEAT FIELD TO THE EAST.

General: SITE OCCUPIED BY RTHA IN 2001. PROBABLY UNOCCUPIED IN 2002. NEST MONITORED 18 MAR-5 AUG 2004; 1 FLEDGED. NEST MONITORED 23 APR-21 AUG 2005; POSSIBLE MISSED FLEDGLING.

Owner/Manager: PVT



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Occurrence No.	1326	Map Index:	56454	EO Index:	56470	Element Last Seen:	2005-07-29
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.44835 / -121.74626			Accuracy:	80 meters		
UTM:	Zone-10 N4256307 E609403			Elevation (ft):	40		
PLSS:	T07N, R02E, Sec. 15, SW (M)			Acres:	0.0		
Location:	EAST OF SIKES ROAD, 0.25 MILE SOUTH OF HACKMAN ROAD, 4 MILES EAST OF DIXON.						
Detailed Location:	2002 SITE FROM CDFW NEST RECORDS. MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 29: SECOND TREE FROM WEST, NORTH OF THE DRIVEWAY OF A LARGE FARMSTEAD AT 7890 SIKES ROAD (NEST VIEWED FROM ENE OF NEST TREE, NOT FROM THE ROAD).						
Ecological:	2002 NEST TREE IDENTIFIED AS A WALNUT. 2004 NEST AT 80% HEIGHT OF A LOCUST; CULTIVATED LAND IN ALL DIRECTIONS.						
General:	ACTIVE NEST OBSERVED ON 29 MAY 2002; NOTHING VISIBLE IN RETURN VISIT ON 25 JUN. NEST MONITORED 18 MAR-13 JUL 2004; 2 FLEDGED. NEST MONITORED 1 MAR-29 JUL 2005; 2 FLEDGED.						
Owner/Manager:	PVT						
Occurrence No.	1327	Map Index:	56458	EO Index:	56474	Element Last Seen:	2005-05-09
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48784 / -121.72292			Accuracy:	80 meters		
UTM:	Zone-10 N4260717 E611379			Elevation (ft):	35		
PLSS:	T07N, R02E, Sec. 02, NE (M)			Acres:	0.0		
Location:	EAST SIDE OF BULKLEY ROAD, 0.5 MILE SOUTH OF TREMONT ROAD, 6 MILES NE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 30. 2004 NEST LOCATED AT THE 90% HEIGHT, ON THE EAST SIDE, OF A RAGGED COTTONWOOD (EASTMOST OF THE LARGER TREES ON THE NORTH EDGE OF THE FARMSTEAD).						
Ecological:	NEST TREE WAS A COTTONWOOD; SURROUNDED BY ALFALFA TO THE WEST, NORTH, AND SOUTH.						
General:	NEST MONITORED 7 APR-5 AUG 2004; 1 FLEDGED. NEST MONITORED 22 APR-10 AUG 2005; INCUBATION OBSERVED ON 9 MAY, BUT NO FURTHER SIGHTINGS.						
Owner/Manager:	PVT						



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Occurrence No.	1328	Map Index:	56459	EO Index:	56475	Element Last Seen:	2004-08-20
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-08-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40147 / -121.72100				Accuracy:	80 meters	
UTM:	Zone-10 N4251135 E611679				Elevation (ft):	25	
PLSS:	T06N, R02E, Sec. 02, NE (M)				Acres:	0.0	
Location:	JUST SE OF THE INTERSECTION OF BULKLEY ROAD AND KING ROAD, 6 MILES SE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 31. 2004 NEST DIFFICULT TO SEE.						
Ecological:	NEST TREE WAS A PINE.						
General:	NEST MONITORED 12 APR-20 AUG 2004; ADULTS SEEN, FLEDGING OUTCOME UNKNOWN. INACTIVE IN 2005.						
Owner/Manager:	PVT						

Occurrence No.	1329	Map Index:	56460	EO Index:	56476	Element Last Seen:	2005-07-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.47411 / -121.70446				Accuracy:	80 meters	
UTM:	Zone-10 N4259216 E613010				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 12, SW (M)				Acres:	0.0	
Location:	SOUTH SIDE OF MAXWELL ROAD, 0.8 MILE EAST OF BULKLEY ROAD, 6 MILES ENE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 33. 2004 NEST LOCATED IN AN ELM AT THE SE CORNER OF THE HOUSE AT 8292 MAXWELL ROAD. 2005 NEST LOCATED IN A DEODAR CEDAR BETWEEN THE HOUSE AND THE ROAD.						
Ecological:	NEST TREE WAS A DEODAR CEDAR (2005).						
General:	NEST MONITORED 17 MAY-10 AUG 2004; 3 YOUNG FLEDGED. NEST MONITORED 11 APR-16 JUL 2005; 2 FLEDGED.						
Owner/Manager:	PVT						

Occurrence No.	1330	Map Index:	56461	EO Index:	56477	Element Last Seen:	2004-08-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-08-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-08-24
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48463 / -121.69861				Accuracy:	80 meters	
UTM:	Zone-10 N4260391 E613504				Elevation (ft):	25	
PLSS:	T07N, R02E, Sec. 01, NE (M)				Acres:	0.0	
Location:	SW OF THE INTERSECTION OF ROAD 36 AND THE WEST END OF MACE ROAD (HWY 104), 7 MILES ENE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 34. 2004 NEST TREE IS THE EASTMOST BLUE GUM EUCALYPTUS IN A ROW.						
Ecological:	NEST TREE IS A BLUE GUM EUCALYPTUS; SURROUNDED BY RUDERAL NORTH TO A FARMSTEAD AND CULTIVATED LAND TO THE SOUTH.						
General:	INADEQUATE OBSERVATION DUE TO DIFFICULTY GAINING ACCESS IN 2004. NEST MONITORED 19 MAY-12 AUG 2004; ON 19 MAY, ADULT DEFENDED NEST AND BEGGING CALLS WERE HEARD FROM THE NEXT TREE.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1331	Map Index:	56474	EO Index:	56490	Element Last Seen:	2005-04-12
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.49541 / -121.73128				Accuracy:	80 meters	
UTM:	Zone-10 N4261547 E610638				Elevation (ft):	40	
PLSS:	T08N, R02E, Sec. 35, NW (M)				Acres:	0.0	
Location:	NORTH SIDE OF TREMONT ROAD, JUST EAST OF EGGERT ROAD, 6 MILES NE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 35. SITE WAS LOCATED AT 8752 EGGERT ROAD, WHERE A NEW HOUSE WAS UNDER CONSTRUCTION IN 2004. NEST TREE WAS A EUCALYPTUS.						
Ecological:	NEST TREE WAS A BLUE GUM EUCALYPTUS; SURROUNDED BY A NEW ALMOND ORCHARD TO THE SOUTH AND EAST AND A WALNUT ORCHARD, JUST BEGINNING PRODUCTION, TO THE NORTH.						
General:	NEST SITE MONITORED 19 MAY-17 AUG 2004; ADULTS CONSISTENTLY PRESENT FROM 30 MAY-13 AUG, BUT NEST COULD NOT BE FOUND (NESTING PRESUMED). NEST MONITORED 12 APR-16 JUL 2005; NEST-BUILDING OBSERVED ON 12 APR, BUT NO LATER SIGHTINGS.						
Owner/Manager:	PVT						

Occurrence No.	1332	Map Index:	56475	EO Index:	56491	Element Last Seen:	2005-07-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.47425 / -121.71807				Accuracy:	80 meters	
UTM:	Zone-10 N4259215 E611823				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 11, SE (M)				Acres:	0.0	
Location:	NORTH SIDE OF MAXWELL ROAD, 0.15 MILE EAST OF BULKLEY ROAD, 6 MILES ENE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 36. SITE IS LOCATED AT A FARMSTEAD AT 8093 MAXWELL ROAD. 2004 NEST LOCATED AT THE 90% HEIGHT, ON THE SOUTH SIDE, OF THE SOUTHMOST RED GUM EUCALYPTUS WITHIN A NORTH-SOUTH ROW.						
Ecological:	NEST TREE WAS A RED GUM EUCALYPTUS.						
General:	NEST SITE MONITORED 5 AUG-10 AUG 2004; 1 YOUNG FLEDGED. NEST MONITORED 22 APR-11 AUG 2005; 1 LARGE CHICK SEEN ON 4 JUL, BUT NO FLEDGLING DETECTED.						
Owner/Manager:	PVT						



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Occurrence No.	1334	Map Index:	56574	EO Index:	56590	Element Last Seen:	2005-08-09
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-29
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.44004 / -121.58449			Accuracy:	80 meters		
UTM:	Zone-10 N4255589 E623534			Elevation (ft):	5		
PLSS:	T07N, R04E, Sec. 19 (M)			Acres:	0.0		
Location:	WEST SIDE OF JEFFERSON BOULEVARD (HIGHWAY 84), 0.4 MILE SOUTH OF BABEL SLOUGH, 3 MILES NW OF CLARKSBURG.						
Detailed Location:	RESSEGUIE'S CLARKSBURG 3. 2004 NEST WAS LOCATED AT THE 85% HEIGHT, ON THE NE SIDE, OF A RAGGED COTTONWOOD FOUND 125 METERS FROM THE ROAD. 2005 NEST WAS LOCATED AT THE 75% HEIGHT OF THE SMALL OAK (NORTHMOST TREE OF 3RD CLUMP WEST OF ROAD).						
Ecological:	NEST TREE WAS AN OAK; SURROUNDED BY ALFALFA TO THE NORTH AND SOUTH.						
General:	NEST SITE MONITORED 28 MAR-3 AUG 2004; 3 YOUNG FLEDGED. NEST MONITORED 20 APR-9 AUG 2005; 1 FLEDGED.						
Owner/Manager:	PVT						
Occurrence No.	1335	Map Index:	56575	EO Index:	56591	Element Last Seen:	2007-XX-XX
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.43319 / -121.58271			Accuracy:	specific area		
UTM:	Zone-10 N4254832 E623701			Elevation (ft):	5		
PLSS:	T07N, R04E, Sec. 30, NW (M)			Acres:	11.0		
Location:	ALONG JEFFERSON BOULEVARD (HIGHWAY 84), ABOUT 0.9 MILE SOUTH OF BABEL SLOUGH AND 2.5 MILES NW OF CLARKSBURG.						
Detailed Location:	TWO SITES: SOUTH SITE AT JEFFERSON BLVD ACTIVE 2004-05 (RESSEGUIE SITE CLARKSBURG 5) AND 2007 (ESTEP SITE YO-55); NORTH SITE ACTIVE 2007 (ESTEP SITE YO-91).						
Ecological:	2004 NEST DIFFICULT TO SEE, IN AN E-W ROW OF SMALL COTTONWOODS AT A FIELD BOUNDARY 0.3 MILE N OF WILLOW POINT WEST RD; WITH ALFALFA TO NE/W, CULTIVATED TO SE. 2007 NESTS IN RIPARIAN WILLOW (YO-91) AND ROADSIDE WALNUT (YO-55).						
General:	NEST MONITORED 28 MAR-11 AUG 2004; 3 YOUNG FLEDGED. NEST MONITORED 29 MAR-18 AUG 2005; POSSIBLE FLEDGLING OBSERVED ON 28 JUL 2005. 1 YOUNG SEEN IN YO-55 NEST, AND UNKNOWN OUTCOME AT YO-91 IN 2007.						
Owner/Manager:	PVT						



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Occurrence No.	1336	Map Index:	56577	EO Index:	56593	Element Last Seen:	2009-05-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.44602 / -121.58409				Accuracy:	nonspecific area	
UTM:	Zone-10 N4256253 E623559				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 19, NW (M)				Acres:	17.0	
Location:	WEST SIDE OF JEFFERSON BOULEVARD (HIGHWAY 84) AND ALONG THE SOUTH OF BABEL SLOUGH, 3.25 MILES NW OF CLARKSBURG.						
Detailed Location:	1992: DETECTION IN VICINITY, REPORTED ON FIELD SURVEY FORM. 2004-05: RESSEGUIE SITE "CLARKSBURG 8" FROM FIELD SURVEY FORMS. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN SURVEY DATA 2009-2010.						
Ecological:	2004: NEST IN LARGE VALLEY OAK AT 80% HEIGHT; AT THE SOUTH MARGIN OF AN OPEN FIELD. 2005: GREAT HORNED OWL OCCUPYING 2004 NEST, NEW NEST NOT FOUND. 2009: NEST IN BAND OF OAKS BETWEEN WHEAT & ALFALFA FIELDS.						
General:	1992: 1 SEEN FORAGING IN VICINITY. 2004: NEST MONITORED 4 MAY-3 AUG; 1 YOUNG FLEDGED. NEST SITE MONITORED IN 2005 WITH ADULTS PRESENT APR-JUL, BUT NO NEST FOUND. AT LEAST 1, MAYBE 2, ACTIVE NESTS OBSERVED IN 2009; SUCCESS UNKNOWN.						
Owner/Manager:	PVT						

Occurrence No.	1337	Map Index:	56578	EO Index:	56594	Element Last Seen:	2005-08-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-29
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42461 / -121.58282				Accuracy:	80 meters	
UTM:	Zone-10 N4253879 E623706				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 30 (M)				Acres:	0.0	
Location:	EAST SIDE OF JEFFERSON BOULEVARD (HIGHWAY 84), 0.3 MILE SOUTH OF WILLOW POINT ROAD, 2.6 MILES WEST OF CLARKSBURG.						
Detailed Location:	RESSEGUIE'S CLARKSBURG 10. 2004 NEST WAS LOCATED AT THE 90% HEIGHT OF AN EAST SHOULDER BLACK WALNUT.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDED BY CULTIVATED LAND TO THE EAST, VINEYARD TO THE WEST, AND HARVEY LYMAN AG SERVICE TO THE SW.						
General:	NEST SITE MONITORED 15 MAY-3 AUG 2004; 1 YOUNG FLEDGED. NEST MONITORED 29 MAR-18 AUG 2005; ADULTS OBSERVED DEFENDING THE 2004 NEST, BUT NO YOUNG OBSERVED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1338	Map Index:	56579	EO Index:	56595	Element Last Seen:	2007-XX-XX
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.41467 / -121.58863				Accuracy:	specific area	
UTM:	Zone-10 N4252769 E623215				Elevation (ft):	5	
PLSS:	T07N, R03E, Sec. 36, NE (M)				Acres:	9.0	
Location:	NORTH SIDE OF CLARKSBURG ROAD, 0.3 MILE WEST OF JEFFERSON BOULEVARD, 3 MILES WEST OF CLARKSBURG.						
Detailed Location:	2004-2005: NEST WAS LOCATED AT THE 80% HEIGHT OF THE TALLEST WILLOW ON THE NORTH SIDE OF A DITCH ALONG THE NORTH SIDE OF THE ROAD. RESSEGUIE'S CLARKSBURG 13. 2007: SITE YO58 FROM 2008 ESTEP REPORT, GIVEN COORDINATES ABOUT 90 M EAST.						
Ecological:	2004-05: NEST TREE WAS A WILLOW; SURROUNDED BY ALFALFA TO THE NE, RUDERAL TO THE NW, AND SUDAN GRASS TO THE SOUTH. 2007: NEST IN WILLOW IN ROADSIDE TREE ROW, SURROUNDED BY ALFALFA AND IRRIGATED CROPS.						
General:	NEST SITE MONITORED 6 JUN-27 JUL 2004; 3 YOUNG FLEDGED. NEST MONITORED 12 FEB-28 JUL 2005; 1 YOUNG FLEDGED. NEST IN 2007 FAILED.						
Owner/Manager:	PVT						

Occurrence No.	1339	Map Index:	56581	EO Index:	56597	Element Last Seen:	2009-07-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-10
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42943 / -121.57264				Accuracy:	specific area	
UTM:	Zone-10 N4254428 E624586				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 29, NW (M)				Acres:	14.0	
Location:	ALONG WILLOW POINT ROAD, ABOUT 0.5 MILE EAST OF JEFFERSON BOULEVARD & 2.25 MILES WNW OF CLARKSBURG.						
Detailed Location:	1994: TERRITORY "YO" (NO # ASSIGNED) FROM DFG DATABASE OF SWHA OBSERVATIONS, 1979-94. 2004-05: RESSEGUIE SITE "CLARKSBURG 15." 2004 NEST ON S SIDE OF ROAD. 2005 NEST 0.1 MI E, ON N SIDE. 2009: POINT FROM DFG SHAPEFILE OF NEST RECORDS, 2009.						
Ecological:	1994: NEST IN NATIVE TREE. 2004: NEST AT 90% HEIGHT IN SYCAMORE SURROUNDED BY ALFALFA, WITH TOMATOES SE. 2005: NEST IN TALL ROADSIDE PINE AT 95% HEIGHT. 2009: PRESUMED NEST IN 50' NON-NATIVE TREE, SURROUNDED BY VINEYARD WITH CROPS TO NW.						
General:	1994: NEST WITH 2 YOUNG OBSERVED ON 4 AUG. 2004: NEST MONITORED 10 JUL-3 AUG; 2 YOUNG HATCHED, 1 FLEDGED & 1 PREDATED. 2005: ACTIVE NEST MONITORED 6 MAR-18 AUG; NO YOUNG DETECTED. 2009: ACTIVITY OBS AROUND NEST ON 14 JUL, NO YOUNG DETECTED.						
Owner/Manager:	PVT						



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Occurrence No.	1340	Map Index:	56585	EO Index:	56601	Element Last Seen:	2004-08-03
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-29
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42554 / -121.54396			Accuracy:	80 meters		
UTM:	Zone-10 N4254036 E627097			Elevation (ft):	5		
PLSS:	T07N, R04E, Sec. 28 (M)			Acres:	0.0		
Location:	SOUTH SIDE OF WILLOW POINT ROAD, 0.4 MILE WEST OF WILLOW AVENUE, 0.7 MILE NW OF CLARKSBURG.						
Detailed Location:	RESSEGUIE'S CLARKSBURG 17. 2004 NEST WAS LOCATED AT THE 90% HEIGHT OF A MULTI-TRUNKED BLUE GUM EUCALYPTUS, AT THE SW CORNER OF THE FARMSTEAD AT 52105 WILLOW POINT ROAD.						
Ecological:	NEST TREE WAS A BLUE GUM EUCALYPTUS; SURROUNDED BY CULTIVATED LAND.						
General:	NEST SITE MONITORED 27 JUL-3 AUG 2004; 1 YOUNG FLEDGED. NEST SITE MONITORED 20 APR-28 JUL 2005; UNOCCUPIED IN 2005.						
Owner/Manager:	PVT						

Occurrence No.	1341	Map Index:	56587	EO Index:	56603	Element Last Seen:	2005-05-08
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.34413 / -121.60205			Accuracy:	nonspecific area		
UTM:	Zone-10 N4244923 E622162			Elevation (ft):	5		
PLSS:	T06N, R03E, Sec. 25, NW (M)			Acres:	13.0		
Location:	SOUTH SIDE OF COURTLAND ROAD, 0.5 MILE WEST OF MORSE (=MORRIS) ROAD, 2 MILES NW OF COURTLAND.						
Detailed Location:	COURTLAND 3 SITE. 2004 NEST TREE ON S SHOULDER 0.5 MILE W OF MORSE. 2005-06 NEST TREE ON S SHOULDER 0.35 MILE W OF MORSE, "FIRST TREE EAST OF 2004 NEST TREE." 2004 TREE (W) APPEARS TO HAVE FALLEN OVER, 2009+ AERIALS & GOOGLE STREET VIEW.						
Ecological:	2004: NEST IN A COTTONWOOD; VINEYARDS TO N & S, RUDERAL TO N ALONG THE ROAD & TO S ALONG LARGE DITCH. 2005: NEW NEST IN WILLOW VACATED, NEST BUILDING IN TREE FROM '04. 2006: NESTING AT NEW TREE FROM '05, WILLOW OR COTTONWOOD (UNCLEAR).						
General:	MONITORED 15 MAY-3 AUG 2004: 1 YOUNG FLEDGED. INCUBATION OBS 8 MAY 2005, NEW NEST VACANT BY 29 MAY, TWIGS CARRIED TO '04 NEST TREE ON 2 JUL, NO NEST/YOUNG BY 29 JUL. 2006: INCUBATION OBS 22 MAY, PAIR DEFENSIVE 3 AUG, NO YOUNG BY 14 AUG.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1342	Map Index:	56589	EO Index:	56605	Element Last Seen:	2005-08-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.36551 / -121.58402				Accuracy:	nonspecific area	
UTM:	Zone-10 N4247319 E623702				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 18, SW (M)				Acres:	10.0	
Location:	EAST SIDE OF JEFFERSON BOULEVARD, 0.3 MILE SOUTH OF SOUTH NETHERLANDS ROAD, 2.5 MILES NNW OF COURTLAND.						
Detailed Location:	2003: COORDINATES FROM DFG DATABASE OF SWAINSON'S HAWK NEST RECORDS, 2000-2004. 2004 NEST IN FIRST TREE S OF DIRT ROAD RUNNING E, ON E SHOULDER OF ROAD; UTMS DON'T MATCH DESCRIPTION.						
Ecological:	2003: NEST TREE A 40' WALNUT WITH ORCHARD/VINEYARD TO NE & SE AND GRAZING TO NW & SW. 2004: NEST TREE WAS A BLACK WALNUT; SURROUNDED BY A VINEYARD TO THE EAST AND ALFALFA TO THE WEST.						
General:	2003: 1 FEATHERED YOUNG SEEN IN NEST ON 2 JUN. 2004: NEST MONITORED 27 JUL-3 AUG; 1 YOUNG FLEDGED. 2005: NEST SITE MONITORED 21 APR-18 AUG; ADULTS DEFENDED SITE, BUT NO NEST OR YOUNG SEEN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1368	Map Index:	56864	EO Index:	56880	Element Last Seen:	2009-04-23
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-04-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48727 / -121.67751				Accuracy:	80 meters	
UTM:	Zone-10 N4260709 E615340				Elevation (ft):	25	
PLSS:	T07N, R03E, Sec. 06, NE (M)				Acres:	0.0	
Location:	JUST SW OF THE INTERSECTION OF ROAD 105 AND ROAD 36, 5 MILES SE OF DAVIS.						
Detailed Location:	VICINITY OF TERRITORY "YO" (NO # ASSIGNED) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 17.5 SITE. THE SAME NEST TREE WAS USED FOR MULTIPLE YEARS.						
Ecological:	NEST TREE WAS A 100' BLUE GUM JUST INSIDE THE FENCE OF THE MIGRANT LABOR CAMP PROPERTY; SURROUNDED BY A WASTEWATER DISPOSAL AREA TO THE SW, THEN ALFALFA, RUDERAL TO THE NORTH, AND ALFALFA TO THE NE AND SE.						
General:	ACTIVE, INCUBATION OBSERVED ON 21 JUN 1994. NEST USED BY RED-TAILED HAWKS BEFORE 2004 (& GREAT HORNED OWLS IN 2000). MONITORED MAR-JUL 2004; 1 YOUNG FLEDGED. MONITORED FEB-JUL 2005; 1 FLEDGED. ACTIVE, INCUBATION OBS ON 23 APR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1422	Map Index:	61127	EO Index:	61163	Element Last Seen:	2004-05-23
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-05-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-04-27
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35787 / -121.41736			Accuracy:	80 meters		
UTM:	Zone-10 N4246708 E638276			Elevation (ft):	25		
PLSS:	T06N, R05E, Sec. 22, NE (M)			Acres:	0.0		
Location:	EAST SIDE OF BRUCEVILLE ROAD, 0.5 MILE NORTH OF ESCHINGER ROAD.						
Detailed Location:							
Ecological:	NEST TREE IS A EUCALYPTUS.						
General:	1 DARK-MORPH FEMALE OBSERVED ON NEST ON 23 MAY 2004; NEST FAILED WHEN IT WAS BLOWN OUT OF THE NEST TREE, AND THERE WAS NO ATTEMPT AT RE-NESTING.						
Owner/Manager:	PVT						
Occurrence No.	1423	Map Index:	61128	EO Index:	61164	Element Last Seen:	2004-05-25
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-05-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-04-27
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35433 / -121.40420			Accuracy:	80 meters		
UTM:	Zone-10 N4246335 E639433			Elevation (ft):	30		
PLSS:	T06N, R05E, Sec. 23, SW (M)			Acres:	0.0		
Location:	0.25 MILE NORTH OF ESCHINGER ROAD AND 0.7 MILE EAST OF BRUCEVILLE ROAD, 3.75 MILES SW OF ELK GROVE.						
Detailed Location:							
Ecological:	NEST TREE IS A FREMONT COTTONWOOD ALONG A DRAINAGE CANAL; SURROUNDED BY PASTURE LAND.						
General:	2 ADULTS SUCCESSFULLY FLEDGED 2 CHICKS IN 2004.						
Owner/Manager:	PVT						
Occurrence No.	1429	Map Index:	61562	EO Index:	61598	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25677 / -121.45644			Accuracy:	nonspecific area		
UTM:	Zone-10 N4235431 E635050			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 29, N (M)			Acres:	13.0		
Location:	SOUTH BANK OF THE MOKELUMNE RIVER, ABOUT 0.4 MILE W OF I-5 BRIDGE AND 3 MILES ENE OF WALNUT GROVE.						
Detailed Location:	2005: COORDINATES FROM FIELD SURVEY FORM. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010. 2009 NEST SITE ABOUT 0.1 MILE E OF 2005 SITE.						
Ecological:	2005: NEST TREE WAS A VALLEY OAK WITHIN RIPARIAN HABITAT ALONG THE MOKELUMNE RIVER; FLOCKS OF TRICOLORED BLACKBIRDS OBSERVED IN THE VICINITY ON 3 JUN. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	FEMALE OBSERVED ON NEST ON 3 MAY 2005. ONE SWAINSON'S HAWK OBSERVED ON NEST WITH ONE PERCHED NEARBY ON 14 MAY, AND 1 NESTING SWHA OBSERVED ON 26 MAY 2009.						
Owner/Manager:	RECLAMATION DISTRICT 348						



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Occurrence No.	1440	Map Index:	62296	EO Index:	62333	Element Last Seen:	2005-07-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-08-15
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40555 / -121.72188			Accuracy:	80 meters		
UTM:	Zone-10 N4251587 E611596			Elevation (ft):	25		
PLSS:	T07N, R02E, Sec. 35, SW (M)			Acres:	0.0		
Location:	ALONG THE WEST SIDE OF BULKLEY ROAD, 0.25 MILE NORTH OF KING ROAD, 13 MILES SW OF DAVIS.						
Detailed Location:	RESSEGUIE'S SAXON 38. NEST TREE WAS LOCATED AT A SMALL FARMSTEAD CONTAINING LOCUST TREES. NEST WAS LOCATED AT THE 2/3 HEIGHT OF THE TALLEST LOCUST NW OF THE HOUSE.						
Ecological:	NEST TREE IS A LOCUST; SURROUNDED BY ALFALFA TO THE NE AND CULTIVATED LAND IN ALL OTHER DIRECTIONS.						
General:	NEST MONITORED 22 APR-16 JUL 2005; 1 FLEDGED.						
Owner/Manager:	PVT						

Occurrence No.	1451	Map Index:	62340	EO Index:	62377	Element Last Seen:	2009-07-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-29
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.41476 / -121.59765			Accuracy:	80 meters		
UTM:	Zone-10 N4252766 E622427			Elevation (ft):	5		
PLSS:	T07N, R03E, Sec. 36, NW (M)			Acres:	0.0		
Location:	NORTH SHOULDER OF CLARKSBURG ROAD, 0.8 MILE WEST OF JEFFERSON BOULEVARD, 3.5 MILES WEST OF CLARKSBURG.						
Detailed Location:	2005: NEST IN FIRST TREE EAST OF THE DIRT ROAD LEADING N, ON N SIDE OF CLARKSBURG RD, RESSEGUIE SITE CLARKSBURG 20; UTMS FROM FIELD SURVEY FORM. 2009: DETECTION FROM DFG SHAPEFILE OF NEST SITES RECORDED 2009, ABOUT 0.1 MILE FURTHER SE.						
Ecological:	2005: NEST AT 90% HEIGHT IN OAK WITHIN A LINE OF TREES ALONG THE NORTH SHOULDER; SURROUNDED BY ALFALFA TO THE NORTH AND SOUTH. 2009: POSSIBLE NEST IN 30' TREE CODED AS "OTHER EXOTIC" (NOT EUCALYPTUS OR WALNUT), SURROUNDED BY ALFALFA.						
General:	2005: NEST MONITORED 10 APR-9 AUG; 2 FLEDGED. 2009: SWAINSON'S HAWK ACTIVITY OBSERVED IN VICINITY ON 14 JUL; ACTIVE NEST PRESUMED, BUT SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1461	Map Index:	62361	EO Index:	62398	Element Last Seen:	2005-07-28
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-08-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.39306 / -121.60610			Accuracy:	80 meters		
UTM:	Zone-10 N4250348 E621727			Elevation (ft):	5		
PLSS:	T06N, R03E, Sec. 02 (M)			Acres:	0.0		
Location:	SOUTH SHOULDER OF CENTRAL AVENUE, 0.3 MILE EAST OF Z LINE ROAD, 4.5 MILES WSW OF CLARKSBURG.						
Detailed Location:	NEST LOCATED AT THE 80% HEIGHT, SOUTH OF CENTER, OF THE EASTMOST SHOULDER TREE.						
Ecological:	NEST TREE IS A BLACK WALNUT.						
General:	NEST MONITORED 10 APR-28 JUL 2005; ADULTS OBSERVED NEST-BUILDING ON 10 APR, WHITEWASH AND PELLETS BENEATH TREE ON 12 JUN, AND ADULTS PRESENT, BUT NO CHICK EVER DETECTED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1462	Map Index:	62366	EO Index:	62403	Element Last Seen:	2005-07-13
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-08-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42814 / -121.55777			Accuracy:	80 meters		
UTM:	Zone-10 N4254304 E625886			Elevation (ft):	3		
PLSS:	T07N, R04E, Sec. 29 (M)			Acres:	0.0		
Location:	SOUTH SIDE OF WILLOW POINT ROAD, 1.3 MILES EAST OF JEFFERSON BOULEVARD, 1.6 MILES WNW OF CLARKSBURG.						
Detailed Location:	NEST LOCATED AT THE 90% HEIGHT, JUST SOUTH OF THE TREES AROUND THE FARMSTEAD HOUSE.						
Ecological:	NEST TREE IS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE SOUTH AND CULTIVATED LAND TO THE NORTH.						
General:	NESTING STRONGLY SUSPECTED IN 2004, BUT NEVER CONFIRMED. NEST MONITORED 20 APR-13 JUL 2005; 2 FLEDGED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1463	Map Index:	62368	EO Index:	62405	Element Last Seen:	2009-04-15
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-04-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.40935 / -121.55507			Accuracy:	specific area		
UTM:	Zone-10 N4252223 E626154			Elevation (ft):	3		
PLSS:	T07N, R04E, Sec. 33, SW (M)			Acres:	10.0		
Location:	ALONG TULE ROAD, ABOUT 0.4 MILE SOUTH OF CLARKSBURG ROAD INTERSECTION AND 1.7 MILES SW OF CLARKSBURG.						
Detailed Location:	MAPPED TO COORDINATES FROM 2005 FIELD SURVEY FORM & DFG SHAPEFILE OF NEST SITES FROM 2009.						
Ecological:	2005: NEST IN TALL COTTONWOOD AT 75% HEIGHT; ALFALFA TO THE NORTH & SOUTH AND VINEYARDS TO THE EAST. 2009: NEST IN 30' VALLEY OAK WITH VINEYARDS TO EAST AND ALFALFA & OTHER CROPS TO WEST.						
General:	2005: ACTIVE NEST MONITORED MAY-JUL; 1 DOWNY CHICK OBSERVED ON 12 JUN WAS LATER PREDATED (CARCASS FOUND JUST SOUTH OF NEST TREE). 2009: ACTIVE NEST, INCUBATION OBSERVED ON 15 APR.						
Owner/Manager:	PVT						



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Occurrence No.	1464	Map Index:	62369	EO Index:	62406	Element Last Seen:	2009-05-18
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-05-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.39590 / -121.56764			Accuracy:	specific area		
UTM:	Zone-10 N4250714 E625080			Elevation (ft):	1		
PLSS:	T06N, R04E, Sec. 05, S (M)			Acres:	10.0		
Location:	NORTH SIDE OF CENTRAL AVENUE, JUST EAST OF MAIN SLOUGH (=MAIN DRAINAGE CANAL), ABOUT 2.6 MILES SW OF CLARKSBURG.						
Detailed Location:	2005: NEST LOCATED OVER THE NORTH ROAD SHOULDER, IN THE FIRST BLACK WALNUT EAST OF THE SLOUGH; UTMS FROM FIELD SURVEY FORM. 2009: NEST ABOUT 1/4 MILE FURTHER EAST ON CENTRAL; COORDINATES FROM DFG SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2005: NEST TREE WAS A BLACK WALNUT SURROUNDED BY ALFALFA TO THE SOUTH AND CULTIVATED LAND TO THE NORTH. 2009: NEST IN TREE CODED AS "OTHER NATIVE" (NOT VALLEY/BLUE OAK, COTTONWOOD, WILLOW, OR PINE), WITH ALFALFA TO NORTH & CROPLAND SOUTH.						
General:	NEST MONITORED 29 MAY-28 JUL 2005; 1 FLEDGED. ACTIVE NEST WITH INCUBATION OBSERVED ON 18 MAY 2009.						
Owner/Manager:	PVT						

Occurrence No.	1472	Map Index:	62463	EO Index:	62500	Element Last Seen:	2005-08-19
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-09-01
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.41585 / -121.73031			Accuracy:	80 meters		
UTM:	Zone-10 N4252719 E610844			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 35, NW (M)			Acres:	0.0		
Location:	NORTH SIDE OF MIDWAY ROAD, 0.5 MILE WEST OF BULKLEY ROAD, 5.3 MILES SE OF DIXON.						
Detailed Location:							
Ecological:	NEST TREE IS UNKNOWN; SURROUNDED BY TREES AND BUILDINGS TO THE NORTH AND MANY SUITABLE TREES TO THE SOUTH.						
General:	SUSPECTED AS A NEST SITE IN 2001, BUT NOT CONFIRMED. UNOCCUPIED IN 2002. NEST SITE MONITORED 23 APR-19 AUG 2005; 1 CHICK FLEDGED, BUT NEST WAS NOT VISIBLE.						
Owner/Manager:	PVT						



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Occurrence No.	1473	Map Index:	62465	EO Index:	62502	Element Last Seen:	2005-07-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-09-01
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.43591 / -121.74814				Accuracy:	80 meters	
UTM:	Zone-10 N4254924 E609257				Elevation (ft):	40	
PLSS:	T07N, R02E, Sec. 22, SW (M)				Acres:	0.0	
Location:	EAST SIDE OF SIKES ROAD, 0.3 MILE NORTH OF MILLER ROAD, 4 MILES ESE OF DIXON.						
Detailed Location:							
Ecological:	NEST TREE IS UNKNOWN; SURROUNDED BY ALFALFA TO THE WEST, PASTURE TO THE SOUTH AND EAST, AND ANOTHER FARMSTEAD TO THE NORTH.						
General:	NEST SITE MONITORED 23 APR-29 JUL 2005; ADULTS DEFENDED THE AREA, BUT NO NEST OR CHICK EVER OBSERVED.						
Owner/Manager:	PVT						

Occurrence No.	1474	Map Index:	62466	EO Index:	62503	Element Last Seen:	2005-08-21
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-08-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-09-01
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.49505 / -121.69942				Accuracy:	80 meters	
UTM:	Zone-10 N4261546 E613417				Elevation (ft):	35	
PLSS:	T08N, R02E, Sec. 36, NE (M)				Acres:	0.0	
Location:	NORTH SHOULDER OF TREMONT ROAD, 0.3 MILE NORTH OF MILLER ROAD, 4 MILES SE OF DAVIS.						
Detailed Location:	NEST LOCATED AT THE 90% HEIGHT OF THE WESTMOST SMALL, MUTILATED BLACK WALNUT.						
Ecological:	NEST TREE IS A BLACK WALNUT; SURROUNDED BY CULTIVATED LAND TO THE SOUTH AND RUDERAL TO THE NORTH.						
General:	NEST MONITORED 19 JUN-21 AUG 2005; ADULT SEEN ON NEST 20 JUN 2005, BUT NO CHICK DETECTED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1478	Map Index:	62531	EO Index:	62568	Element Last Seen:	2007-XX-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.46826 / -121.56443				Accuracy:	80 meters	
UTM:	Zone-10 N4258748 E625235				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 08, SE (M)				Acres:	0.0	
Location:	BABEL SLOUGH, ABOUT 0.8 MI SW OF SACRAMENTO NORTHERN RR CROSSING & 1 MI SE OF ARCADE, E SIDE SACRAMENTO RIVER.						
Detailed Location:	RESSEGUIE'S CLARKSBURG 36 SITE. MAPPED TO COORDINATES GIVEN FOR SITE YO-56 FROM 2008 ESTEP REPORT.						
Ecological:	2005 NEST TREE NOT LOCATED; SITE WAS SURROUNDED BY VINEYARD TO THE NORTH AND CULTIVATED LAND SOUTH. 2007: NEST IN RIPARIAN COTTONWOOD SURROUNDED BY ALFALFA, VINEYARDS, AND IRRIGATED CROPLANDS.						
General:	NEST SITE MONITORED 14 JUL-18 AUG 2005; NO NEST FOUND, BUT 2 YOUNG FLEDGED. NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	PVT						



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Occurrence No.	1479	Map Index:	62533	EO Index:	62570	Element Last Seen:	2007-XX-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.46330 / -121.56802			Accuracy:	80 meters		
UTM:	Zone-10 N4258193 E624931			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 17, NW (M)			Acres:	0.0		
Location:	BABEL SLOUGH, ABOUT 1.5 MILES NNE OF JEFFERSON BLVD AT REAMER LN, ABOUT 3.5 MILES WEST OF FREEPORT.						
Detailed Location:	RESSEGUIE SITE CLARKSBURG 1. MAPPED TO COORDINATES GIVEN FOR SITE YO-87 FROM 2008 ESTEP REPORT.						
Ecological:	2004-2005: NEST TREE NOT LOCATED; SITE WAS SURROUNDED BY VINEYARD TO THE EAST AND WEST. 2007: NEST IN ROADSIDE VALLEY OAK SURROUNDED BY ALFALFA, IRRIGATED CROPS, AND VINEYARDS.						
General:	NEST WAS SUSPECTED IN 2004, BUT NO NEST OR CHICK WERE FOUND. NEST SITE MONITORED 10 APR-9 AUG 2005; NO NEST FOUND, BUT 1 FLEDGED JUVENILE OBSERVED. ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1545	Map Index:	62991	EO Index:	63064	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Clarksburg (3812145), Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49624 / -121.62073			Accuracy:	specific area		
UTM:	Zone-10 N4261778 E620277			Elevation (ft):	10		
PLSS:	T08N, R03E, Sec. 35, W (M)			Acres:	10.0		
Location:	YOLO BYPASS WILDLIFE AREA, 1.75 MILES SE OF THE INTERSECTION OF ROAD 34A & ROAD 106A, 5 MILES SE OF DAVIS.						
Detailed Location:	2004: MAPPED TO COORDINATES FROM DFG DATABASE OF SWAINSON'S HAWK NEST RECORDS 2000-2004. 2009: NEST TREE ABOUT 1/4 MILE TO SW, MAPPED TO POINT IN DFG SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2004: NEST TREE WAS IN A COTTONWOOD GROVE SURROUNDED BY ROW CROPS IN ALL DIRECTIONS. 2009: NEST IN 25' WILLOW SURROUNDED BY CROPLAND.						
General:	2004: COPULATION OBSERVED NEAR NEST ON 28 APR; EXACT NEST LOCATION/NEST SUCCESS UNKNOWN. 2009: ACTIVE NEST, INCUBATION OBSERVED ON 28 APR; NEST SUCCESS UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA, UNKNOWN						



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Occurrence No.	1643	Map Index:	64999	EO Index:	65078	Element Last Seen:	2006-06-23
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2006-06-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-07-05
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.46436 / -121.51629				Accuracy:	80 meters	
UTM:	Zone-10 N4258381 E629442				Elevation (ft):	7	
PLSS:	T07N, R04E, Sec. 14, NW (M)				Acres:	0.0	
Location:	0.7 MILE SW OF FREEPORT BEND ON THE SACRAMENTO RIVER, 0.75 MILE WEST OF FREEPORT.						
Detailed Location:	NEST TREE WAS LOCATED FAIRLY CLOSE TO THE SACRAMENTO RIVER.						
Ecological:	NEST TREE WAS A LARGE WILLOW ADJACENT TO AN AGRICULTURAL DITCH, LOCATED WITHIN RIPARIAN VEGETATION DOMINATED BY WILLOW, BLACKBERRY, AND REEDS. ALFALFA FIELDS AND VINEYARDS ARE FOUND ADJACENT TO THE NEST TREE.						
General:	2 ADULTS OBSERVED NEST-BUILDING ON 23 JUN 2006.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1674	Map Index:	67151	EO Index:	67304	Element Last Seen:	2003-04-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-19
Quad Summary:	Jersey Island (3812116), Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.12336 / -121.67751				Accuracy:	nonspecific area	
UTM:	Zone-10 N4220329 E615918				Elevation (ft):	5	
PLSS:	T03N, R03E, Sec. 07, NE (M)				Acres:	148.0	
Location:	VICINITY OF NW CORNER OF TWITCHELL ISLAND ALONG SEVENMILE SLOUGH, 2.5 MI SSE OF RIO VISTA.						
Detailed Location:	MAPPED PER COORDINATES GIVEN IN DFG FIELD SURVEY FORMS AND DIGITAL DATASETS. 2001 NEST TREE LOCATION DESCRIBED AS "TWITCHELL ISLAND RD. AT BRANNAN IS. STATE PARK," 2003 NEST TREE ABOUT 525 METERS FURTHER EAST.						
Ecological:	2001 NEST TREE WAS 80' COTTONWOOD. ROW CROPS TO NE & NW, ALFALFA TO SE, AND PARKS TO SW. 2003 NEST TREE WAS A 25' EXOTIC TREE; SURROUNDED BY RIPARIAN TO THE NE, AND ROW CROPS TO THE NW, SW, AND SE.						
General:	ACTIVE NEST, INCUBATION OBSERVED ON 3 MAY 2001. ACTIVE SWHA NEST, WITH 2 ADULTS PRESENT, OBSERVED ON 25 APR 2003; ONE ADULT SITTING IN NEST, ONE SOARING.						
Owner/Manager:	UNKNOWN, DPR-BRANNAN ISLAND SR						



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Occurrence No.	1693	Map Index:	69763	EO Index:	70572	Element Last Seen:	2005-08-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2007-08-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.45787 / -121.56994				Accuracy:	80 meters	
UTM:	Zone-10 N4257587 E624773				Elevation (ft):	12	
PLSS:	T07N, R04E, Sec. 17, SW (M)				Acres:	0.0	
Location:	0.75 MILE NNE OF THE INTERSECTION OF BABEL SLOUGH ROAD AND PUMPHOUSE ROAD, 8 MILES SOUTH OF WEST SACRAMENTO.						
Detailed Location:	SITE LOCATED ON THE EAST SIDE OF BABEL SLOUGH.						
Ecological:	NEST TREE UNKNOWN, SINCE EXACT NEST LOCATION NEVER DETERMINED.						
General:	NESTING SUSPECTED, BUT NOT CONFIRMED, IN 2004. SITE CONSISTENTLY OCCUPIED AND DEFENDED BY ADULTS IN 2005; ADULTS PRESENT ON 28 MAY, 13 JUN, 13 JUL, AND 29 JUL 2005.						
Owner/Manager:	PVT						
Occurrence No.	1808	Map Index:	87321	EO Index:	88306	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-07
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.19102 / -121.69463				Accuracy:	2/5 mile	
UTM:	Zone-10 N4227815 E614311				Elevation (ft):	10	
PLSS:	T04N, R03E, Sec. 18, W (M)				Acres:	0.0	
Location:	JUST SE OF RIO VISTA MUNICIPAL AIRPORT, ABOUT 0.6 MI NE OF AIRPORT RD AT BAUMANN RD & 1.8 MI W OF RYER ISLAND FERRY.						
Detailed Location:	MAPPED TO VICINITY OF UTM COORDINATES PROVIDED IN 2007 REPORT; NO DATUM GIVEN, ACCURACY LOW. MAPPED TO INCLUDE NEAREST LIKELY NESTING HABITAT (TREES VISIBLE IN 2007 AERIAL PHOTOS).						
Ecological:							
General:	NESTING OBSERVED IN TREE (SPECIES NOT RECORDED) DURING 2007 SURVEY FOR BREEDING RAPTORS; NEST SUCCESS UNKNOWN/NOT RECORDED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1809	Map Index:	87322	EO Index:	88307	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-11-21	

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long:	38.21717 / -121.70183	Accuracy:	1/5 mile
UTM:	Zone-10 N4230708 E613640	Elevation (ft):	0
PLSS:	T04N, R02E, Sec. 01, SE (M)	Acres:	0.0

Location: S SIDE OF DITCH ABOUT 1.7 MI SSW OF LIBERTY ISLAND FERRY AND 3 MI ENE OF CANRIGHT RD AT MCCORMACK RD, W OF CACHE SLOUGH.

Detailed Location: MAPPED TO VICINITY OF UTM COORDINATES PROVIDED IN 2007 REPORT; NO DATUM GIVEN, ACCURACY LOW. ONLY TREES VISIBLE IN 2007 AERIAL ARE ALONG S SIDE OF IRRIGATION DITCH ADJACENT TO GIVEN LOCATION.

Ecological:

General: NESTING OBSERVED IN TREE DURING 2007 SURVEY FOR BREEDING RAPTORS; NEST SUCCESS UNKNOWN/NOT RECORDED.

Owner/Manager: UNKNOWN

Occurrence No.	1810	Map Index:	87324	EO Index:	88309	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-11-26	

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long:	38.24749 / -121.70846	Accuracy:	nonspecific area
UTM:	Zone-10 N4234064 E613013	Elevation (ft):	0
PLSS:	T05N, R02E, Sec. 25, SW (M)	Acres:	69.0

Location: LINDSEY SLOUGH, ABOUT 0.6 MILE W OF HASTINGS FERRY AND 3 MILES E OF PETERSON RANCH.

Detailed Location: 2003: LAT/LONG GIVEN IN DFG DATABASE, LOCATION "ON A SMALL ISLAND IN LINDSAY SL, NEAR HASTINGS ISLAND BRIDGE." 2007: UTMS PROVIDED IN REPORT; NO DATUM GIVEN, SUSPECT LOW ACCURACY. MAPPED TO INCLUDE BOTH SITES.

Ecological: 2003: PAIR NESTED IN ALDER ON SMALL ISLAND IN SLOUGH.

General: 2003: FEMALE SAT IN NEST AT LEAST 1 MONTH BUT NO CHICKS PRODUCED; OBS MAY-SEP. 2007: NESTING OBSERVED (TREE SPECIES NOT RECORDED) DURING 2007 SURVEY FOR BREEDING RAPTORS; SUCCESS NOT RECORDED.

Owner/Manager: UNKNOWN



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Occurrence No.	1812	Map Index:	87340	EO Index:	88326	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-27
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.17384 / -121.66488				Accuracy:	1/5 mile	
UTM:	Zone-10 N4225945 E616945				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 20, SE (M)				Acres:	0.0	
Location:	SE BANK SACRAMENTO RIVER AT CACHE SLOUGH CONFLUENCE, ABOUT 0.9 MI S OF RYER IS. FERRY & 1.4 MI NE OF RIO VISTA BRIDGE.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010; EXACT LOCATION OF NEST TREE UNKNOWN/NOT RECORDED.						
Ecological:	2009: NEST IN RIPARIAN TREE.						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED AT/NEAR NEST ON 28 APR & 1 OBSERVED ON 28 MAY 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1826	Map Index:	87454	EO Index:	88431	Element Last Seen:	1994-07-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-30
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.22195 / -121.55673				Accuracy:	3/5 mile	
UTM:	Zone-10 N4231426 E626335				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 04 (M)				Acres:	0.0	
Location:	ALONG THE SACRAMENTO RIVER ABOUT 2.4 MILES E OF HOWARD LANDING AND 5 MILES NNE OF ISLETON.						
Detailed Location:	TERRITORIES SA (NO # ASSIGNED) & SA083 FROM SWAINSON'S HAWK DATABASE. 1993 DETECTION ON E SIDE OF RIVER. 1994 OBSERVATION POINTS ON E SIDE RIVER, FLEDGLINGS SEEN ACROSS RIVER (14513 HWY 160). 2000 OBS PTS ON W SIDE RIVER.						
Ecological:	1993: POSSIBLE NEST TREE WAS LARGE COTTONWOOD (CW) ON LEVEE NEXT TO CULTIVATED FIELDS; LAND USE RESIDENTIAL, RESORT, AGRICULTURE. 1994: SWHA OBS IN CW TREES, LAND USE WAS AG. 2000: VACANT NEST IN 40' CW. KITE OBS IN SYCAMORE ACROSS RIVER.						
General:	1993: 2 ADULTS OBS FORAGING & RETURNING TO POTENTIAL NEST TREE ON 12 JUL, NEST NOT SEEN. 1994: 1 ADULT OBS ON 6 JUL, FEMALE & 3 FLEDGED JUVENILES OBS IN COTTONWOODS ON W SIDE RIVER. 2000: UNOCCUPIED NEST FOUND.						
Owner/Manager:	PVT						



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Occurrence No.	1827	Map Index:	87456	EO Index:	88433	Element Last Seen:	2009-04-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25552 / -121.50364				Accuracy:	1/10 mile	
UTM:	Zone-10 N4235224 E630921				Elevation (ft):	10	
PLSS:	T05N, R04E, Sec. 25, NW (M)				Acres:	0.0	
Location:	DELTA MEADOWS, ABOUT 0.5 MILE NE OF LOCKE AND 2.5 MILES SE OF VORDEN ON THE SACRAMENTO RIVER.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	2009: NEST TREE WAS A SYCAMORE.						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED AT NEST ON 2 APR 2009.						
Owner/Manager:	DPR, SAC COUNTY						

Occurrence No.	1828	Map Index:	87458	EO Index:	88434	Element Last Seen:	2009-07-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.26377 / -121.52680				Accuracy:	80 meters	
UTM:	Zone-10 N4236108 E628881				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 22, SE (M)				Acres:	0.0	
Location:	WEST SIDE OF THE SACRAMENTO RIVER, ALONG HWY 160; ABOUT 1.2 MILES SE OF VORDEN AND 1.3 MILES NW OF LOCKE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE BASED ON 2009 SURVEYS OF SWAINSON'S HAWK NEST SITES. LOCATION DESCRIPTION "SE CORNER OF SURVEY BLOCK [#1706]/ALONG STATE HIGHWAY 160."						
Ecological:	2009: NEST IN 30' VALLEY OAK. SURROUNDING LAND USE IS FALLOW/RUDERAL.						
General:	YOUNG AND ADULT SWAINSON'S HAWKS SEEN AT NEST ON 20 JUL 2009; SOARING, PERCHING, INCUBATION, AND TERRITORIAL DEFENSE OBSERVED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1829	Map Index:	87459	EO Index:	88435	Element Last Seen:	2009-06-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29109 / -121.51764			Accuracy:	80 meters		
UTM:	Zone-10 N4239152 E629633			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 11, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF HERZOG RD ABOUT 0.5 MILE N OF VORDEN RD INTERSECTION, 1.6 MILES NE OF VORDEN ON THE SACRAMENTO RIVER.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE BASED ON 2009 SURVEYS OF SWAINSON'S HAWK NEST SITES. LOCATION DESCRIPTION "NE CORNER OF [SURVEY] BLOCK [#1706]/ ON HERZOG ROAD BETWEEN VORDEN AND ALFALFA PLANT RD."						
Ecological:	2009: NEST IN 20' TREE CODED AS "OTHER NATIVE" (NOT BLUE OAK, COTTONWOOD, PINE, VALLEY OAK OR WILLOW), ALFALFA FIELDS TO NE AND SE, FALLOW/RUDERAL LANDS TO NW AND SW.						
General:	SWAINSON'S HAWKS ADULTS AND YOUNG SEEN AT NEST ON 23 JUN 2009. SOARING, PERCHING, INCUBATING, FORAGING, AND TERRITORIAL DEFENSE BEHAVIORS OBSERVED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1830	Map Index:	87463	EO Index:	88439	Element Last Seen:	2010-04-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-04-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.30484 / -121.51034			Accuracy:	nonspecific area		
UTM:	Zone-10 N4240688 E630247			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 11 (M)			Acres:	26.0		
Location:	ALONG SNODGRASS SLOUGH, ABOUT 0.7 MILE SE OF HERZOG RD AT RUSSELL RD & 2.5 MILES NE OF VORDEN ON THE SACRAMENTO RIVER.						
Detailed Location:	2003, 2009: MAPPED TO COORDINATES FROM CDFW SWAINSON'S HAWK NEST SITE SURVEY DATASETS. 2010: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2003: NEST IN ALDER TREE AT N END OF EGRET ROOKERY. CROPS TO NE & SE, RIPARIAN TO NW & SW. 2009: NEST IN 45' COTTONWOOD. RIPARIAN TO NE & SE, CROPS TO NW & SW. 2010: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2003: 2 DOWNY YOUNG OBSERVED IN NEST ON 11 JUN. 2009: 2 OBS PERCHED TOGETHER IN VICINITY ON 9 APR. SWHA AT NEST OBS INCUBATING AND DEFENDING TERRITORY ON 20 APR. 2010: 1 NESTING SWHA OBSERVED ON 7 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1831	Map Index:	87465	EO Index:	88447	Element Last Seen:	2010-04-07
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2010-04-07	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-03	
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.30605 / -121.49996			Accuracy:	nonspecific area		
UTM:	Zone-10 N4240838 E631153			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 01 (M)			Acres:	31.0		
Location:	ALONG OLD RAILROAD GRADE ABOUT 1 MILE ESE OF HERZOG ROAD AT RUSSELL ROAD & 2.2 MILES WNW OF I-5 AT DIERSSSEN ROAD.						
Detailed Location:	2003 COORDINATES FROM CDFW SWAINSON'S HAWK NEST SITE SURVEY DATASET. 2010 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA; EXACT LOC OF NEST TREE UNKNOWN/NOT RECORDED.						
Ecological:	2003: NEST IN 35' COTTONWOOD. SURROUNDING LAND USE WAS CROPLAND. 2010: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2 DOWNY YOUNG SEEN IN THE NEST ON 5 JUN 2003. 1 NESTING SWAINSON'S HAWK OBSERVED ON 7 APR 2010.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1832	Map Index:	87468	EO Index:	88448	Element Last Seen:	2009-06-11
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-06-11	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-05-07	
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32430 / -121.51952			Accuracy:	1/5 mile		
UTM:	Zone-10 N4242834 E629410			Elevation (ft):	5		
PLSS:	T06N, R04E, Sec. 34, SE (M)			Acres:	0.0		
Location:	ALONG SNODGRASS SLOUGH ABOUT 0.6 MILE NORTH OF HERZOG ROAD AT RUSSELL ROAD AND 1.6 MILES SE OF HWY 160 AT LAMBERT RD.						
Detailed Location:	1992 DETECTION FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS, GIVEN TRS IN VICINITY, LOC: "SE WILSE[=WILSON?]/LAMBERT JCT." 2009 NESTING SITES PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	1992: SURROUNDING HABITAT WAS GRASSLANDS. NEST TREE SPECIES NOT RECORDED. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S)/RIPARIAN SCRUB.						
General:	DFG SWHA TERRITORY #SA071: 2 ADULTS OBSERVED AT/NEAR A NEST ON 10 JUL 1992. 2-3 NESTING SWAINSON'S HAWKS OBSERVED AT 1-2 NEST SITES ON 11 JUN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1833	Map Index:	87471	EO Index:	88451	Element Last Seen:	2003-05-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29086 / -121.60290				Accuracy:	80 meters	
UTM:	Zone-10 N4239011 E622178				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 12, S (M)				Acres:	0.0	
Location:	SUTTER ISLAND; ALONG E SIDE OF SUTTER SLOUGH ABOUT 0.3 MI N OF CONFLUENCE WITH MINER SLOUGH AND 1.5 MI SE OF OXFORD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST SITES. STATED LOCATION "SUTTER ISLAND - WEST SIDE."						
Ecological:	2003: NEST IN 75' TREE CODED AS "OTHER NATIVE" (NOT BLUE OAK, VALLEY OAK, COTTONWOOD, WILLOW OR PINE). PREDOMINANT LAND USE IS ORCHARDS.						
General:	SWAINSON'S HAWK OBSERVED ON NEST, INCUBATING; ONE FEATHERED CHICK OBS IN NEST ON 7 MAY 2003.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1834	Map Index:	87481	EO Index:	88459	Element Last Seen:	2003-05-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29977 / -121.57996				Accuracy:	nonspecific area	
UTM:	Zone-10 N4240030 E624169				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 07, NE (M)				Acres:	35.0	
Location:	STEAMBOAT SLOUGH, ABOUT 0.4 MILE SW OF ITS SACRAMENTO RIVER CONFLUENCE AND 0.1 MILE N OF SUTTER ISLAND CROSS ROAD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. TWO NEST SITES, NORTH AT "SOUTHSIDE OF SLOUGH, 100 YARDS WEST [=SW?] OF MARINA," & SOUTH AT "0.2 MILE E OF SUTTER ISLAND RD/SUTTER ISLAND RR."						
Ecological:	2003: BOTH NEST TREES WERE 50' COTTONWOODS, SURROUNDING LAND USE WAS ORCHARD.						
General:	NORTH NEST IDENTIFIED ON 7 MAY, SOUTH NEST ON 22 MAY. ON RETURN VISIT ON 9 JULY BOTH NESTS WERE UNOCCUPIED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1835	Map Index:	87490	EO Index:	88465	Element Last Seen:	2003-05-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.34537 / -121.58056				Accuracy:	1/5 mile	
UTM:	Zone-10 N4245089 E624038				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 30, N (M)				Acres:	0.0	
Location:	ALONG ELK SLOUGH JUST NORTH OF WAUKEENA RD AT COURTLAND RD, ABOUT 1.2 MILES NW OF COURTLAND.						
Detailed Location:	1987 DETECTION OF BREEDING PAIR IN VICINITY (JEFFERSON RD 1/4 MI N OF COURTLAND RD). MAPPED TO 2003 LOCATION FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS 2000-2004; COORDS DON'T QUITE MATCH "WAUKEENA RD- NORTH 1/4 MI COURTLAND RD."						
Ecological:	1987 DETECTION IN OPEN, RECENTLY PLOWED FIELDS. 2003 NEST IN ONE OF A SMALL GROVE OF LOCUST TREES, WITH ORCHARDS TO THE NE & SE AND CROPLAND TO THE NW AND SW.						
General:	1987: SWAINSON'S HAWK PAIR OBSERVED ON GROUND IN FIELD, MATE-FEEDING & COPULATING. 2003: 1 FEATHERED YOUNG OBS ON NEST ON 8 MAY, DETECTIONS OF ADULTS NOT RECORDED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1836	Map Index:	87513	EO Index:	88487	Element Last Seen:	2003-06-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.35642 / -121.58843				Accuracy:	1/10 mile	
UTM:	Zone-10 N4246305 E623332				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 24, NE (M)				Acres:	0.0	
Location:	NORTH COURTLAND ROAD, ABOUT 0.2 MILE WEST OF JEFFERSON BLVD INTERSECTION AND 2 MILES NORTHWEST OF COURTLAND.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF NEST SITE RECORDS FROM 2000-2004.						
Ecological:	2003: NEST IN 30' VALLEY OAK, SURROUNDING LAND USE WAS CROPLAND.						
General:	SWAINSON'S HAWK NEST RECORDED ON 5 JUN 2003; NO YOUNG CONFIRMED, SURVEYORS COULD NOT SEE CLEARLY INTO THE NEST TREE.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1837	Map Index:	87514	EO Index:	88488	Element Last Seen:	2003-05-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.35113 / -121.61374			Accuracy:	1/5 mile		
UTM:	Zone-10 N4245685 E621129			Elevation (ft):	5		
PLSS:	T06N, R03E, Sec. 23, SW (M)			Acres:	0.0		
Location:	ALONG DITCH ABOUT 0.5 MI SE OF N COURTLAND RD AT WIDGEON RD (=RD 149) & 0.5 MI NE OF COURTLAND RD AT DUCK SLOUGH BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 NEST SITES. COORDS FALL IN MIDDLE OF FIELD ABOUT 0.15 MI FROM NEAREST TREE TO E (IN AERIAL PHOTOS FROM 2003). DESCRIPTION GIVES NEAREST INTERSECTION, "N COURTLAND RD & WIDGEON RD."						
Ecological:	NEST IN 40' COTTONWOOD SURROUNDED BY CROPLAND.						
General:	TWO FEATHERED YOUNG OBSERVED IN NEST ON 8 MAY 2003; PRESENCE AND BEHAVIOR OF ADULTS NOT RECORDED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1838	Map Index:	87516	EO Index:	88490	Element Last Seen:	2009-05-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.36600 / -121.50929			Accuracy:	1/5 mile		
UTM:	Zone-10 N4247476 E630230			Elevation (ft):	5		
PLSS:	T06N, R04E, Sec. 14, S (M)			Acres:	0.0		
Location:	NORTH SIDE OF HOOD FRANKLIN ROAD ABOUT 0.6 MILE ESE HWY 160 INTERSECTION & 1.9 MILES SW OF I-5 INTERSECTION.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	1 NESTING SWAINSON'S HAWK OBSERVED ON 20 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1839	Map Index:	87518	EO Index:	88492	Element Last Seen:	2009-04-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14285 / -121.49594				Accuracy:	1/5 mile	
UTM:	Zone-10 N4222733 E631799				Elevation (ft):	0	
PLSS:	T03N, R04E, Sec. 01, N (M)				Acres:	0.0	
Location:	SYCAMORE SLOUGH ABOUT 0.4 MILE E OF CONFLUENCE WITH THE SOUTH MOKELUMNE RIVER & 2 MILES NW OF HWY 12 AT N GLASSCOCK RD.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	HABITAT DESCRIBED AS "NON-RIPARIAN TREE(S)."						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED ON 8 APR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1840	Map Index:	87547	EO Index:	88523	Element Last Seen:	1985-06-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1985-06-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-07
Quad Summary:	Isleton (3812125), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25279 / -121.54071				Accuracy:	2/5 mile	
UTM:	Zone-10 N4234870 E627683				Elevation (ft):	-10	
PLSS:	T05N, R04E, Sec. 27 (M)				Acres:	0.0	
Location:	ON GRAND ISLAND, ABOUT 1.5 MILES NE OF RYDE.						
Detailed Location:	TERRITORY #SA050 FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. MAPPED TO STATED LOCATION: "1.5 MILE NORTHEAST OF RYDE." GIVEN TRS T5N R4E SEC 32 SW 1/4 OF NE 1/4 DOES NOT MATCH STATED LOCATION.						
Ecological:	SURROUNDING HABITAT DESCRIBED AS PASTURE/AGRICULTURAL. NEST TREE SPECIES NOT RECORDED.						
General:	2 ADULTS AND 1 JUVENILE SWAINSON'S HAWK OBSERVED AT/NEAR A NEST ON 24 JUN 1985.						
Owner/Manager:	PVT						



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Occurrence No.	1841	Map Index:	87554	EO Index:	88530	Element Last Seen:	2007-06-27
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-07-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16381 / -121.39881				Accuracy:	80 meters	
UTM:	Zone-10 N4225201 E640270				Elevation (ft):	10	
PLSS:	T04N, R05E, Sec. 26 (M)				Acres:	0.0	
Location:	EAST SIDE OF N THORNTON RD (I-5 NORTH FRONTAGE ROAD) ABOUT 0.2 MILE NORTH OF WOODBRIDGE ROAD INTERSECTION.						
Detailed Location:	NEST TREE ON GROUNDS OF A DAIRY FARM. MAPPED TO COORDINATES GIVEN IN 2004 THESIS (SITE #TH5) AND ON 2007 FIELD SURVEY FORM. ADJACENT TREES APPEAR TO HAVE BEEN USED IN 2004 AND 2007.						
Ecological:	2004: NEST IN ELM SURROUNDED BY AGRICULTURE. 2007: NEST NEAR TOP OF VALLEY OAK ON SE SIDE. SURROUNDING LAND USE OPEN FIELDS OF HAY & OTHER CROPS. DISTURBANCE FROM HEAVY EQUIPMENT USED AT DAIRY. NO APPARENT IMPACT FROM I-5 TRAFFIC.						
General:	2002: BREEDING PAIR OBSERVED IN VICINITY THROUGH SEASON, NEST NOT CONFIRMED. 2003: NEST OBS THROUGH SEASON, 1 YOUNG FLEDGED. 2007: 2 YOUNG FIRST OBS 22 JUN, 1 BRANCHING BY 23-24 JUN, EMPTY NEST BY 3 JUL; PRESUME 2 FLEDGED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1842	Map Index:	87556	EO Index:	88532	Element Last Seen:	2003-09-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-09-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18212 / -121.38460				Accuracy:	1/10 mile	
UTM:	Zone-10 N4227255 E641480				Elevation (ft):	15	
PLSS:	T04N, R05E, Sec. 24, W (M)				Acres:	0.0	
Location:	ALONG UNNAMED CANAL NW OF LODI; ABOUT 0.7 MILE NW OF ACAMPO RD AT RAY RD AND 1.1 MILES SE OF I-5 AT PELTIER RD.						
Detailed Location:	LOCATION FROM 2004 THESIS FOR NEST SITE #AC1. OBSERVATION POINT UTMS PLUS BEARING & DISTANCE GIVEN FOR 2002 DETECTION. 2003 NEST AT SAME LOCATION, DESCRIBED AS "CANAL BETWEEN PROPERTIES, NORTH OF ACAMPO RD, WEST OF RAY RD."						
Ecological:	2002 & 2003: NEST IN VALLEY OAK ADJACENT TO CANAL, SURROUNDED BY VINEYARDS/URBAN-AGRICULTURE.						
General:	2002: PAIR OBSERVED THROUGHOUT SEASON AT/NEAR NEST, BUT NEST SUCCESS NOT CONFIRMED. 2003: PAIR OBS NESTING BUT NEST SUCCESS NOT CONFIRMED; OBS ON MULTIPLE OCCASIONS, GIVEN DATE 24 SEP.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1843	Map Index:	87561	EO Index:	88535	Element Last Seen:	2003-04-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18669 / -121.40208				Accuracy:	80 meters	
UTM:	Zone-10 N4227736 E639940				Elevation (ft):	10	
PLSS:	T04N, R05E, Sec. 23, NW (M)				Acres:	0.0	
Location:	ALONG THORNTON RD (I-5 NORTH FRONTAGE RD) ABOUT 0.2 MI S OF PELTIER RD INTERSECTION & 1 MI NW OF ACAMPO RD RR CROSSING.						
Detailed Location:	MAPPED TO COORDINATES PROVIDED IN 2004 THESIS FOR SITE TH2, "THORNTON RD. (EAST SIDE) ~0.4 KM SOUTH OF PELTIER RD."						
Ecological:	NEST WAS IN COTTONWOOD SURROUNDED BY URBAN/AGRICULTURAL LAND USE, NEAR A CANAL.						
General:	2002: MULTIPLE OBSERVATIONS(MO) OF SINGLE SWHA NEAR NEST TREE, NEST SEEN, NO FLEDGLINGS OBSERVED. 2003: MO OF SWHA ON NEST & PERCHED NEAR NEST; 1 YOUNG FLEDGED; DATE GIVEN IN REPORT IS 10 APR THOUGH PRESUMABLY LATER OBSERVATIONS WERE MADE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1844	Map Index:	87562	EO Index:	88536	Element Last Seen:	1994-07-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-07-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18925 / -121.42079				Accuracy:	2/5 mile	
UTM:	Zone-10 N4227992 E638296				Elevation (ft):	5	
PLSS:	T04N, R05E, Sec. 15 (M)				Acres:	0.0	
Location:	ALONG PELTIER RD, ABOUT 0.9 MILE WEST OF I-5 AND 2.3 MILES SOUTH OF THORNTON.						
Detailed Location:	MAPPED TO COORDINATES AND LOCATION DESCRIPTIONS FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. TERRITORY SJ015 IN 1981-82, "3/4 OF 1 MI W OF HWY 5 ON PELTIER RD;" SJ099 IN 1994 DETECTION "ON PELTIER RD, 1 MI W OF I-5."						
Ecological:	1981: GRASSY FIELD WITH "GOOD [NESTING] TREES" A MILE AWAY. 1994: NEST IN 50' COTTONWOOD IN ROW OF COTTONWOOD TREES ALONG PELTIER ROAD. SURROUNDING LAND USE IS AGRICULTURAL FIELDS.						
General:	1981: 1 ADULT OBSERVED (FLYOVER). 1982: NO NESTS OR HAWKS OBSERVED. 1994: 1 FLEDGLING OBSERVED ON NEST; 2 ADULTS DEFENDING NEST ON 11 AND 22 JUL.						
Owner/Manager:	PVT						



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Occurrence No.	1845	Map Index:	87564	EO Index:	88537	Element Last Seen:	2003-06-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19364 / -121.44688				Accuracy:	nonspecific area	
UTM:	Zone-10 N4228440 E636003				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 17 (M)				Acres:	168.0	
Location:	VICINITY OF PELTIER RD/BLOSSOM RD INTERSECTION, ABOUT 2 MILES WEST OF I-5 AT PELTIER RD AND 2.3 MILES SW OF THORNTON.						
Detailed Location:	MAPPED TO LOCATION DESCRIPTIONS IN 2004 THESIS: SITE PE6 AT "PELTIER RD, ~0.5 KM EAST OF CANAL/BLOSSOM RD CURVE" AND BM1 AT "BLOSSOM RD, ALONG CANAL TO EAST, ~0.5 KM NORTH OF CURVE (PELTIER RD)."						
Ecological:	TWO NEST SITES DESCRIBED IN THE VICINITY; PE6 NEST IN COTTONWOOD & BM1 NEST IN WILLOW. SURROUNDING HABITAT WAS URBAN/AGRICULTURAL WITH NEARBY CANALS.						
General:	2004: 2 BREEDING PAIRS OBSERVED ON MULTIPLE OCCASIONS; BOTH PAIRS FLEDGED 1 YOUNG. NESTS WERE LOCATED LATER (PRESUMABLY, AFTER THE BREEDING SEASON WAS FINISHED).						
Owner/Manager:	UNKNOWN						

Occurrence No.	1846	Map Index:	87570	EO Index:	88544	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20411 / -121.43024				Accuracy:	1/5 mile	
UTM:	Zone-10 N4229627 E637441				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 09, SE (M)				Acres:	0.0	
Location:	ALONG BEAVER SLOUGH, ABOUT 0.9 MILE E OF BLOSSOM ROAD CROSSING AND 1.3 MILES SSW OF THORNTON.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA FOR 2009-2010.						
Ecological:	2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2 SWAINSON'S HAWKS OBSERVED BRINGING NEST MATERIAL INTO TREE ON 14 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1847	Map Index:	87572	EO Index:	88545	Element Last Seen:	2009-06-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21262 / -121.45485				Accuracy:	1/5 mile	
UTM:	Zone-10 N4230534 E635271				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 08, N (M)				Acres:	0.0	
Location:	ALONG UNNAMED CANAL ABOUT 0.7 MILE NW OF BLOSSOM RD AT BEAVER SLOUGH CROSSING AND 2 MILES WSW OF THORNTON PO.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2009: NEST 20 FEET UP IN MEDIUM-SIZED COTTONWOOD ON BANK OF POND (=CANAL).						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED ON 26 MAY 2009. 1 SWAINSON'S HAWK OBSERVED FLYING FROM THE NEST ON 17 JUN 2009; NO SIGN OF YOUNG IN NEST.						
Owner/Manager:	DWR						

Occurrence No.	1848	Map Index:	87575	EO Index:	88548	Element Last Seen:	2003-04-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20043 / -121.40506				Accuracy:	80 meters	
UTM:	Zone-10 N4229256 E639652				Elevation (ft):	10	
PLSS:	T04N, R05E, Sec. 14, NW (M)				Acres:	0.0	
Location:	E SIDE OF RR TRACKS ALONG THE NW MAIN CANAL, ABOUT 0.8 MI N OF PELTIER RD AT I-5 AND 1.7 MI WSW OF KILE RD AT RAY RD.						
Detailed Location:	TERRITORY KR2. MAPPED TO LOCATION GIVEN IN 2004 THESIS AS UTMS FOR OBSERVATION POINT WITH DISTANCE AND BEARING TO NEST TREE. STATED LOCATION "RR TRACKS/CANAL, ~350 M SOUTH OF WHERE KILE RD CURVES FROM N/S TO W/E."						
Ecological:	2003: NEST IN VALLEY OAK ADJACENT TO CANAL, SURROUNDED BY URBAN/AGRICULTURAL LAND USE.						
General:	2003: MULTIPLE OBSERVATIONS OF BREEDING PAIR AT/NEAR NEST MADE THROUGHOUT SURVEY (GIVEN DATE IS 11 APR); 2 YOUNG WERE FLEDGED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1849	Map Index:	87578	EO Index:	88551	Element Last Seen:	2002-05-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-05-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-19
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21918 / -121.41903				Accuracy:	80 meters	
UTM:	Zone-10 N4231315 E638394				Elevation (ft):	10	
PLSS:	T04N, R05E, Sec. 03, SW (M)				Acres:	0.0	
Location:	KILE ROAD AT N MIDSECTION STREET IN THORNTON, ABOUT 0.8 MILE SE OF I-5 AT WEST WALNUT GROVE ROAD.						
Detailed Location:	MAPPED TO UTM COORDINATES FOR 2002 NEST SITE GIVEN IN 2004 THESIS, SITE TH4 AT "END OF KILE RD/MIDSECTION." NEST SITE NOT FOUND/RECORDED IN 2003, MULTIPLE FLYOVERS SIGHTED NEARBY AT "UNIVERSAL WOOD PRODUCTS, NORTH OF KILE RD ALONG RR."						
Ecological:	2002: NEST IN VALLEY OAK. HABITAT WAS VALLEY OAK WOODLAND IN RESIDENTIAL USE AREA.						
General:	2002: NESTING PAIR OBSERVED PERCHED NEAR NEST AND FLYING TO AND FROM NEST TREE ON MULTIPLE OCCASIONS (GIVEN DATE IS 17 MAY); 0 YOUNG PRODUCED. 2003: TERRITORIAL SWHA OBSERVED FLYING BY AREA ON MULTIPLE OCCASIONS, NO NEST FOUND.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1850	Map Index:	87580	EO Index:	88553	Element Last Seen:	2003-03-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-03-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.22788 / -121.43093				Accuracy:	nonspecific area	
UTM:	Zone-10 N4232263 E637336				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 04, NE (M)				Acres:	12.0	
Location:	ALONG EAST SIDE OF I-5, JUST NORTH OF WEST WALNUT GROVE ROAD ONRAMP, IN THORNTON.						
Detailed Location:	MAPPED TO LOCATIONS GIVEN IN 2004 THESIS FOR BREEDING TERRITORY TH1, AS UTMS OF OBSERVATION POINTS WITH BEARING & DISTANCE TO NEST TREES. IT SEEMS DIFFERENT TREES WERE USED IN 2002 & 2003, THOUGH '03 SITE DESCRIBED AS "LAST YEAR'S TREE."						
Ecological:	2002-2003 NEST TREES WERE COTTONWOODS. HABITAT DESCRIBED AS VALLEY OAK WOODLAND, SURROUNDING LAND USE WAS RESIDENTIAL.						
General:	2002: BREEDING PAIR OBS AT NEST ON 3 APR. INCUBATION WAS OBSERVED, BUT NEST SUCCESS UNKNOWN. 2003: BREEDING PAIR OBS AT NEST ON MULTIPLE OCCASIONS (ONLY DATE GIVEN IN REPORT IS 19 MAR); PAIR FLEDGED 1 YOUNG.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1851	Map Index:	87583	EO Index:	88555	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21576 / -121.49739				Accuracy:	1/5 mile	
UTM:	Zone-10 N4230821 E631541				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 12 (M)				Acres:	0.0	
Location:	ALONG THE S MOKELUMNE RIVER, ABOUT 0.5 MI SSE OF WALNUT GROVE RD (J11) AT N STATEN ISLAND RD & 1.3 MI NE OF EAGLE TREE.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA; EXACT LOCATION OF NEST TREE UNKNOWN/NOT RECORDED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	1 NESTING SWAINSON'S HAWK OBSERVED ON 26 MAY 2009; NEST SUCCESS UNKNOWN/NOT RECORDED.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	1852	Map Index:	87584	EO Index:	88556	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.24053 / -121.48580				Accuracy:	nonspecific area	
UTM:	Zone-10 N4233587 E632510				Elevation (ft):	0	
PLSS:	T05N, R05E, Sec. 31 (M)				Acres:	24.0	
Location:	ALONG THE MOKELUMNE RIVER, ABOUT 0.9 MILE N OF NEW HOPE LANDING AND 1.4 MILES E OF WALNUT GROVE POST OFFICE.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2009: HABITAT DESCRIBED AS RIPARIAN TREE(S). NEST APPROXIMATELY 30' UP IN NEST TREE (SPECIES NOT RECORDED).						
General:	2009: 1 SWAINSON'S HAWK OBSERVED SITTING ON NEST ON 22 APR; 1 NESTING SWHA OBS ON 14 & 26 MAY.						
Owner/Manager:	TNC, UNKNOWN						



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Occurrence No.	1853	Map Index:	87587	EO Index:	88559	Element Last Seen:	2009-04-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.23363 / -121.45268				Accuracy:	80 meters	
UTM:	Zone-10 N4232869 E635421				Elevation (ft):	0	
PLSS:	T05N, R05E, Sec. 32, SE (M)				Acres:	0.0	
Location:	ABOUT 0.6 MILE NW OF N BLOSSOM ROAD AT W WALNUT GROVE ROAD AND 0.8 MILE ESE OF N VAIL ROAD AT W LAUFFER ROAD.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF 2009 SWAINSON'S HAWK SURVEY DATA. ONLY DESCRIPTION GIVEN IS "BLOSSOM RD."						
Ecological:	2009 NEST IN15' TREE CODED AS "OTHER NATIVE" (NOT BLUE OAK, VALLEY OAK, COTTONWOOD, WILLOW, OR PINE). ALFALFA FIELDS TO NORTH & ORCHARDS/VINEYARDS TO SOUTH (APPEAR TO BE VINEYARDS IN AERIAL PHOTOGRAPHS).						
General:	ADULT SWAINSON'S HAWK(S) ENGAGED IN NEST-BUILDING & FORAGING, AND NEST WITH YOUNG OBSERVED ON 29 APR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1854	Map Index:	87589	EO Index:	88560	Element Last Seen:	2002-05-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-05-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.24119 / -121.43736				Accuracy:	1/10 mile	
UTM:	Zone-10 N4233731 E636748				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 33, NW (M)				Acres:	0.0	
Location:	ALONG UNNAMED DITCH ABOUT 0.5 MILE SE OF I-5 AT BARBER RD AND 0.8 MILE NW OF N THORNTON RD (J8) AT NEW HOPE RD.						
Detailed Location:	MAPPED TO SITE TH3 LOCATION IN 2004 THESIS, GIVEN AS OBSERVATION POINT WITH DISTANCE AND BEARING TO NEST TREE, AND DESCRIPTION "EAST SIDE I-5, BETWEEN WALNUT GROVE/BARBER RDS."						
Ecological:	NEST IN COTTONWOOD.						
General:	NESTING PAIR SEEN AT AND NEAR NEST ON MULTIPLE OCCASIONS IN 2002 (ONLY DATE GIVEN IS 17 MAY), NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1855	Map Index:	87600	EO Index:	88571	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-12
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26975 / -121.47328				Accuracy:	1/10 mile	
UTM:	Zone-10 N4236847 E633552				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 19, NE (M)				Acres:	0.0	
Location:	ABOUT 1.3 MI ESE OF TWIN CITIES RD AT SNODGRASS SLOUGH & 1.7 MI NW OF I-5 AT THE MOKELUMNE RIVER.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2009: 1 SWAINSON'S HAWK OBS PERCHED ON NEST ON 8 APR; NESTING PAIR OBS, 1 ON NEST & 1 PERCHED NEAR NEST, ON 22 APR. NEST SUCCESS UNKNOWN/NOT RECORDED.						
Owner/Manager:	TNC						

Occurrence No.	1856	Map Index:	87603	EO Index:	88574	Element Last Seen:	2009-07-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-12
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26417 / -121.44724				Accuracy:	80 meters	
UTM:	Zone-10 N4236266 E635841				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 20, SE (M)				Acres:	0.0	
Location:	ALONG THE COSUMNES RIVER, ABOUT 0.9 MI NNW OF FRANKLIN BLVD AT BENSON FERRY RD AND 1.5 MI SSE OF I-5 AT TWIN CITIES RD.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009, GIVEN DESCRIPTION "SE QUADRANT OF SURVEY BLOCK [1708], JUST EAST OF I-5."						
Ecological:	2009: NEST IN 25' VALLEY OAK; HABITAT DESCRIBED AS SEASONAL WETLAND TO EAST AND COMMERCIAL/HIGHWAY (I-5) TO WEST.						
General:	ACTIVE NEST WITH YOUNG OBSERVED ON 22 JUL 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1857	Map Index:	87606	EO Index:	88579	Element Last Seen:	2009-06-04
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26806 / -121.48859				Accuracy:	nonspecific area	
UTM:	Zone-10 N4236638 E632216				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 24, NE (M)				Acres:	32.0	
Location:	ABOUT 0.5 MILE SE OF TWIN CITIES RD AT SNODGRASS SLOUGH AND 1.7 MILES NNE OF LOCKE.						
Detailed Location:	MAPPED TO POINTS FROM CDFW SHAPEFILE OF SWHA NEST RECORDS FROM 2009 & DWR SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE IS UNKNOWN.						
Ecological:	NEST IN 80' VALLEY OAK. SURROUNDING HABITAT IS FALLOW CROPLAND.						
General:	2009: 1 NESTING SWHA OBS ON 30 APR. ADULT(S) OBSERVED AT NEST, INCUBATING, ON 6 JUN. NO YOUNG OBSERVED, NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1858	Map Index:	87608	EO Index:	88581	Element Last Seen:	2009-06-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26472 / -121.43151				Accuracy:	80 meters	
UTM:	Zone-10 N4236351 E637216				Elevation (ft):	10	
PLSS:	T05N, R05E, Sec. 21, SE (M)				Acres:	0.0	
Location:	CRUMP RANCH, ABOUT 0.8 MI NNE OF THE COSUMNES & MOKELUMNE RIVER CONFLUENCE & 0.9 MI SSE OF FRANKLIN BLVD AT DESMOND RD.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. LOCATION STATED AS "COSUMNES BARN."						
Ecological:	NEST IN 25' VALLEY OAK. SURROUNDING HABITAT DESCRIBED AS FALLOW CROPLAND TO THE EAST AND RESIDENTIAL/URBAN TO THE WEST (2009 AERIALS SHOW LIMITED DEVELOPMENT ALONG FRANKLIN BLVD).						
General:	ACTIVE NEST WITH YOUNG OBSERVED ON 29 JUN 2009.						
Owner/Manager:	TNC						



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Occurrence No.	1859	Map Index:	87618	EO Index:	88587	Element Last Seen:	2002-04-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-04-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.31008 / -121.39569				Accuracy:	1/10 mile	
UTM:	Zone-10 N4241438 E640262				Elevation (ft):	20	
PLSS:	T05N, R05E, Sec. 02, SE (M)				Acres:	0.0	
Location:	ALONG UNNAMED SLOUGH ABOUT 0.8 MILE SSE OF LAMBERT RD AT CARROLL RD, 1.4 MI NE OF BRUCEVILLE RD AT CAMP RD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004, PROBABLY FOR AN OBSERVATION POINT; LOCATION STATED AS "S OF 8390 LAMBERT RD, OFF OF ONETO."						
Ecological:	NEST IN 50' VALLEY OAK. HABITAT TO NE DESCRIBED AS RIPARIAN, WITH CROPLAND TO WEST.						
General:	BREEDING PAIR OBSERVED COPULATING, PERCHING NEAR NEST ON 17 APR 2002.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1860	Map Index:	87621	EO Index:	88590	Element Last Seen:	2009-07-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28200 / -121.43809				Accuracy:	80 meters	
UTM:	Zone-10 N4238258 E636607				Elevation (ft):	10	
PLSS:	T05N, R05E, Sec. 16, SE (M)				Acres:	0.0	
Location:	ABOUT 0.6 MI SSE OF FRANKLIN BLVD AT TWIN CITIES RD & 1.8 MI N OF COSUMNES & MOKELUMNE RIVER CONFLUENCE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 25' COTTONWOOD SURROUNDED BY GRASSLAND.						
General:	NEST WITH YOUNG OBSERVED ON 15 JULY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1861	Map Index:	87622	EO Index:	88591	Element Last Seen:	2009-04-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28498 / -121.46542			Accuracy:	80 meters		
UTM:	Zone-10 N4238549 E634212			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 17, NW (M)			Acres:	0.0		
Location:	ABOUT 0.4 MILE W OF I-5 AT TWIN CITIES ROAD, 3.4 MILES NE OF LOCKE.						
Detailed Location:	1994 DETECTIONS BY I-5 AT TWIN CITIES RD, FROM CDFW SWHA DATABASE, TERRITORIES SJ00* (FORAGING GROUNDS) & "SA" (NO # ASSIGNED). MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-04 NEST RECORDS & CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2003 NEST IN 30' WILLOW WITH CROPLAND TO EAST AND PASTURE TO WEST. 2009 NEST IN SAME OR ADJACENT TREE.						
General:	1994: SWHA INCLUDING FORAGING GROUP OF 9 BIRDS OBSERVED, NO NEST RECORDED. 2003: NEST WITH 1 FEATHERED YOUNG OBSERVED ON 19 MAY. 2009: ACTIVE NEST, INCUBATION OBS ON 20 APR.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1862	Map Index:	87623	EO Index:	88592	Element Last Seen:	2003-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31486 / -121.50252			Accuracy:	80 meters		
UTM:	Zone-10 N4241812 E630913			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 02, NE (M)			Acres:	0.0		
Location:	ALONG UNNAMED SLOUGH ABOUT 1 MILE ESE OF LAMBERT RD AT SNODGRASS SLOUGH AND 2.4 MILES SW OF POINT PLEASANT.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. LOCATION STATED AS "LAMBERT RD- RR EASEMENT- SUTTER HOME."						
Ecological:	NEST IN 40' COTTONWOOD WITH CROPLANDS TO EAST AND ORCHARD/VINEYARD TO WEST.						
General:	NEST WITH ONE PARTIALLY-FEATHERED YOUNG OBSERVED ON 5 JUN. POSSIBLE SECOND CHICK OBS ON RETURN VISIT, 9 JUL 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1863	Map Index:	87625	EO Index:	88594	Element Last Seen:	2009-04-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29735 / -121.51185			Accuracy:	1/10 mile		
UTM:	Zone-10 N4239855 E630129			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 11 (M)			Acres:	0.0		
Location:	W SIDE SNODGRASS SLOUGH, ABOUT 0.3 MILE ESE OF ALFALFA PLANT ROAD AT HERZOG ROAD & 2 MILES NE OF VORDEN.						
Detailed Location:	NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE UNKNOWN.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED ON 9 APR 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1864	Map Index:	87628	EO Index:	88597	Element Last Seen:	2009-04-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.30819 / -121.47625			Accuracy:	nonspecific area		
UTM:	Zone-10 N4241109 E633222			Elevation (ft):	10		
PLSS:	T05N, R05E, Sec. 06 (M)			Acres:	15.0		
Location:	KUHN RANCH, FROM ABOUT 0.7 TO 1 MILE NW OF I-5 AT DIERSSEN RD AND 1 TO 1.3 MILES SSW OF I-5 AT LAMBERT RD.						
Detailed Location:	2003: COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK 2000-2004 NEST RECORDS; THE MIDDLE OF 3 NEST SITES MAPPED HERE. 2009: POINTS FROM CDFW SHAPEFILE OF NESTS RECORDED IN 2009; N-MOST NEST AT POND, S NEST JUST SW OF MAIN RANCH BUILDINGS.						
Ecological:	2003: NEST IN 50' COTTONWOOD SURROUNDED BY ORCHARD/VINEYARD. 2009: N NEST IN 25' WILLOW IN SEASONAL WETLAND, S NEST IN 25' TREE CODED AS "OTHER EXOTIC" (NOT EUCALYPTUS OR WALNUT) WITH PASTURE TO THE EAST & FALLOW/RUDERAL LAND TO THE WEST.						
General:	2003: ACTIVE NEST OBSERVED 3 JUN, BUT NO YOUNG SEEN. 2009: YOUNG OBSERVED IN NORTH NEST, NEST-BUILDING OBSERVED AT SOUTH NEST SITE (SUCCESS UNKNOWN) ON 20 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1865	Map Index:	87629	EO Index:	88598	Element Last Seen:	2009-05-04
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-05-04	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-17	
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.31200 / -121.44714			Accuracy:	80 meters		
UTM:	Zone-10 N4241573 E635761			Elevation (ft):	10		
PLSS:	T05N, R05E, Sec. 04, W (M)			Acres:	0.0		
Location:	ALONG UNNAMED ROAD ABOUT 0.6 MILE SSW OF FRANKLIN BLVD AT LAMBERT RD AND 1.2 MILES NE OF I-5 AT DIERSSEN RD.						
Detailed Location:	1993 OBSERVATION WAS IN AREA ABOUT 0.5 MI W OF THE OCCURRENCE. MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST SITES RECORDED IN 2009.						
Ecological:	NEST IN 25' TREE CODED AS "OTHER NATIVE" (NOT COTTONWOOD, WILLOW, BLUE OR VALLEY OAK, OR PINE), WITH FALLOW/RUDERAL LAND TO NORTH AND CROPLAND TO SOUTH. NEARBY PASTURES USED FOR FORAGING, AS OBSERVED IN JUL 1993.						
General:	ONE ADULT OBSERVED FORAGING IN 1993. SWAINSON'S HAWK(S) INCUBATING ON NEST OBSERVED ON 4 MAY 2009.						
Owner/Manager:	CITY OF ELK GROVE						
Occurrence No.	1866	Map Index:	87630	EO Index:	88599	Element Last Seen:	2003-07-09
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2003-07-09	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-17	
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34526 / -121.47264			Accuracy:	nonspecific area		
UTM:	Zone-10 N4245227 E633470			Elevation (ft):	10		
PLSS:	T06N, R05E, Sec. 30, N (M)			Acres:	27.0		
Location:	ALONG UNNAMED CREEK, ON BOTH SIDES OF I-5, ABOUT 1.2 MI NW TO 1 MI N OF POINT PLEASANT.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. 3 NESTS SITES; NEST FURTHEST EAST IS IN STONE LAKES NWR PARCEL.						
Ecological:	3 NEST SITES IN 2003: W NEST IN 70' COTTONWOOD WITH CROPLAND TO SOUTH; MIDDLE NEST IN 50' COTTONWOOD SURROUNDED BY PASTURE; BOTH WEST OF I-5. E NEST ON EAST SIDE OF I-5, IN 30' WILLOW SURROUNDED BY PASTURE WITH CROPLAND TO THE NE.						
General:	TWO PARTIALLY-FEATHERED YOUNG OBSERVED IN WEST NEST ON 11 JUN; 2 FEATHERED YOUNG SEEN IN MIDDLE NEST & 1 FEATHERED YOUNG IN EAST NEST ON 9 JUL 2003.						
Owner/Manager:	UNKNOWN, USFWS-STONE LAKES NWR						



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Occurrence No.	1867	Map Index:	87631	EO Index:	88601	Element Last Seen:	2003-05-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.32743 / -121.46873				Accuracy:	80 meters	
UTM:	Zone-10 N4243254 E633844				Elevation (ft):	10	
PLSS:	T06N, R05E, Sec. 31, SE (M)				Acres:	0.0	
Location:	JUST SW OF KORN RD AT KESTREL LAKE RD ON THE WEST SIDE OF I-5, POINT PLEASANT.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. JUDGING FROM AERIAL PHOTOS, THE NEST TREE APPEARS TO BE LOCATED ON A DAIRY FARM.						
Ecological:	NEST IN 50' TREE CODED AS "OTHER NATIVE" (NOT BLUE OR VALLEY OAK, COTTONWOOD, WILLOW, OR PINE), SURROUNDED BY PASTURE.						
General:	ACTIVE NEST OBSERVED, BUT NO YOUNG SEEN ON 19 MAY 2003. NEST DESTROYED (BLOWN DOWN) AT UNKNOWN DATE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1868	Map Index:	87633	EO Index:	88602	Element Last Seen:	2003-06-03
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.33566 / -121.45713				Accuracy:	1/5 mile	
UTM:	Zone-10 N4244185 E634843				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 32, NW (M)				Acres:	0.0	
Location:	SOUTH OF POINT PLEASANT RD, ABOUT 0.4 MILE SE OF FOGG RD INTERSECTION AND 0.5 MILE SW OF FRANKLIN RD INTERSECTION.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. LOCATION APPEARS TO BE AN OBSERVATION POINT, AS NEAREST TREES VISIBLE IN AERIAL PHOTOS ARE MORE THAN 200 M AWAY.						
Ecological:	NEST IN 30' TREE CODED AS "OTHER EXOTIC" (NOT EUCALYPTUS OR WALNUT), SURROUNDED BY PASTURE.						
General:	NEST WAS DIFFICULT TO OBSERVE DUE TO DISTANCE, BUT FOOD RETRIEVED WAS OBSERVED THROUGH NESTING SEASON; APPEARED TO HAVE AT LEAST 1 FEATHERED YOUNG ON 3 JUN 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1869	Map Index:	87634	EO Index:	88603	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.33383 / -121.44472			Accuracy:	nonspecific area		
UTM:	Zone-10 N4244000 E635931			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 33, NW (M)			Acres:	10.0		
Location:	ALONG E SIDE OF HEIN RD ABOUT 0.5 MI SSE OF POINT PLEASANT RD, 1.1 MILES E OF POINT PLEASANT, 1.5 MI W OF BRUCEVILLE.						
Detailed Location:	2003: COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS. 2009: POINT FROM CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2003: NEST IN 30' TREE CODED AS "OTHER EXOTIC" (NOT EUCALYPTUS OR WALNUT) SURROUNDED BY PASTURE. 2009: NEST IN 40' COTTONWOOD SURROUNDED BY PASTURE.						
General:	ACTIVE NEST OBSERVED, BUT NO YOUNG SEEN ON 3 JUN 2003. NEST WITH YOUNG OBS ON 28 APR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1870	Map Index:	87635	EO Index:	88604	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.32222 / -121.43409			Accuracy:	specific area		
UTM:	Zone-10 N4242727 E636882			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 33, SE (M)			Acres:	12.0		
Location:	NORTH SIDE OF LAMBERT RD ABOUT 0.6 MILE E OF FRANKLIN BLVD INTERSECTION AND 1.3 MI SW OF BRUCEVILLE.						
Detailed Location:	1994: FORAGING TERRITORY (#SA00*) FROM CDFW SWAINSON'S HAWK OBSERVATION DATABASE IS NEARBY, ON SOUTH SIDE OF LAMBERT RD. 2009: TWO NEST SITES FROM CDFW SHAPEFILE OF SWHA NEST RECORDS FROM 2009.						
Ecological:	1994: FLOODED FIELDS SOUTH OF LAMBERT RD. 2009: W NEST IN 40' EUCALYPTUS, E NEST IN 35' TREE CODED AS "OTHER NATIVE" (NOT BLUE OR VALLEY OAK, WILLOW, COTTONWOOD, OR PINE) SURROUND ALFALFA & PASTURE.						
General:	GROUPS OF 20-100 SWHA OBS FORAGING ON MULTIPLE OCCASIONS JUL-SEP 1994. TWO NESTS WITH YOUNG SEEN ON 28 APR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1871	Map Index:	87636	EO Index:	88605	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.33454 / -121.41716				Accuracy:	80 meters	
UTM:	Zone-10 N4244119 E638339				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 34, N (M)				Acres:	0.0	
Location:	EAST SIDE OF BRUCEVILLE RD LESS THAN 0.1 MILE SOUTH OF POINT PLEASANT RD JUNCTION, IN BRUCEVILLE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 40' COTTONWOOD SURROUNDED BY CROPS, RESIDENTIAL LAND USE.						
General:	NEST WITH YOUNG OBSERVED ON 28 APRIL 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1872	Map Index:	87637	EO Index:	88606	Element Last Seen:	2003-05-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34108 / -121.44505				Accuracy:	80 meters	
UTM:	Zone-10 N4244804 E635888				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 28, SW (M)				Acres:	0.0	
Location:	NORTH OF POINT PLEASANT RD, ABOUT 0.2 MILE NE OF FRANKLIN BLVD INTERSECTION & 1.5 MILES WNW OF BRUCEVILLE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004.						
Ecological:	2003: NEST IN 30' WILLOW, WITH PASTURE TO THE SOUTH AND CROPLAND TO THE NORTH.						
General:	NEST WITH 1 FEATHERED YOUNG OBSERVED ON 8 MAY 2003.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1873	Map Index:	87638	EO Index:	88607	Element Last Seen:	2003-07-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34754 / -121.43952				Accuracy:	80 meters	
UTM:	Zone-10 N4245529 E636360				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 28, NW (M)				Acres:	0.0	
Location:	ABOUT 0.3 MILE SW OF ED RAU RD AT ESCHINGER RD AND 1.7 MILES NE OF POINT PLEASANT.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004.						
Ecological:	2003: NEST IN 30' WILLOW SURROUNDED BY CROPLAND.						
General:	NEST WITH 2 FEATHERED YOUNG OBSERVED ON 8 JUL 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1874	Map Index:	87640	EO Index:	88609	Element Last Seen:	2009-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34837 / -121.42683			Accuracy:	80 meters		
UTM:	Zone-10 N4245640 E637467			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 28, NE (M)			Acres:	0.0		
Location:	SOUTH OF ESCHINGER RD ABOUT 0.5 MILE ESE OF ED RAU RD INTERSECTION & 1 MILE NW OF BRUCEVILLE.						
Detailed Location:	MAPPED TO POINT IN CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 20' COTTONWOOD SURROUNDED BY PASTURE.						
General:	NEST WITH YOUNG OBSERVED ON 9 JUL 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1875	Map Index:	87641	EO Index:	88610	Element Last Seen:	2003-05-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-20
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35917 / -121.43593			Accuracy:	80 meters		
UTM:	Zone-10 N4246824 E636652			Elevation (ft):	15		
PLSS:	T06N, R05E, Sec. 21, N (M)			Acres:	0.0		
Location:	JUST NORTH OF CORE RD AT ITS INTERSECTION WITH ED RAU RD, ABOUT 1.7 MILES SE OF FRANKLIN.						
Detailed Location:	MAPPED TO COORDINATES FOR 2003 NEST, FROM CDFW NEST RECORDS, 2000-2004. OBSERVATION POINT PLUS BEARING AND DISTANCE TO NEST TREE GIVEN FOR 2001 DETECTION; ABOUT 75 M NORTH OF 2003 TREE.						
Ecological:	2001 NEST IN 70' COTTONWOOD SURROUNDED BY PASTURE; KITE NEST SEEN ABOUT 300 M TO THE NW. 2003 NEST IN 40' COTTONWOOD SURROUNDED BY PASTURE.						
General:	BREEDING PAIR OBSERVED AT NEST, BUT NO YOUNG SEEN ON 22 APR 2001. NEST WITH 1 FEATHERED YOUNG OBS ON 8 MAY 2003.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1876	Map Index:	87642	EO Index:	88611	Element Last Seen:	2009-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36301 / -121.44204			Accuracy:	80 meters		
UTM:	Zone-10 N4247241 E636110			Elevation (ft):	15		
PLSS:	T06N, R05E, Sec. 21, NW (M)			Acres:	0.0		
Location:	SOUTH END OF UNNAMED SLOUGH ABOUT 0.7 MILE NE OF FRANKLIN BLVD AT CORE RD AND 1.3 MILES SSE OF FRANKLIN.						
Detailed Location:	MAPPED TO POINT IN CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 35' COTTONWOOD WITH ALFALFA TO THE NORTH AND PASTURE TO THE SOUTH.						
General:	NEST WITH YOUNG OBSERVED ON 9 JUL 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1877	Map Index:	87644	EO Index:	88613	Element Last Seen:	2009-07-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36651 / -121.40282				Accuracy:	80 meters	
UTM:	Zone-10 N4247689 E639530				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 14, SW (M)				Acres:	0.0	
Location:	E SIDE OF RAU ROAD, ABOUT 0.4 MI S OF KAMMERER ROAD INTERSECTION AND 3 MI ESE OF FRANKLIN.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004 & POINT FROM CDFW SHAPEFILE OF NEST RECORDS, 2009. 2003 & 2009 NESTS APPEAR TO BE IN SAME TREE.						
Ecological:	2003, 2009: NEST IN 35' EUCALYPTUS. SURROUNDING LAND USES ARE PASTURE, RESIDENTIAL, CROPLAND, AND ORCHARD/VINEYARD.						
General:	2003: ACTIVE NEST OBSERVED; NEST WAS DAMAGED AND ABANDONED BY 13 MAY. 2009: NEST WITH YOUNG OBSERVED ON 8 JUL.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1878	Map Index:	87646	EO Index:	88615	Element Last Seen:	2003-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.37216 / -121.42064				Accuracy:	1/10 mile	
UTM:	Zone-10 N4248289 E637963				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 15, W (M)				Acres:	0.0	
Location:	JUST WEST OF BRUCEVILLE ROAD AT KAMMERER ROAD, ABOUT 1.9 MILES ESE OF FRANKLIN.						
Detailed Location:	1994 DETECTION AT TERRITORY "SA" (NO # ASSIGNED) FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS FROM 1979-1994. MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004.						
Ecological:	NEST TREE IN 50' COTTONWOOD SURROUNDED BY PASTURE.						
General:	1994: PAIR OBSERVED ON SOARING 14 JUN. 2003: 1 FLEDGED YOUNG OBSERVED IN NEST ON 2 JUL.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1879	Map Index:	87647	EO Index:	88617	Element Last Seen:	2003-06-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35689 / -121.49187				Accuracy:	80 meters	
UTM:	Zone-10 N4246491 E631768				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 24, W (M)				Acres:	0.0	
Location:	ALONG NORTH ARM OF S STONE LAKE, ABOUT 1.3 MILES SSW OF STONE LAKE RD AT HOOD FRANKLIN RD & 1.6 MILES SE OF HOOD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. JUST SE THE BOUNDARY OF STONE LAKES NATIONAL WILDLIFE REFUGE.						
Ecological:	NEST IN 60' COTTONWOOD WITH PASTURE TO THE EAST AND CROPLAND TO THE WEST.						
General:	2 DOWNY YOUNG OBSERVED IN NEST ON 11 JUN 2003.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1880	Map Index:	87649	EO Index:	88618	Element Last Seen:	2003-05-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36385 / -121.48425				Accuracy:	80 meters	
UTM:	Zone-10 N4247274 E632421				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 24, NE (M)				Acres:	0.0	
Location:	ALONG NORTH ARM OF S STONE LAKE, ABOUT 0.1 MI W OF STONE LAKE RD, 0.9 MI SW OF I-5 AT HOOD FRANKLIN RD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. ABOUT 0.3 MILE EAST OF STONE LAKES NWR BOUNDARY.						
Ecological:	NEST IN 50' WILLOW SURROUNDED BY PASTURE.						
General:	NEST WITH 1 FEATHERED YOUNG OBSERVED ON 15 MAY 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1881	Map Index:	87650	EO Index:	88619	Element Last Seen:	2003-06-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38678 / -121.48373				Accuracy:	80 meters	
UTM:	Zone-10 N4249818 E632425				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 12, E (M)				Acres:	0.0	
Location:	STONE LAKE STATE PARK, ABOUT 0.9 MILE NNW OF I-5 AT HOOD FRANKLIN RD AND 2.3 MILES NE OF HOOD.						
Detailed Location:	TRS GIVEN FOR 1993 DETECTION AT TERRITORY SA072 IN CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. MAPPED TO COORDINATES FROM CDFW DATABASE OF SWHA NEST RECORDS, 2000-2004.						
Ecological:	2003 NEST IN 50' COTTONWOOD SURROUNDED BY GRASSLAND.						
General:	SWAINSON'S HAWKS OBS IN AREA MAY & JUN 1993. ACTIVE NEST OBSERVED, BUT NO YOUNG SEEN BECAUSE NEST WAS HARD TO SEE INTO, ON 10 JUN 2003.						
Owner/Manager:	DPR-STONE LAKE PARK						

Occurrence No.	1882	Map Index:	87657	EO Index:	88625	Element Last Seen:	2009-04-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38440 / -121.49622				Accuracy:	nonspecific area	
UTM:	Zone-10 N4249537 E631338				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 12, SW (M)				Acres:	8.0	
Location:	SOUTH END OF N STONE LAKE, ABOUT 1.2 MILES NW OF I-5 AT HOOD FRANKLIN RD AND 1.6 MILES NE OF HOOD.						
Detailed Location:	2003: COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2003: NEST IN 45' WILLOW SURROUNDED BY PASTURE. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	ABANDONED NEST OBSERVED ON 10 JUN 2003. 1-2 NESTING SWAINSON'S HAWKS OBSERVED ON 17 APR 2009.						
Owner/Manager:	DPR-STONE LAKE PARK						



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Occurrence No.	1883	Map Index:	87659	EO Index:	88628	Element Last Seen:	2009-05-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.39175 / -121.49681				Accuracy:	nonspecific area	
UTM:	Zone-10 N4250351 E631274				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 12 (M)				Acres:	22.0	
Location:	N STONE LAKE, ON EAST AND WEST SHORE; ABOUT 0.6 MI ENE OF ROSEBUD LANDING AND 1.6 MI NW OF I-5 AT HOOD FRANKLIN RD.						
Detailed Location:	2003: COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS, 2000-2004. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2003: NEST ON W LAKESHORE, IN 45' VALLEY OAK SURROUNDED BY GRASSLAND. 2009: NESTING SITE ON E LAKESHORE, HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2003: ACTIVE NEST WITH 0 YOUNG OBSERVED ON 9 JUN. 2009: 2 NESTING SWAINSON'S HAWKS OBSERVED ON 5 MAY. NEST SUCCESS UNKNOWN/NOT RECORDED.						
Owner/Manager:	DPR-STONE LAKE PARK						

Occurrence No.	1884	Map Index:	87662	EO Index:	88632	Element Last Seen:	2003-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38124 / -121.45358				Accuracy:	80 meters	
UTM:	Zone-10 N4249248 E635068				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 08, SE (M)				Acres:	0.0	
Location:	JUST NE FRANKLIN BLVD AT KENNETH WAY, FRANKLIN.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	NEST IN 60' SYCAMORE TREE SURROUNDED BY PASTURE, WITH RESIDENTIAL TO THE SOUTHEAST.						
General:	PAIR SITTING ON NEST WITH 2 FEATHERED YOUNG OBSERVED IN THE NEST ON 13 MAY 2003.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1885	Map Index:	87665	EO Index:	88634	Element Last Seen:	2002-07-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-07-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37840 / -121.41974				Accuracy:	80 meters	
UTM:	Zone-10 N4248983 E638030				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 15, NW (M)				Acres:	0.0	
Location:	ABOUT 0.1 MILE SW OF BILBY ROAD AT BRUCEVILLE ROAD, 1.9 MILES E OF FRANKLIN.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	NEST IN 50' WALNUT WITH CROPLAND TO NORTH AND ORCHARD/VINEYARD AND PASTURE TO SOUTH.						
General:	1 CHICK BRANCHING ON 16 JUL; ACTIVE NEST REVISITED ON 18 JUL 2002.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1886	Map Index:	87668	EO Index:	88637	Element Last Seen:	2009-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38295 / -121.41598				Accuracy:	specific area	
UTM:	Zone-10 N4249493 E638349				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 10 (M)				Acres:	15.0	
Location:	EAST SIDE OF BRUCEVILLE RD, VICINITY OF BILBY ROAD, ABOUT 2 MILES E OF FRANKLIN.						
Detailed Location:	THREE NEST SITES. MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS AND POINT FROM CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2003: N NEST IN 40' TREE CODED AS "OTHER NATIVE" (NOT BLUE/VALLEY OAK, PINE, WILLOW OR COTTONWOOD); S NEST IN "OTHER EXOTIC" (NOT EUC OR WALNUT); SUROUNDED BY PASTURE 2009: NEST IN 40' EUCALYPTUS; FALLOW/RUDERAL LAND TO E, RESIDENTIAL TO W.						
General:	2003: TWO ACTIVE NESTS OBSERVED ON 24 JUN; 1 ADULT OBS FLYING INTO NEST WITH 1 FEATHERED YOUNG AND LEAVING N NEST, 1 FEMALE ADULT OBS STANDING IN S NEST (NEST FAILURE PRESUMED). 2009: NEST WITH YOUNG OBSERVED ON 9 JUL.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1887	Map Index:	87670	EO Index:	88639	Element Last Seen:	2009-04-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39468 / -121.41352				Accuracy:	specific area	
UTM:	Zone-10 N4250799 E638542				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 03, SE (M)				Acres:	15.0	
Location:	VICINITY OF BRUCEVILLE ROAD AT POPPY RIDGE ROAD, ABOUT 2.2 MILES ENE OF FRANKLIN.						
Detailed Location:	1994 DETECTION AT TERRITORY SA (NO # ASSIGNED) FROM CDFW DATABASE OF 1979-94 SWHA OBSERVATIONS. THREE NEST SITES, MAPPED TO COORDINATES FROM CDFW DATABASE OF SWHA NEST RECORDS 2000-04, & POINT FROM CDFW SHAPEFILE OF NESTS RECORDS FROM 2009.						
Ecological:	2009: NEST IN 35' VALLEY OAK SURROUNDED BY RESIDENTIAL WITH FALLOW/RUDERAL LAND TO SE.						
General:	1994: 1 SWHA OBS, NO NEST FOUND. 2003: 3 PARTIALLY-FEATHERED YOUNG OBS IN W NEST 13 MAY-2 JUL; PAIR PERCHED IN TELEPHONE POLE NEAR E NEST ON 25 JUN (NO ACTIVITY, POSSIBLY FAILED/ABANDONED). 2009: NEST WITH YOUNG OBS ON 29 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1888	Map Index:	87671	EO Index:	88640	Element Last Seen:	2003-06-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39059 / -121.42695				Accuracy:	80 meters	
UTM:	Zone-10 N4250325 E637377				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 09, NE (M)				Acres:	0.0	
Location:	FRANKLIN HIGH SCHOOL CAMPUS, ABOUT 0.5 MILE W OF BRUCEVILLE ROAD AT POPPY RIDGE ROAD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS. 2002 AND 2003 NESTS APPEAR TO HAVE BEEN IN SAME/ADJACENT TREES.						
Ecological:	2002: NEST IN 75' WALNUT SURROUNDED BY GRASSLAND WITH RESIDENTIAL TO THE NW. 2003: NEST IN 45' WALNUT WITH RESIDENTIAL W & FALLOW/RUDERAL LAND E. SINCE THE FIRST NEST DETECTION, MUCH OF THE SURROUNDING OPEN SPACE HAS BEEN DEVELOPED.						
General:	1 FEATHERED CHICK OBSERVED IN NEST ON 19 JUL 2002. ADULTS SHADING 1 DOWNY CHICK IN NEST OBS ON 26 JUN 2003.						
Owner/Manager:	PVT						

Occurrence No.	1889	Map Index:	87672	EO Index:	88641	Element Last Seen:	2003-06-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40176 / -121.38734				Accuracy:	specific area	
UTM:	Zone-10 N4251624 E640814				Elevation (ft):	40	
PLSS:	T06N, R05E, Sec. 01, W (M)				Acres:	11.0	
Location:	WEST SIDE OF I-99 ABOUT 0.5 MILE SOUTH OF ELK GROVE BOULEVARD INTERSECTION, ELK GROVE.						
Detailed Location:	TWO NEST SITES. MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	2001 NEST IN 60' VALLEY OAK SURROUNDED BY CROPLAND. 2003 NEST IN 60' VALLEY OAK WITH RESIDENTIAL TO THE EAST AND FALLOW LAND TO THE WEST. 2001 NEST TREE APPEARS TO HAVE BEEN CUT IN 2002 TO MAKE WAY FOR ONGOING AUTO MALL EXPANSION.						
General:	2001: ACTIVE NEST; COPULATION & NEST-BUILDING OBSERVED ON 30 APR, INCUBATION OBS ON 20 MAY. 2003: NEST WITH TWO DOWNY YOUNG OBS ON 25 JUN.						
Owner/Manager:	PVT						



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Occurrence No.	1890	Map Index:	87676	EO Index:	88644	Element Last Seen:	2003-06-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40692 / -121.41932				Accuracy:	80 meters	
UTM:	Zone-10 N4252148 E638012				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 03, NW (M)				Acres:	0.0	
Location:	ABOUT 0.2 MILE SW OF BRUCEVILLE RD/ELK GROVE BLVD INTERSECTION IN ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	2003: NEST IN 40' COTTONWOOD, SURROUNDED BY RESIDENTIAL WITH CROPLAND TO THE SE. SINCE THE DETECTION (SOME TIME LATE 2003/EARLY 2004), THE AREA HAS BEEN COMPLETELY DEVELOPED. AIR PHOTOS SHOW SOME TREES REMAIN, SURROUNDED BY PARKING LOT.						
General:	ADULT MALE OBSERVED ON 18, 24, & 25 JUN; NEST WITH 1 DOWNY YOUNG OBS ON 25 JUN 2003. IF NOT EXTIRPATED, THIS SITE IS HIGHLY DEGRADED (B. ACORD 5/2013).						
Owner/Manager:	PVT						

Occurrence No.	1891	Map Index:	87680	EO Index:	88649	Element Last Seen:	2002-04-02
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2002-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40819 / -121.43831				Accuracy:	80 meters	
UTM:	Zone-10 N4252261 E636352				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 04, NW (M)				Acres:	0.0	
Location:	SOUTH SIDE OF ELK GROVE BOULEVARD ABOUT 0.6 MILE EAST OF FRANKLIN BOULEVARD INTERSECTION, ELK GROVE.						
Detailed Location:	1993-94 DETECTIONS AT TERRITORY #SA078 FROM CDFW DATABASE OF 1979-94 SWAINSON'S HAWK OBSERVATIONS (COORDS DON'T MATCH DESC "ELK GROVE BLVD 1.2 MI E FRANKLIN BLVD"). MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-04 NEST RECORDS.						
Ecological:	1994: NEST IN VALLEY OAK. 2000: SURVEYOR UNABLE TO LOCATE NEST. 2002: NEST IN 70' VALLEY OAK; FIRST NEST ABANDONED, 2ND NEST SUSPECTED IN EVEN LARGER OAK NEARBY. JUDGING FROM AERIALS, ALL AVAILABLE NEST TREES WERE CUT DOWN LATER THAT YEAR.						
General:	1993: PAIR OBS IN AREA 16 JUL. 1994: TERRITORIAL FEMALE DEFENDING 2 FLEDGLINGS 14 JUL. 2000: NO NEST FOUND (INADEQUATE OBS). 2002: ACTIVE NEST/0 YOUNG OBS ON 2 APR; NEST LATER ABANDONED, PAIR STAYED IN AREA BUT 2ND NEST NOT FOUND.						
Owner/Manager:	PVT						



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Occurrence No.	1892	Map Index:	87682	EO Index:	88651	Element Last Seen:	2003-06-26
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:		2003-06-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-02-21	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40202 / -121.43932			Accuracy:	80 meters		
UTM:	Zone-10 N4251575 E636275			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 04, NW (M)			Acres:	0.0		
Location:	NORTHWEST CORNER OF HEATHER FIELD WAY AND SUMMER GLEN WAY IN ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWHA NEST RECORDS.						
Ecological:	2003: NEST IN 75' VALLEY OAK SURROUNDED BY RESIDENTIAL. SINCE THIS DETECTION, THE AREA HAS BEEN ENTIRELY DEVELOPED, BUT JUDGING FROM 2012 AERIALS, THE NEST TREE APPEARS TO STILL BE STANDING, THOUGH SURROUNDED BY TRACT HOUSING.						
General:	NEST WITH 1 DOWNY YOUNG OBSERVED ON 26 JUN 2003.						
Owner/Manager:	PVT						

Occurrence No.	1893	Map Index:	87684	EO Index:	88653	Element Last Seen:	2003-05-13
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2003-05-13	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-18	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40293 / -121.44898			Accuracy:	80 meters		
UTM:	Zone-10 N4251662 E635429			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 05, NE (M)			Acres:	0.0		
Location:	JUST SOUTH OF PERCHERON DR AT WESTFALEN WAY, ABOUT 0.4 MI S OF FRANKLIN BLVD AT ELK GROVE BLVD IN ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWHA NEST RECORDS.						
Ecological:	2003 NEST TREE IN 60' VALLEY OAK SURROUNDED BY RESIDENTIAL. SINCE 2003, THE AREA HAS BEEN COMPLETELY DEVELOPED, THOUGH 2012 AERIALS SHOW THE NEST TREE MAY STILL BE STANDING.						
General:	NEST WITH 2 FEATHERED YOUNG OBSERVED ON 13 MAY 2003.						
Owner/Manager:	PVT						



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Occurrence No.	1894	Map Index:	87685	EO Index:	88654	Element Last Seen:	2009-05-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40916 / -121.48614				Accuracy:	1/10 mile	
UTM:	Zone-10 N4252298 E632173				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 36 (M)				Acres:	0.0	
Location:	WEST SIDE I-5 AT ELK GROVE BOULEVARD EXIT.						
Detailed Location:	1992 DETECTIONS IN VICINITY. MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE UNKNOWN.						
Ecological:	2009: NEST IN COTTONWOOD TREE. SHRIKE NEST OBSERVED NEARBY. WETLAND PRESERVES AND RUDERAL FIELDS WEST OF I-5 USED AS FORAGING HABITAT.						
General:	FORAGING SWAINSON'S HAWKS OBSERVED IN 1992. NESTING SWHA OBS ON 21 APR & 5 MAY 2009. ADULT OBS ON NEST, NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1895	Map Index:	87686	EO Index:	88655	Element Last Seen:	2009-05-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.41833 / -121.50149				Accuracy:	nonspecific area	
UTM:	Zone-10 N4253294 E630817				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 35 (M)				Acres:	70.0	
Location:	ALONG CANAL PARALLELLING SOUTHERN PACIFIC RAILROAD, ABOUT 1 MI NW OF I-5 AT ELK GROVE BLVD AND 1.5 MI E OF CLARKSBURG.						
Detailed Location:	2003: MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 NEST RECORDS. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. NORTHERNMOST NEST SITE(S) WITHIN STONE LAKES NWR.						
Ecological:	2003: NEST IN 50' COTTONWOOD TREE WITH PASTURE TO EAST AND RIPARIAN TO WEST. 2009: 1 NEST IN VALLEY OAK, OTHER NESTS POSSIBLY PRESENT BUT NOT DESCRIBED. NESTING RED-TAILED HAWKS OBSERVED IN VICINITY.						
General:	2003: ACTIVE NEST OBSERVED ON 14 MAY, NEST EMPTY BY 14 JUL. 2009: 3 OBSERVATIONS OF NESTING PAIRS IN VICINITY 3 APR-21 MAY, 1 ACTIVE NEST OBSERVED ON 21 APR. NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN, USFWS-STONE LAKES NWR						



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Occurrence No.	1896	Map Index:	87687	EO Index:	88656	Element Last Seen:	2009-04-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42335 / -121.49009				Accuracy:	1/10 mile	
UTM:	Zone-10 N4253868 E631803				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 36 (M)				Acres:	0.0	
Location:	STONE LAKES NWR, ALONG SLOUGH ON W SIDE OF I-5 ABOUT 1 MI NNW OF ELK GROVE BLVD EXIT & 2 MI E OF CLARKSBURG.						
Detailed Location:	NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED ON 30 APR 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						
Occurrence No.	1897	Map Index:	87688	EO Index:	88657	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43740 / -121.49563				Accuracy:	80 meters	
UTM:	Zone-10 N4255419 E631294				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 25, NW (M)				Acres:	0.0	
Location:	ALONG MORRISON CREEK ABOUT 0.3 MI WSW OF I-5 CROSSING & 1.3 MI SSE OF FREEPORT BRIDGE OVER THE SACRAMENTO RIVER.						
Detailed Location:	1992, 2009 DETECTIONS IN VICINITY. MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 NEST RECORDS.						
Ecological:	1992: PAIR SEEN FORAGING OVER CUT ALFLALFA AND NEWLY-DISKED GRAIN FIELDS. 2003: NEST IN 70' COTTONWOOD WITH RIPARIAN TO THE WEST AND CROPLAND/FALLOW LAND TO THE EAST.						
General:	FORAGING PAIR OBSERVED IN 1992. NEST WITH 1 PARTIALLY-FEATHERED YOUNG OBS ON 10 JUN 2003. PAIR PRESENT THROUGHOUT THE YEAR IN 2009, NESTING SUSPECTED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1898	Map Index:	87689	EO Index:	88658	Element Last Seen:	2009-07-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44566 / -121.48250			Accuracy:	80 meters		
UTM:	Zone-10 N4256354 E632425			Elevation (ft):	0		
PLSS:	T07N, R04E, Sec. 24, E (M)			Acres:	0.0		
Location:	SOUTH SIDE OF BEACH LAKE, ALONG MORRISON CREEK ON THE E SIDE OF I-5 ABOUT 1.3 MI SE OF FREEPORT BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS. HISTORICAL NEST SITES MENTIONED IN TABLE OF 2009 SWHA OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	2003 NEST IN 50' COTTONWOOD SUROUNDED BY FALLOW/RUDERAL LAND. AREA SURVEYED IN 2009; NEST NOT FOUND, BUT SURVEYOR NOTED NESTING IN DENSE VALLEY OAKS "IN PREVIOUS YEARS." ANOTHER HISTORICAL NEST SITE, ABOUT 0.3 MI SW, ALSO VACANT IN 2009.						
General:	NEST WITH 1 YOUNG OBSERVED ON 14 MAY 2003. JUVENILE OBS IN AREA ON 20 JUL 2009, BUT NO NEST FOUND.						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	1899	Map Index:	87690	EO Index:	88659	Element Last Seen:	2009-06-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44582 / -121.49011			Accuracy:	80 meters		
UTM:	Zone-10 N4256361 E631760			Elevation (ft):	5		
PLSS:	T07N, R04E, Sec. 24, NE (M)			Acres:	0.0		
Location:	EAST SIDE OF I-5 ON BEACH LAKE RD, ABOUT 0.4 MI N OF MORRISON CREEK CROSSING & 0.9 MI SE OF FREEPORT BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES FOR 2009 SWAINSON'S HAWK OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS. LOCATION STATED AS "NW SHORE OF MEADOWLARK LAKE."						
Ecological:							
General:	NEST WITH 1 DOWNY CHICK OBSERVED JUN 2009; NO ACTIVITY ON NEST OBS DURING 3 SURVEY DAYS IN JUL.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	1900	Map Index:	87691	EO Index:	88660	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45697 / -121.47463				Accuracy:	specific area	
UTM:	Zone-10 N4257621 E633091				Elevation (ft):	5	
PLSS:	T07N, R05E, Sec. 18, S (M)				Acres:	10.0	
Location:	ALONG MORRISON CREEK JUST W OF LAGUNA CREEK CONFLUENCE, ABOUT 1.5 MILES E OF FREEPORT BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES FOR 2 NEST SITES FROM 2009 SWAINSON'S HAWK OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS. LOCATIONS STATED AS "UPPER CELL & LAGUNA CREEK," "NORTH LEVEE & MORRISON CREEK."						
Ecological:	2009: BOTH NESTS IN GOODDING'S WILLOWS.						
General:	TWO ACTIVE NESTS MONITORED FROM MAY-JUL 2009; EACH FLEDGED 2 YOUNG.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	1901	Map Index:	87692	EO Index:	88661	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45507 / -121.46429				Accuracy:	80 meters	
UTM:	Zone-10 N4257425 E633997				Elevation (ft):	5	
PLSS:	T07N, R05E, Sec. 18, S (M)				Acres:	0.0	
Location:	NORTH SIDE OF WASTEWATER TREATMENT PLANT ALONG LAGUNA CREEK, ABOUT 0.4 MI SE OF MORRISON CREEK CONFLUENCE.						
Detailed Location:	COORDINATES FROM TABLE OF SWAINSON'S HAWK OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS, 2009. STATED LOCATION "SEPTAGE AREA ADJACENT TO TREATMENT PLANT."						
Ecological:	NEST IN GOODDING'S WILLOW.						
General:	ACTIVE NEST MONITORED MAY-JUL 2009; NEST FLEDGED 3 YOUNG.						
Owner/Manager:	SRCSD						



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Occurrence No.	1902	Map Index:	87696	EO Index:	88669	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44650 / -121.45410				Accuracy:	80 meters	
UTM:	Zone-10 N4256488 E634902				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 20, NE (M)				Acres:	0.0	
Location:	SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT PROPERTY, S OF LAGUNA CK ABOUT 0.5 MI SSW OF FRANKLIN BLVD AT CALVINE RD.						
Detailed Location:	MAPPED TO COORDINATES OF 2009 SWHA OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS. STATED LOCATION "FISH HEAD LAKE ON EAST SIDE OF BUFFERLANDS."						
Ecological:							
General:	ACTIVE NEST MONITORED MAY-JUL 2009; TWO YOUNG FLEDGED.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	1903	Map Index:	87698	EO Index:	88671	Element Last Seen:	1990-04-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43057 / -121.41613				Accuracy:	1/5 mile	
UTM:	Zone-10 N4254778 E638245				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 27, SE (M)				Acres:	0.0	
Location:	BIG HORN ROAD JUST EAST OF BRUCEVILLE ROAD INTERSECTION, ABOUT 0.9 MILE SW OF I-99 AT SHELDON ROAD.						
Detailed Location:	MAPPED TO TRS AND STATED LOCATION FOR TERRITORY #SA070 IN CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. NEST TREE AT "BIG HORN, EAST OF BRUCEVILLE." EXACT LOCATION OF NEST TREE NOT KNOWN.						
Ecological:	1990 NEST IN VALLEY OAK AMIDST OPEN FIELDS/GRASS. MUCH OF THE SURROUNDING AREA HAS BEEN FURTHER DEVELOPED SINCE THIS DETECTION.						
General:	2 ADULTS AND 1 JUVENILE SEEN AT NEST ON 20 APR 1990.						
Owner/Manager:	PVT						



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Occurrence No.	1904	Map Index:	87699	EO Index:	88672	Element Last Seen:	2004-06-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-06-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45130 / -121.41372				Accuracy:	80 meters	
UTM:	Zone-10 N4257082 E638417				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 22, NW (M)				Acres:	0.0	
Location:	NORTH SIDE OF SHASTA AVE ABOUT 0.2 MILE E OF BRUCEVILLE RD INTERSECTION & 0.3 MILE W OF W STOCKTON BLVD, ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	2004 NEST IN 100' EUCALYPTUS WITH RESIDENTIAL TO SOUTH AND FALLOW/RUDERAL TO NORTH. SUBSEQUENTLY TENNIS COURTS, PARK & LIBRARY WERE BUILT ON LAND W AND SW OF NEST SITE (FROM AERIALS).						
General:	SWHA PAIR OBSERVED ON AND/OR NEAR NEST ON 9 MAY & 24 JUN 2004; NO YOUNG OBSERVED, NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1905	Map Index:	87700	EO Index:	88673	Element Last Seen:	2010-06-25
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2010-06-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-25
Quad Summary:	Florin (3812144), Sacramento East (3812154)						
County Summary:	Sacramento						
Lat/Long:	38.49926 / -121.49382				Accuracy:	80 meters	
UTM:	Zone-10 N4262286 E631339				Elevation (ft):	10	
PLSS:	T08N, R04E, Sec. 36, SW (M)				Acres:	0.0	
Location:	SOUTHEAST CORNER OF BING MALONEY GOLF COURSE, ABOUT 0.3 MILE NW OF FLORIN RD AT 21ST STREET, SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	2009, 2010: NEST IN TALL COTTONWOOD WITHIN A GOLF COURSE FAIRWAY JUST NORTH OF A PUBLIC PARK. VISIBLE DISTURBANCE FROM RECREATION, POSSIBLE THREAT OF TREE REMOVAL DUE TO GOLF COURSE OPERATIONS.						
General:	2009: ACTIVE NEST, INCUBATION OBSERVED ON 20 MAY; 4 ADULTS SEEN, OTHER BREEDING PAIRS SUSPECTED IN VICINITY. 2010: NESTING SWHA & ADDITIONAL PAIR OBS 12 MAY; ADULT & 1 HATCHLING OBS ON NEST 25 JUN.						
Owner/Manager:	PVT						



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Occurrence No.	1906	Map Index:	87701	EO Index:	88674	Element Last Seen:	2009-07-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.38682 / -121.50699				Accuracy:	specific area	
UTM:	Zone-10 N4249791 E630393				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 11, SE (M)				Acres:	10.0	
Location:	ALONG CANAL ON EAST SIDE OF RR TRACKS BETWEEN THE SACRAMENTO RIVER & N STONE LAKE, ABOUT 1-1.4 MILES NNE OF HOOD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASES OF 2000-2004 & 2009 SWAINSON'S HAWK NEST RECORDS, & POINT FROM DWR SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2 NESTING TERRITORIES; N TERRITORY ACTIVE IN 2003 & '09; S IN '09. 2003: NEST IN 70' COTTONWOOD. 2009: N NEST IN 45' VALLEY OAK. S NEST IN 25' VALLEY OAK. SURROUNDING HABITAT RIPARIAN, SEASONAL WETLAND, GRASSLAND, FALLOW, PASTURE.						
General:	2003: ACTIVE NEST OBS 9 JUN; NEST SUCCESS UNKNOWN. 2009: N NEST OBS 28 APR, YOUNG SEEN IN NEST ON 19 JUN; YOUNG IN S NEST ON 17 JUL.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1907	Map Index:	87702	EO Index:	88675	Element Last Seen:	2009-06-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.38998 / -121.51581				Accuracy:	80 meters	
UTM:	Zone-10 N4250129 E629617				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 11, NW (M)				Acres:	0.0	
Location:	WEST SIDE OF SACRAMENTO RIVER AT RM 40, ABOUT 1.2 MILES S OF CO RD 141 INTERSECTION & 1.5 MILES N OF HOOD.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF 2009 SWAINSON'S HAWK NEST RECORDS. GIVEN DESCRIPTION "IN NE QUADRANT OF SURVEY BLOCK [#1826]. ALONG RIVER ROAD, NORTH OF COUNTY ROAD 142."						
Ecological:	2009: NEST IN 40' COTTONWOOD WITH FALLOW LAND TO THE WEST AND PASTURE TO THE NORTHEAST.						
General:	NEST WITH YOUNG OBSERVED ON 19 JUN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1909	Map Index:	87709	EO Index:	88677	Element Last Seen:	2009-04-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.39775 / -121.53581				Accuracy:	80 meters	
UTM:	Zone-10 N4250962 E627857				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 03, SW (M)				Acres:	0.0	
Location:	WEST SIDE OF ELK SLOUGH, ABOUT 0.2 MILE S OF CO RD 141 AT RD 144 & 1 MILE E OF TULE RD AT CENTRAL AVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	NEST IN 40' VALLEY OAK SURROUNDED BY FALLOW/RUDERAL LAND.						
General:	NEST WITH YOUNG OBSERVED ON 21 APRIL 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1910	Map Index:	87711	EO Index:	88679	Element Last Seen:	2009-07-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42920 / -121.59421				Accuracy:	80 meters	
UTM:	Zone-10 N4254373 E622703				Elevation (ft):	5	
PLSS:	T07N, R03E, Sec. 25, NE (M)				Acres:	0.0	
Location:	ALONG WILLOW POINT RD, 0.6 MILE W OF JEFFERSON BLVD & 3.7 MI WNW OF CLARKSBURG.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 25' WILLOW SURROUNDED BY ALFALFA FIELDS WITH OTHER CROPLAND TO THE SOUTHEAST.						
General:	SWAINSON'S HAWK(S) OBSERVED WITH DEFENSIVE BEHAVIOR ON 14 JUL 2009. NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1921	Map Index:	87731	EO Index:	88696	Element Last Seen:	2009-06-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.47360 / -121.59833				Accuracy:	specific area	
UTM:	Zone-10 N4259295 E622269				Elevation (ft):	5	
PLSS:	T07N, R03E, Sec. 12, NW (M)				Acres:	11.0	
Location:	YOLO BYPASS WILDLIFE AREA, ALONG OLD RAILROAD GRADE ABOUT 2 MI N OF TULE CANAL AT BABEL SLOUGH & 2.9 MI SW OF RIVERVIEW.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009 AND COORDINATES FOR SITE YO-84 FROM 2008 ESTEP REPORT.						
Ecological:	2007: NESTING TERRITORY DETECTED IN OAK GROVE ADJACENT TO SEASONAL WETLAND, RICE, AND ALFALFA. SURVEYOR MAY NOT HAVE BEEN ABLE TO DIRECTLY OBSERVE NEST/NEST TREE. 2009: NEST IN 30' WILLOW WITH SEASONAL WETLANDS TO NORTH & PASTURE TO SOUTH.						
General:	NESTING TERRITORY DETECTED DURING 2007 SURVEY; NESTING OUTCOME UNKNOWN/UNCONFIRMED. ACTIVE NEST, INCUBATION OBSERVED ON 11 JUN 2009; NEST SUCCESS UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	1922	Map Index:	87732	EO Index:	88698	Element Last Seen:	2009-04-27
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.48883 / -121.62131				Accuracy:	80 meters	
UTM:	Zone-10 N4260954 E620239				Elevation (ft):	5	
PLSS:	T08N, R03E, Sec. 35, SW (M)				Acres:	0.0	
Location:	YOLO BYPASS WILDLIFE AREA, ABOUT 1.8 MILES SE OF RD 35 AT RD 106A & 2.4 MILES WNW OF ARCADE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 25' WILLOW SURROUNDED BY SEASONAL WETLANDS, WITH CROPLAND TO THE NW.						
General:	NEST-BUILDING OBSERVED ON 27 APR 2009. NEST SUCCESS UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	1923	Map Index:	87736	EO Index:	88702	Element Last Seen:	2009-06-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Clarksburg (3812145), Sacramento West (3812155)						
County Summary:	Yolo						
Lat/Long:	38.50156 / -121.59485			Accuracy:	specific area		
UTM:	Zone-10 N4262402 E622525			Elevation (ft):	10		
PLSS:	T08N, R03E, Sec. 36, NE (M)			Acres:	17.0		
Location:	EAST SIDE OF YOLO BYPASS WILDLIFE AREA, ABOUT 1.1 MI SSW OF S FORK PUTAH CREEK AT TOE DRAIN & 1.8 MI WSW OF RIVERVIEW.						
Detailed Location:	COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004, & POINTS FROM CDFW SHAPEFILE OF NEST RECORDS FROM 2009. '02 NEST SITE AT "SE CORNER OF CLOSED ZONE," '03 "NEAR EAST LEVEE, BOTTOM END OF OLD NAGGS PROPERTY."						
Ecological:	2002: NEST IN 50' COTTONWOOD SURROUNDED BY FALLOW/RUDERAL LAND. 2003: NEST IN SAME/ADJACENT TREE AS IN '02; PASTURE TO S. 2004: NEST IN 75' COTTONWOOD; IN PASTURE. 2009: NEST IN 30' WILLOW ABOUT 130M W OF '04 NEST TREE; IN SEASONAL WETLAND.						
General:	2002: NEST WITH 1 PARTIALLY-FEATHERED YOUNG OBSERVED ON 22 APR. 2003: NEST WITH 1 FEATHERED YOUNG OBS 30 MAY. 2004: ACTIVE NEST OBS 27 MAY; NO YOUNG OBS. 2009: NEST WITH YOUNG OBS ON 8 JUN.						
Owner/Manager:	DFG-YOLO BYPASS WA, UNKNOWN						

Occurrence No.	1924	Map Index:	87737	EO Index:	88703	Element Last Seen:	2009-06-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.35568 / -121.64182			Accuracy:	80 meters		
UTM:	Zone-10 N4246152 E618668			Elevation (ft):	10		
PLSS:	T06N, R03E, Sec. 21, NE (M)			Acres:	0.0		
Location:	ALONG TOE DRAIN, ABOUT 0.7 MILE W OF RD 150 AT N COURTLAND RD & 3.3 MILES SW OF GREENDALE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 40' COTTONWOOD WITH FALLOW/RUDERAL LANDS TO THE EAST AND SEASONAL WETLANDS TO THE WEST.						
General:	NEST WITH YOUNG OBSERVED ON 10 JUN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1925	Map Index:	87738	EO Index:	88704	Element Last Seen:	2009-05-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.29243 / -121.63207				Accuracy:	1/10 mile	
UTM:	Zone-10 N4239146 E619624				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 10, E (M)				Acres:	0.0	
Location:	NORTH SIDE OF MINER SLOUGH, JUST SOUTH OF HOLLAND RD AT SR 84, 0.7 MILE E OF FIVE POINTS.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE UNKNOWN.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	1 NESTING SWAINSON'S HAWK OBSERVED ON 18 MAY 2009; NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1927	Map Index:	87748	EO Index:	88712	Element Last Seen:	2009-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-26
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.27354 / -121.66060				Accuracy:	1/10 mile	
UTM:	Zone-10 N4237014 E617159				Elevation (ft):	5	
PLSS:	T05N, R03E, Sec. 17, SE (M)				Acres:	0.0	
Location:	WEST SIDE OF PROSPECT ISLAND ON THE SACRAMENTO RIVER, ABOUT 1.5 MI SW OF FIVE POINTS AND 2.7 MI NE OF HASTINGS FERRY.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE UNKNOWN.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	1 NESTING SWAINSON'S HAWK OBSERVED ON 13 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1959	Map Index:	87942	EO Index:	88947	Element Last Seen:	2009-04-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-17
Quad Summary:	Saxon (3812146), Davis (3812156)						
County Summary:	Yolo						
Lat/Long:	38.50003 / -121.65859				Accuracy:	80 meters	
UTM:	Zone-10 N4262150 E616969				Elevation (ft):	20	
PLSS:	T08N, R03E, Sec. 33, NW (M)				Acres:	0.0	
Location:	ALONG COUNTY ROAD 106, ABOUT 0.1 MILE SOUTH OF ROAD 35 AND 5 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NES IN 30' WILLOW, WITH PASTURE TO THE EAST AND ALFALFA TO THE WEST.						
General:	INCUBATION OBSERVED ON 23 APR 2009; NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1969	Map Index:	87994	EO Index:	89036	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.47999 / -121.57849				Accuracy:	80 meters	
UTM:	Zone-10 N4260030 E623989				Elevation (ft):	20	
PLSS:	T07N, R04E, Sec. 06, SE (M)				Acres:	0.0	
Location:	ALONG SACRAMENTO NORTHERN RR, ABOUT 0.3 MILE NNE OF ARCADE, 1.9 MI SW OF RIVERVIEW.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-81 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN VALLEY OAK IN CHANNELIZED RIPARIAN HABITAT, SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1970	Map Index:	87995	EO Index:	89037	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.47316 / -121.57466				Accuracy:	80 meters	
UTM:	Zone-10 N4259277 E624335				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 08, NW (M)				Acres:	0.0	
Location:	ALONG UNNAMED SLOUGH ABOUT 0.3 MI ESE OFARCADE & 2 MI SSW OF GARCIA BEND.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-82 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN VALLEY OAK IN CHANNELIZED RIPARIAN HABITAT, SURROUNDED BY ALFALFA, IRRIGATED CROPLAND AND VINEYARDS.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1971	Map Index:	87996	EO Index:	89038	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.49132 / -121.57282				Accuracy:	80 meters	
UTM:	Zone-10 N4261295 E624464				Elevation (ft):	20	
PLSS:	T07N, R04E, Sec. 05, NW (M)				Acres:	0.0	
Location:	ALONG SACRAMENTO NORTHERN RAILROAD, ABOUT 0.9 MILE SW OF GARCIA BEND AND 1.1 MILES NNE OF ARCADE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-79 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN VALLEY OAK IN CHANNELIZED RIPARIAN HABITAT, SURROUNDED BY IRRIGATED CROPLAND.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1972	Map Index:	87997	EO Index:	89039	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-03-20
Quad Summary:	Clarksburg (3812145), Sacramento West (3812155)						
County Summary:	Yolo						
Lat/Long:	38.50015 / -121.56932				Accuracy:	1/10 mile	
UTM:	Zone-10 N4262279 E624754				Elevation (ft):	20	
PLSS:	T08N, R04E, Sec. 32, NW (M)				Acres:	0.0	
Location:	ALONG SACRAMENTO NORTHERN RAILROAD, ABOUT 0.5 MI W OF GARCIA BEND & 1.7 MI NNE OF ARCADE.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-65 FROM 2008 ESTEP REPORT.						
Ecological:	NEST TREE SPECIES NOT RECORDED: THE SURVEYOR MAY NOT HAVE BEEN ABLE TO DIRECTLY OBSERVE THE NEST OR NEST TREE. SURROUNDING HABITAT WAS CHANNELIZED RIPARIAN HABITAT, ALFALFA AND IRRIGATED CROPLAND.						
General:	NESTING TERRITORY DETECTED DURING 2007 SURVEY; NESTING OUTCOME UNKNOWN/UNCONFIRMED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1973	Map Index:	87998	EO Index:	89040	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.44432 / -121.57782				Accuracy:	80 meters	
UTM:	Zone-10 N4256074 E624108				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 19, NE (M)				Acres:	0.0	
Location:	JUST NORTH OF REAMER LANE, ABOUT 0.3 MILE SE OF JEFFERSON BLVD AT RD 38B AND 3.1 MILES NW OF CLARKSBURG.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-90 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN VALLEY OAK IN OAK GROVE, ADJACENT TO VINEYARDS, IRRIGATED CROPLANDS, AND ALFALFA.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1974	Map Index:	88000	EO Index:	89042	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.43616 / -121.51232				Accuracy:	80 meters	
UTM:	Zone-10 N4255257 E629839				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 26, NW (M)				Acres:	0.0	
Location:	NORTH SIDE SACRAMENTO RIVER AT RM 45.6, ABOUT 1.2 MI ENE OF CO HWY E9 AT RD 39.						
Detailed Location:	MAPPED TO COORDINATES FOR YO-89 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN RIPARIAN COTTONWOOD SURROUNDED BY IRRIGATED CROPLAND, ALFALFA, AND VINEYARDS.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1975	Map Index:	88001	EO Index:	89043	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.43216 / -121.54716				Accuracy:	80 meters	
UTM:	Zone-10 N4254765 E626806				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 28, N (M)				Acres:	0.0	
Location:	WINCHESTER LAKE AT RAILROAD CROSSING; ON THE W SIDE OF THE SACRAMENTO RIVER ABOUT 0.5 MI NE OF WILLOW POINT.						
Detailed Location:	MAPPED TO COORDINATES FOR YO-92 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN RIPARIAN WILLOW ADJACENT TO ALFALFA AND IRRIGATED CROPLAND.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY, SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1976	Map Index:	88004	EO Index:	89045	Element Last Seen:	2008-06-06
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-06-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-30
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.41761 / -121.53219				Accuracy:	nonspecific area	
UTM:	Zone-10 N4253171 E628138				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 34, NW (M)				Acres:	196.0	
Location:	VICINITY OF ELK SLOUGH, FROM THE SACRAMENTO RIVER CONFLUENCE TO WOOD DUCK LANE, ON THE SOUTH SIDE OF CLARKSBURG.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-94 FROM 2008 ESTEP REPORT, AND VICINITY OF ELK SLOUGH POINT COUNT SITES FROM 2009 BIRD MONITORING REPORT.						
Ecological:	2007 NEST IN VALLEY OAK IN TREE ROW, ADJACENT TO URBAN, ORCHARD, VINEYARD AND IRRIGATED CROPLAND. ADULT OBSERVED FORAGING OVER CROPLAND ABOUT 0.3 MILE NORTH IN 2008.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS NOT RECORDED. "CONFIRMED BREEDER" AT ELK SLOUGH IN 2008 PER PRBO POINT COUNTS; NESTING/FLEDGING DETAILS NOT REPORTED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1977	Map Index:	88005	EO Index:	89047	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-01-24	

Quad Summary: Courtland (3812135)

County Summary: Yolo

Lat/Long:	38.32757 / -121.58637	Accuracy:	80 meters
UTM:	Zone-10 N4243107 E623561	Elevation (ft):	5
PLSS:	T06N, R03E, Sec. 36, NE (M)	Acres:	0.0

Location: ALONG SUTTER SLOUGH, ABOUT 0.4 MI ENE OF MORSE RD AT SUTTER RD & 0.6 MI W OF MORGANS LANDING ON THE SACRAMENTO RIVER.

Detailed Location: MAPPED TO COORDINATES GIVEN FOR SITE YO-99 FROM 2008 ESTEP REPORT. 2003 DETECTION WAS ABOUT 0.3 MILE TO SOUTH.

Ecological: 2003: "DAMAGED NEST" OBSERVED IN 40' COTTONWOOD. 2007: NEST IN RIPARIAN COTTONWOOD SURROUNDED BY ALFALFA AND IRRIGATED AGRICULTURE.

General: ACTIVE NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.

Owner/Manager: UNKNOWN

Occurrence No.	1978	Map Index:	88006	EO Index:	89048	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-03-20	

Quad Summary: Courtland (3812135)

County Summary: Yolo

Lat/Long:	38.33749 / -121.58116	Accuracy:	1/10 mile
UTM:	Zone-10 N4244213 E623999	Elevation (ft):	5
PLSS:	T06N, R04E, Sec. 30, S (M)	Acres:	0.0

Location: EAST SIDE OF ELK SLOUGH ABOUT 0.3 MILE SOUTH OF RD 158 BRIDGE AND 0.8 MILE NW OF THE COURTLAND POST OFFICE.

Detailed Location: MAPPED TO COORDINATES FOR SITE YO-98 FROM 2008 ESTEP REPORT.

Ecological: SURVEYOR WAS UNABLE TO DIRECTLY OBSERVE NEST TREE; NESTING TERRITORY DETECTED WITHIN RIPARIAN HABITAT SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.

General: NESTING TERRITORY DETECTED DURING 2007 SURVEY; NESTING OUTCOME UNKNOWN/UNCONFIRMED.

Owner/Manager: UNKNOWN



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Occurrence No.	1979	Map Index:	88007	EO Index:	89049	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-29
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33933 / -121.65665				Accuracy:	80 meters	
UTM:	Zone-10 N4244319 E617398				Elevation (ft):	10	
PLSS:	T06N, R03E, Sec. 28, NW (M)				Acres:	0.0	
Location:	LIBERTY ISLAND, ABOUT 1.2 MILES WSW OF ROAD 150 AT ROAD 158 & 2.75 MILES NE OF LIBERTY FARMS.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-95 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN WILLOW IN CHANNELIZED RIPARIAN HABITAT SURROUNDED BY SEASONAL WETLAND AND ALFALFA.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1980	Map Index:	88008	EO Index:	89050	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-25
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33441 / -121.63015				Accuracy:	80 meters	
UTM:	Zone-10 N4243808 E619723				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 27, S (M)				Acres:	0.0	
Location:	RYER AVE ABOUT 0.7 MI S OF RD 158 JUNCTION & 1 MI NW OF VALDEZ.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-51 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN COTTONWOOD IN ROADSIDE TREE ROW, SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1981	Map Index:	88009	EO Index:	89051	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-27
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.32066 / -121.62916				Accuracy:	1/10 mile	
UTM:	Zone-10 N4242283 E619832				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 34, SE (M)				Acres:	0.0	
Location:	E SIDE OF RYER AVENUE, ABOUT 0.3 MI S OF SUTTER ROAD INTERSECTION AND 1 MI N OF OXFORD RD, 1 MI NE OF MEDORA LAKE.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-96 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN COTTONWOOD IN ROADSIDE TREE ROW, SURROUNDED BY IRRIGATED CROPLAND.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1982	Map Index:	88010	EO Index:	89052	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-25
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.37076 / -121.55369				Accuracy:	80 meters	
UTM:	Zone-10 N4247943 E626343				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 16, NW (M)				Acres:	0.0	
Location:	W SIDE OF ELK SLOUGH, ABOUT 0.4 MI E OF NETHERLANDS RD AT WAUKEENA RD, 2 MI W OF HOOD.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-52 IN 2008 ESTEP REPORT.						
Ecological:	NEST IN RIPARIAN VALLEY OAK SURROUNDED BY VINEYARDS, ALFALFA, AND IRRIGATED CROPLAND.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1983	Map Index:	88011	EO Index:	89053	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-25
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.34277 / -121.64524				Accuracy:	80 meters	
UTM:	Zone-10 N4244716 E618390				Elevation (ft):	15	
PLSS:	T06N, R03E, Sec. 28, NE (M)				Acres:	0.0	
Location:	WEST SIDE OF DEEP WATER SHIP CHANNEL ON LIBERTY ISLAND ABOUT 2 MI NW OF VALDEZ.						
Detailed Location:	MAPPED TO SITE YO-50 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN COTTONWOOD IN CHANNELIZED RIPARIAN HABITAT, SUROUNDED BY IRRIGATED CROPLAND, ALFALFA, AND SEASONAL WETLAND.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	2236	Map Index:	88702	EO Index:	89719	Element Last Seen:	2009-04-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48508 / -121.63052				Accuracy:	80 meters	
UTM:	Zone-10 N4260526 E619442				Elevation (ft):	10	
PLSS:	T07N, R03E, Sec. 03, N (M)				Acres:	0.0	
Location:	YOLO BYPASS WILDLIFE AREA, ABOUT 1.9 MILES SE OF RD 35 AT RD 106 AND 2.8 MILES WNW OF ARCADE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NESTS RECORDED IN 2009.						
Ecological:	NEST IN 35' COTTONWOOD SURROUNDED BY SEASONAL WETLANDS WITH CROPLAND TO THE NORTHEAST.						
General:	ACTIVE NEST, INCUBATION OBSERVED ON 23 APR 2009; NESTING OUTCOME UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	2237	Map Index:	88713	EO Index:	89721	Element Last Seen:	2004-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48115 / -121.63952			Accuracy:	80 meters		
UTM:	Zone-10 N4260078 E618663			Elevation (ft):	10		
PLSS:	T07N, R03E, Sec. 04, E (M)			Acres:	0.0		
Location:	ALONG W BOUNDARY OF YOLO BYPASS WA, ABOUT 1 MI ESE OF RD 36 AT RD 106 & 3.3 MI W OF ARCADE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR CDFW NEST RECORD FROM 2004.						
Ecological:	NEST IN 40' COTTONWOOD SURROUNDED BY GRAZED LAND.						
General:	NEST WITH 1 FEATHERED CHICK OBSERVED ON 13 MAY 2004; FLEDGING SUCCESS UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA, UNKNOWN						
Occurrence No.	2238	Map Index:	88707	EO Index:	89723	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49440 / -121.64012			Accuracy:	80 meters		
UTM:	Zone-10 N4261548 E618589			Elevation (ft):	15		
PLSS:	T08N, R03E, Sec. 34, W (M)			Acres:	0.0		
Location:	WEST OF THE YOLO BYPASS WA, ABOUT 0.7 MI SE OF RD 35 AT RD 106A AND 3.5 MI WNW OF ARCADE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-112 FROM ESTEP'S 2008 REPORT.						
Ecological:	NEST IN LONE EUCALYPTUS SURROUNDED BY IRRIGATED CROPLAND AND ALFALFA.						
General:	ACTIVITY AT NEST OBSERVED DURING 2007 SURVEY; NESTING OUTCOME NOT CONFIRMED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	2239	Map Index:	88711	EO Index:	89727	Element Last Seen:	2004-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.46589 / -121.64227			Accuracy:	80 meters		
UTM:	Zone-10 N4258381 E618449			Elevation (ft):	15		
PLSS:	T07N, R03E, Sec. 09, SE (M)			Acres:	0.0		
Location:	GLIDE RANCH, ALONG RD 38, ABOUT 0.8 MI E OF THE RD 106 JUNCTION & 4.8 MI NW OF JEFFERSON BLVD AT CLARKSBURG RD.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR CDFW NEST RECORD FROM 2004.						
Ecological:	NEST IN 75' EUCALYPTUS SURROUNDED BY GRAZING LAND.						
General:	ACTIVE NEST, BUT NO YOUNG OBSERVED ON 13 MAY 2004; NESTING OUTCOME UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	2240	Map Index:	88714	EO Index:	89729	Element Last Seen:	2004-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.44849 / -121.66644				Accuracy:	80 meters	
UTM:	Zone-10 N4256420 E616368				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, SW (M)				Acres:	0.0	
Location:	YOLO BYPASS WA, ABOUT 0.5 MILE SE OF RD 105 AT RD 38A AND 5.1 MILES NW OF JEFFERSON BLVD AT CLARKSBURG RD.						
Detailed Location:	MAPPED TO COODINATES GIVEN FOR CDFW NEST RECORD FROM 2004.						
Ecological:	NEST IN 75' EUCALYPTUS SURROUNDED BY GRAZING LAND.						
General:	ACTIVE NEST, INCUBATION OBSERVED ON 13 MAY 2004; NEST WAS LATER ABANDONED, POSSIBLY DUE TO WIND DAMAGE.						
Owner/Manager:	DFG-YOLO BYPASS WA						
Occurrence No.	2253	Map Index:	88790	EO Index:	89805	Element Last Seen:	1989-06-06
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1989-06-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43059 / -121.39761				Accuracy:	1/5 mile	
UTM:	Zone-10 N4254808 E639862				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 26, E (M)				Acres:	0.0	
Location:	ALONG LAGUNA CREEK, JUST EAST OF HWY 99 IN ELK GROVE.						
Detailed Location:	TERRITORY "SA" (NO # ASSIGNED) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO LOCALITY "HWY 99 AT LAGUNA CK."						
Ecological:	NEST IN 40' OREGON ASH, 50' EAST OF HIGHWAY BETWEEN SOUTH AND MIDDLE CHANNELS.						
General:	NESTING PAIR OBSERVED ON 6 JUN 1989; NESTING SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN, SAC COUNTY						



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Occurrence No.	2290	Map Index:	88922	EO Index:	89929	Element Last Seen:	2003-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-19
Quad Summary:	Lodi North (3812123), Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.13083 / -121.37648			Accuracy:	1/5 mile		
UTM:	Zone-10 N4221576 E642290			Elevation (ft):	20		
PLSS:	T03N, R05E, Sec. 01 (M)			Acres:	0.0		
Location:	VICINITY OF 5111 W SARGENT RD, JUST WEST OF THE RAY RD INTERSECTION, ABOUT 3.75 MILES WEST OF LODI.						
Detailed Location:	MAPPED TO VICINITY OF LOCATION DESCRIPTION FOR SITE SG1 FROM 2004 THESIS, "SYCAMORE LANE KENNELS (OFF SARGENT/RAY RDS)."						
Ecological:	RURAL RESIDENTIAL AREA, SURROUNDING HABITAT INCLUDED IRRIGATED PASTURE USED FOR GRAZING. SUSPECTED NEST TREE WAS AN "OAK IN PASTURE" IN 2003.						
General:	TERRITORIAL PAIR OBSERVED THROUGHOUT SEASON IN 2002; NEST SITE "NARROWED DOWN TO GROVE" BUT NEST NEVER SEEN. TERRITORIAL SWHA OBSERVED AT SAME LOCATION IN 2003, FLYING TO AND FROM THE SAME TREES; NO NEST OR FLEDGLINGS OBSERVED.						
Owner/Manager:	PVT						
Occurrence No.	2678	Map Index:	99867	EO Index:	101413	Element Last Seen:	2015-04-05
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2015-04-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-05-03
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.4328 / -121.6912			Accuracy:	80 meters		
UTM:	Zone-10 N4254648 E614233			Elevation (ft):	23		
PLSS:	T07N, R03E, Sec. 19, SW (M)			Acres:	5.0		
Location:	ABOUT 0.2 MILE NE OF COUNTY RD 104 (HYDE RD) AT THOMSEN RD & 2.4 MILES NE OF YOLANO, WEST OF THE YOLO BYPASS WA.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. ON TULE RANCH PROPERTY.						
Ecological:	NEST IN MID-SIZED DECIDUOUS TREE IN IRRIGATED PASTURE. THE SOUTHERN PORTION OF TULE RANCH IS IN A SWAINSON'S HAWK CONSERVATION EASEMENT. THE NORTHERN PORTION WILL BE PLACED IN A "MITIGATION RECEIVING SITE" UNDER THE YOLO COUNTY HCP.						
General:	PAIR OBSERVED NEST-BUILDING ON 5 APR 2015.						
Owner/Manager:	PVT						



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Occurrence No.	2687	Map Index:	A1670	EO Index:	103261	Element Last Seen:	2015-07-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2015-07-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-08-30
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48202 / -121.43839				Accuracy:	80 meters	
UTM:	Zone-10 N4260454 E636207				Elevation (ft):	21	
PLSS:	T07N, R05E, Sec. 4, SW (M)				Acres:	5.0	
Location:	NE CORNER OF PERSIMMON AVENUE & TANGERINE AVENUE IN SOUTH SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	NEST IN BACKYARD EUCALYPTUS TREE IN SUBURB OF SOUTH SACRAMENTO.						
General:	NESTING PAIR MONITORED IN 2015 SUCCESSFULLY RAISED 1 FLEDGLING.						
Owner/Manager:	PVT						
Occurrence No.	2741	Map Index:	A8257	EO Index:	110038	Element Last Seen:	2017-04-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2017-04-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-26
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.30531 / -121.7301				Accuracy:	1/10 mile	
UTM:	Zone-10 N4240454 E611032				Elevation (ft):	0	
PLSS:	T05N, R02E, Sec. 2, SW (M)				Acres:	18.0	
Location:	ISLAND IN HAAS SLOUGH, ABOUT 0.1 MI SE OF THE DUCK SLOUGH CONFLUENCE & 1.6 MI ESE OF BARTLETT RD AT BUNKER STATION RD.						
Detailed Location:	MAPPED TO PROVIDED MAP.						
Ecological:	NEST IN VALLEY OAK ON ISLAND WITH RIPARIAN VEGETATION. AREA USED FOR AGRICULTURE INCLUDING GRAZING AND FARMING.						
General:	COPULATION, NESTING AND BROODING BEHAVIOR OBSERVED 10-12 APR 2017.						
Owner/Manager:	PVT						



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Buteo regalis

Element Code: ABNKC19120

ferruginous hawk

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G4
State: None **State:** S3S4
Other: CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern
Habitat: **General:** OPEN GRASSLANDS, SAGEBRUSH FLATS, DESERT SCRUB, LOW FOOTHILLS AND FRINGES OF PINYON AND JUNIPER HABITATS.
Micro: EATS MOSTLY LAGOMORPHS, GROUND SQUIRRELS, AND MICE. POPULATION TRENDS MAY FOLLOW LAGOMORPH POPULATION CYCLES.

Occurrence No. 73 **Map Index:** 71225 **EO Index:** 72130 **Element Last Seen:** 2003-09-25
Occ. Rank: Good **Presence:** Presumed Extant **Site Last Seen:** 2003-09-25
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2008-04-30

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.45732 / -121.48871 **Accuracy:** 1/10 mile
UTM: Zone-10 N4257639 E631861 **Elevation (ft):** 15
PLSS: T07N, R04E, Sec. 13, SE (M) **Acres:** 0.0

Location: 0.3 MILE EAST OF I-5, ALONG SERVICE ROAD FOR SACRAMENTO REGIONAL CO. SANITATION DISTRICT BUFFERLANDS, EAST OF FREEPORT.
Detailed Location: MAPPED ACCORDING TO STATED UTM COORDINATES. THIS AREA NOTED AS BEING A TRADITIONAL TRANSIENT/WINTERING SITE.
Ecological: HABITAT: 2,650 ACRE COUNTY PRESERVE MANAGED FOR WILDLIFE; EAST SIDE DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS; WEST SIDE DOMINATED BY SEASONAL WETLANDS, RIPARIAN FORESTS AND GRASSLANDS.
General: 1 ADULT, WINTERING ON 25 SEP 2003. SEEN ON LEVEE.
Owner/Manager: SRCSD-BUFFERLANDS

Occurrence No. 74 **Map Index:** 71226 **EO Index:** 72132 **Element Last Seen:** 2003-09-22
Occ. Rank: Good **Presence:** Presumed Extant **Site Last Seen:** 2003-09-22
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2008-04-30

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.44805 / -121.46538 **Accuracy:** 1/10 mile
UTM: Zone-10 N4256644 E633915 **Elevation (ft):** 15
PLSS: T07N, R05E, Sec. 19, NE (M) **Acres:** 0.0

Location: SAC CO WASTEWATER TREATMENT PLANT, 1.3 MILES NW OF INTERSECTION OF SIMS RD & FRANKLIN BLVD (CO HWY J8), ELK GROVE.
Detailed Location: MAPPED ACCORDING TO STATED UTM COORDINATES.
Ecological: WASTEWATER TREATMENT PLANT SURROUNDED BY 2650 ACRE PRESERVE MANAGED FOR WIDLIFE; EAST: ANNUAL GRASSLANDS WITH VERNAL POOLS & SEASONAL WETLANDS; WEST: SEASONAL WETLANDS, RIPARIAN FORESTS & GRASSLANDS.
General: 1 ADULT, WINTERING ON 22 SEP 2003. OBSERVED FLYING OVER SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT.
Owner/Manager: SRCSD

Falco columbarius

Element Code: ABNKD06030

merlin

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G5
State: None **State:** S3S4



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Habitat:	Other:	CDFW_WL-Watch List, IUCN_LC-Least Concern					
	General:	SEACOAST, TIDAL ESTUARIES, OPEN WOODLANDS, SAVANNAHS, EDGES OF GRASSLANDS & DESERTS, FARMS & RANCHES.					
	Micro:	CLUMPS OF TREES OR WINDBREAKS ARE REQUIRED FOR ROOSTING IN OPEN COUNTRY.					
Occurrence No.	13	Map Index:	71836	EO Index:	72717	Element Last Seen:	2004-12-13
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-12-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-07-30
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45412 / -121.48350			Accuracy:	80 meters		
UTM:	Zone-10 N4257292 E632322			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 13, SE (M)			Acres:	0.0		
Location:	JUST NORTHEAST OF MORRISON CREEK & EAST OF HWY 5, ABOUT 1 MILE ESE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	SACRAMENTO REGIONAL WASTEWATER TREATMENTO PLANT'S UPPER BEACH LAKE PRESERVE (STONE LAKES NWP). MAPPED TO PROVIDED COORDINATES.						
Ecological:	SEASONAL WETLANDS W/ GRASSLANDS TO WEST & RIPARIAN FOREST ALONG LAGUNA CREEK TO THE EAST. WASTEWATER TREATMENT PONDS TO EAST OF OBSERVATION HARBOR HUNDREDS/THOUSANDS OF SHOREBIRDS; MERLINS SEEN HUNTING THERE IN THE PAST.						
General:	1 WINTERING ADULT OBSERVED 13 DEC 2004 (USUALLY ANYWHERE FROM 1-5 OBSERVATIONS EACH FALL TO EARLY SPRING).						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	19	Map Index:	71863	EO Index:	72736	Element Last Seen:	2004-01-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-01-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45313 / -121.47096			Accuracy:	80 meters		
UTM:	Zone-10 N4257200 E633418			Elevation (ft):			
PLSS:	T07N, R05E, Sec. 18 (M)			Acres:	0.0		
Location:	SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT, 1.7 MILES ESE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. NORTHWEST PORTION OF SAC REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	THE EAST SIDE OF THE BUFFERLANDS IS DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS. THE WEST SIDE OF THE PROPERTY IS DOMINATED BY SEASONAL WETLANDS, RIPARIAN FOREST AND GRASSLANDS.						
General:	1 OVER-WINTERING ADULT (F. C. COLUMBARIUS) OBSERVED ON FENCE ON 12 JAN 2004.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	20	Map Index:	71866	EO Index:	72737	Element Last Seen:	2004-02-17
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2004-02-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2008-11-05	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44829 / -121.45501			Accuracy:	80 meters		
UTM:	Zone-10 N4256687 E634819			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 20, N (M)			Acres:	0.0		
Location:	SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT, NEAR LAGUNA CRK, 2.8 MILES ESE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. AT "FISH HEAD LAKE" MITIGATION WETLAND, SAC REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	THE EAST SIDE OF THE BUFFERLANDS IS DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS. THE WEST SIDE OF THE PROPERTY IS DOMINATED BY SEASONAL WETLANDS, RIPARIAN FOREST AND GRASSLANDS.						
General:	1 OVER-WINTERING ADULT OBSERVED ON 17 FEB 2004.						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	21	Map Index:	71867	EO Index:	72738	Element Last Seen:	2004-03-20
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2004-03-20	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2008-08-01	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43849 / -121.44823			Accuracy:	80 meters		
UTM:	Zone-10 N4255608 E635429			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 20, SE (M)			Acres:	0.0		
Location:	SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT, 3.2 MILES SE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. SEEN AT EASTERN ENTRANCE ROAD (SIMS RD) TO SAC REGIONAL WASTEWATER TREATMENT PLANT.						
Ecological:	THE EAST SIDE OF THE BUFFERLANDS IS DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS. THE WEST SIDE OF THE PROPERTY IS DOMINATED BY SEASONAL WETLANDS, RIPARIAN FOREST AND GRASSLANDS.						
General:	1 OVER-WINTERING MALE ADULT (F. C. SUCKLEYI) OBSERVED PERCHED ON SMALL OAK ON 20 MAR 2004.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	22	Map Index:	71868	EO Index:	72739	Element Last Seen:	2004-03-22
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-03-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-08-01
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43386 / -121.47964				Accuracy:	80 meters	
UTM:	Zone-10 N4255049 E632696				Elevation (ft):	10	
PLSS:	T07N, R05E, Sec. 30, NW (M)				Acres:	0.0	
Location:	SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT, 2 MILES SE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. SEEN AT THE SOUTHWEST PORTION OF SAC REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	THE EAST SIDE OF THE BUFFERLANDS IS DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS. THE WEST SIDE OF THE PROPERTY IS DOMINATED BY SEASONAL WETLANDS, RIPARIAN FOREST AND GRASSLANDS.						
General:	1 OVER-WINTERING FEMALE ADULT OBSERVED ON 22 MAR 2004.						
Owner/Manager:	SRCSD-BUFFERLANDS						

<i>Falco peregrinus anatum</i>				Element Code: ABNKD06071			
American peregrine falcon							
Listing Status:	Federal:	Delisted			CNDDB Element Ranks:	Global:	G4T4
	State:	Delisted				State:	S3S4
	Other:	CDF_S-Sensitive, CDFW_FP-Fully Protected, USFWS_BCC-Birds of Conservation Concern					
Habitat:	General:	NEAR WETLANDS, LAKES, RIVERS, OR OTHER WATER; ON CLIFFS, BANKS, DUNES, MOUNDS; ALSO, HUMAN-MADE STRUCTURES.					
	Micro:	NEST CONSISTS OF A SCRAPE OR A DEPRESSION OR LEDGE IN AN OPEN SITE.					

* SENSITIVE *

Occurrence No.	48	Map Index:	A0630	EO Index:	102187	Element Last Seen:	2015-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2015-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-06-17
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:					Accuracy:	1/10 mile	
UTM:					Elevation (ft):	10	
PLSS:					Acres:	18.0	
Location:	*SENSITIVE* LOCATION INFORMATION SUPPRESSED.						
Detailed Location:	PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493						
Ecological:	URBAN STRUCTURE - DRAWBRIDGE OVER RIVER, ADJACENT TO AGRICULTURAL LAND.						
General:							
Owner/Manager:							



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Laterallus jamaicensis coturniculus

Element Code: ABNME03041

California black rail

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G3G4T1
State: Threatened **State:** S1
Other: BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_NT-Near Threatened, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern
Habitat: **General:** INHABITS FRESHWATER MARSHES, WET MEADOWS AND SHALLOW MARGINS OF SALTWATER MARSHES BORDERING LARGER BAYS.
Micro: NEEDS WATER DEPTHS OF ABOUT 1 INCH THAT DO NOT FLUCTUATE DURING THE YEAR AND DENSE VEGETATION FOR NESTING HABITAT.

Occurrence No. 329 **Map Index:** A5589 **EO Index:** 107327 **Element Last Seen:** 2015-03-27
Occ. Rank: Good **Presence:** Presumed Extant **Site Last Seen:** 2015-03-27
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2017-07-31

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long: 38.36993 / -121.49398 **Accuracy:** 80 meters
UTM: Zone-10 N4247934 E631561 **Elevation (ft):** 10
PLSS: T06N, R04E, Sec. 13, SW (M) **Acres:** 5.0

Location: BLUE HERON TRAILS, SOUTH SIDE OF HOOD FRANKLIN ROAD, 1 MILE WEST OF INTERSTATE 5, STONE LAKES NATIONAL WILDLIFE REFUGE.

Detailed Location: DETECTED IN THE MARSH THAT IS BISECTED BY TWO BRIDGES.

Ecological: FORMERLY THE SITE OF AGRICULTURE / VINEYARD UNTIL AROUND 2006 WHEN RESTORATION EFFORTS CONSTRUCTED SEASONAL WETLANDS AND MANAGED GRASSLANDS PRIMARILY FOR ENVIRONMENTAL EDUCATION AND NATIVE HABITATS.

General: ONE OR MORE OBSERVED AND HEARD THROUGHOUT MAR 2015 BY SEVERAL BIRDERS. ONE OBSERVER WHO ORIGINALLY NOTED THE SPECIES AND ALSO LAST REPORTED THE SPECIES HYPOTHESIZED THAT MORE THAN ONE WAS PRESENT AND MAY REPRESENT A MIGRATION STOPOVER SITE.

Owner/Manager: USFWS-STONE LAKES NWR



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Coccyzus americanus occidentalis

Element Code: ABNRB02022

western yellow-billed cuckoo

Listing Status: **Federal:** Threatened

CNDDB Element Ranks: **Global:** G5T2T3

State: Endangered

State: S1

Other: BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern

Habitat: **General:** RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS.

Micro: NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, WITH LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.

Occurrence No.	95	Map Index:	11194	EO Index:	25585	Element Last Seen:	1896-06-05
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:			1896-06-05
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2019-06-04

Quad Summary: Clarksburg (3812145)

County Summary: Sacramento, Yolo

Lat/Long: 38.41796 / -121.53385 **Accuracy:** 1 mile

UTM: Zone-10 N4253208 E627993 **Elevation (ft):** 5

PLSS: T07N, R04E, Sec. 34, NW (M) **Acres:** 0.0

Location: CLARKSBURG.

Detailed Location:

Ecological:

General: ADULT FEMALE MVZ SPECIMEN #6157 FROM CLARKSBURG INDICATES THAT CUCKOOS ONCE OCCURRED IN THE SACRAMENTO-SAN JOAQUIN DELTA.

Owner/Manager: UNKNOWN

Occurrence No.	195	Map Index:	95826	EO Index:	96967	Element Last Seen:	2009-07-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			2010-08-15
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2015-04-27

Quad Summary: Bruceville (3812134), Courtland (3812135)

County Summary: Sacramento

Lat/Long: 38.25589 / -121.49819 **Accuracy:** 1/5 mile

UTM: Zone-10 N4235274 E631398 **Elevation (ft):** 1

PLSS: T05N, R04E, Sec. 25, N (M) **Acres:** 0.0

Location: ALONG SNODGRASS SLOUGH, ABOUT 0.7 MILE NE OF LOCKE.

Detailed Location: MAPPED ACCORDING TO POINTS FOR 2009 DETECTIONS PROVIDED BY DWR. 2010 DETECTION ABOUT 0.4 MILE TO NNW (NOT MAPPED).

Ecological: HABITAT WAS DENSE WILLOW, OAK, COTTONWOOD, DOGWOOD, ALDER, AND WILD GRAPE. AT A MINIMUM, THE SITE APPEARS TO SUPPORT A MIGRATORY CORRIDOR, AND COULD POTENTIALLY SUPPORT NESTING IN THE FUTURE.

General: 1 BIRD HEARD (COOING) ON 24 JUN 2009. 1 HEARD RESPONDING TO TAPED "KOWLP" CALL ON 1 JUL 2009. 1 HEARD 15 AUG 2010 WAS PRESUMED TO BE MIGRATING THROUGH AREA. MORE FIELDWORK NECESSARY TO CONFIRM BREEDING STATUS.

Owner/Manager: DPR, TNC

Athene cunicularia

Element Code: ABNSB10010

burrowing owl

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** G4

State: None

State: S3

Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern



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Habitat:	General:	OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.					
	Micro:	SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.					
Occurrence No.	32	Map Index:	10886	EO Index:	9970	Element Last Seen:	2003-05-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-06
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.41582 / -121.67981			Accuracy:	nonspecific area		
UTM:	Zone-10 N4252778 E615254			Elevation (ft):	15		
PLSS:	T07N, R03E, Sec. 31, NE (M)			Acres:	28.5		
Location:	VICINITY OF THE VAUGHN RANCH, ALONG MIDWAY ROAD (AKA ROAD 152), ABOUT 12 MILES ESE OF DIXON.						
Detailed Location:	2003: OWL SPOTTED PERCHED ON A WOOD FENCE POST JUST NORTH OF THE DITCH THAT RUNS ALONG THE NORTH SIDE OF MIDWAY ROAD, EAST OF THE MOBILE HOME & CABOOSE & WEST OF THE POWER LINES.						
Ecological:	SURROUNDING LAND USE IS AGRICULTURE. 2003: GRASSLANDS TO THE NORTH AND SOUTH OF MIDWAY ROAD. A FEW RODENT BURROWS OBSERVED ALONG THE FENCELINE AT THE TOP OF THE DITCH.						
General:	ONE OBSERVATION IN 1987. ONE OBSERVED IN 1989; PRESUMED BURROW SITE NEARBY. ONE OBSERVED 5 MAY 2003.						
Owner/Manager:	PVT						
Occurrence No.	33	Map Index:	10823	EO Index:	19677	Element Last Seen:	2004-05-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-05-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-18
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40133 / -121.71376			Accuracy:	nonspecific area		
UTM:	Zone-10 N4251128 E612312			Elevation (ft):	20		
PLSS:	T06N, R02E, Sec. 02, NE (M)			Acres:	16.4		
Location:	IN THE VICINITY OF THE INTERSECTION OF YOLANO ROAD, KING ROAD, AND LIBERTY ISLAND ROAD, 11 MILES SE OF DIXON.						
Detailed Location:	1987: OWLS USING MASONRY BLOCKS. 1990: OWLS ON FENCE NEXT TO CEMENT FOUNDATION. 2001: OWLS USING METAL CULVERT & CONCRETE FOUNDATION. 2002: OWLS ON RR GRADE SOUTH OF KING RD. 2003: OWL IN BURROW JUST WEST OF FOUNDATION.						
Ecological:	BURROWS CONSIST OF ABANDONED MASONRY BLOCKS, CULVERTS AND OTHER MAN-MADE STRUCTURES; SURROUNDED BY A MIX OF GRAZED ANNUAL GRASSLAND AND AGRICULTURE.						
General:	LARGE COLONY, 1987. 2 ADULTS OBS/DOR FLEDGLING FOUND, 2 JUL 1989. 2 AD OBS, 30 JUN 1990. 2 AD/3 JUV OBS, 12 DEC 2001. 1 AD OBS AT BURROW AT RR GRADE, 24 JAN 2002. 1 AD FLUSHED FROM BURROW, 5 MAY 2003. 2 AD/2 JUV OBS AT BURROW, MAY 2004.						
Owner/Manager:	PVT						



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Occurrence No.	121	Map Index:	17357	EO Index:	11951	Element Last Seen:	1982-02-12
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.41619 / -121.69328				Accuracy:	1/5 mile	
UTM:	Zone-10 N4252802 E614077				Elevation (ft):	20	
PLSS:	T07N, R03E, Sec. 30, SW (M)				Acres:	0.0	
Location:	200 YDS EAST OF THE INTERSECTION OF MIDWAY RD (152) AND LEVEE RD, APPROXIMATELY 12.5 MI SOUTH OF DAVIS.						
Detailed Location:	TWO ADULTS AND THREE JUVENILES OBSERVED ON 30 JAN 1982 OCCUPYING GOPHER HOLES ALONG THE FENCE LINE NORTH OF THE DITCH; ALSO OBSERVED ON 12 FEB 1982. 5/5/2003 NO BIRDS SEEN.						
Ecological:	SURROUNDING HABITAT IS FARMLAND WITH SOME CATTLE GRAZING. 5/5/2003- HEAVY VEGETATION COVER ON THE DITCH LINE.						
General:	ON SUBSEQUENT TRIPS TO THIS SITE IN 1986, 1987, AND 1989, NO BIRDS WERE FOUND, AND IT APPEARED THAT THE BURROWS HAD BEEN DISTURBED. 5/5/2003- NO BIRDS OBSERVED, HIGH GREEN GRASS FROM LATE RAINS MAYBE HIDING BURROWS.						
Owner/Manager:	PVT-VAUGHN RANCH						

Occurrence No.	128	Map Index:	20687	EO Index:	9481	Element Last Seen:	1994-09-13
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1994-09-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-26
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44835 / -121.45989				Accuracy:	specific area	
UTM:	Zone-10 N4256685 E634393				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 20 (M)				Acres:	20.3	
Location:	EAST SIDE OF SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, BETWEEN HWY 99 AND I-5, 5 MI NORTH OF FRANKLIN.						
Detailed Location:	BURROWS A, B, C, D, & L ARE LOCATED WEST OF THE UNION PACIFIC RAILROAD TRACKS. BURROWS (ARTIFICIAL, INACTIVE) G, H, I, J & K ARE LOCATED EAST OF RAILROAD TRACKS. BURROW F (INACTIVE) & E (ELIMINATED) ARE 1200 FT & 1600 FT WSW OF BURROW B.						
Ecological:	HABITAT ADJACENT TO BURROW SITE IS GRASSLAND. SURROUNDING AREA TO WEST CONSISTS OF A WASTEWATER TREATMENT PLANT.						
General:	NESTING OCCURRED AT BURROW B (1 PAIR & 7 JUV, JUL & AUG 1992) & BURROW L (1991). 1 INDIVIDUAL OBS 30 JUNE TO 13 SEPT 1994 AT BURROW B. BURROW L ELIMINATED MARCH 1994; BURROW C ELIMINATED MARCH 1993. BURROWS A & D USED INTERMITTENTLY.						
Owner/Manager:	SRCSD						



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Occurrence No.	131	Map Index:	21012	EO Index:	9167	Element Last Seen:	1992-04-04
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.47465 / -121.69828				Accuracy:	80 meters	
UTM:	Zone-10 N4259283 E613549				Elevation (ft):	25	
PLSS:	T07N, R02E, Sec. 01, SE (M)				Acres:	0.0	
Location:	JUST NW OF THE JUNCTION OF MAXWELL LANE AND ROAD 104, APPROXIMATELY 8 MI SOUTH OF DAVIS.						
Detailed Location:							
Ecological:	HABITAT IS AN OPEN, GRASSY FIELD DOMINATED BY WEEDY SPECIES. ALTHOUGH SOMEWHAT DISTURBED, IT IS FAR LESS SO THAN SURROUNDING AGRICULTURAL FIELDS. 5/5/2003 ALFALFA SOUTH, GRASS NORTH, A FEW CATTLE SEEN, DRY RAISED AREA NEAR TROUGH.						
General:	ALTHOUGH FAIRLY UNDISTURBED, LAND AT THIS SITE MAY BE LIGHTLY GRAZED. IN 1990, TWO FAMILY GROUPS, EACH WITH TWO ADULTS AND AT LEAST TWO YOUNG EACH OBSERVED. IN 1992, THREE ADULT OWLS OBSERVED AT BURROW ENTRANCE. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	PVT						

Occurrence No.	133	Map Index:	21534	EO Index:	19692	Element Last Seen:	1989-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.38207 / -121.73024				Accuracy:	80 meters	
UTM:	Zone-10 N4248971 E610902				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 11, NW (M)				Acres:	0.0	
Location:	JUST SOUTH OF ETZEL ROAD JUNCTION WITH OLD SACRAMENTO NORTHERN RR TRACKS, APPROXIMATELY 6 MI NORTH OF LIBERTY FARMS.						
Detailed Location:	BURROW SITE LOCATED IN A PILE OF OLD PIPES UNDER THE POWERLINES, NEXT TO A POWER POLE.						
Ecological:	SURROUNDING HABITAT CONSISTS OF AGRICULTURE, CANALS, PONDS, AND WATER PIPE STORAGE.						
General:	7/2/1989-TWO BURROWING OWLS OBSERVED; ONE ADULT AND ONE OF UNKNOWN AGE. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	134	Map Index:	21528	EO Index:	9597	Element Last Seen:	1989-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.44687 / -121.70719				Accuracy:	3/5 mile	
UTM:	Zone-10 N4256189 E612815				Elevation (ft):	25	
PLSS:	T07N, R02E, Sec. 13, SW (M)				Acres:	0.0	
Location:	NORTH HALF OF THE BLOCK OF LAND DEFINED BY HACKMAN RD (NORTH), BUCKLEY RD (WEST), THOMSEN RD (SOUTH), AND RD 104 (EAST).						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF AGRICULTURAL FIELDS. 5/5/2003 AGRICULTURE IS STILL PRESENT, TALL GRAIN AND ALFALFA CROPS. DITCH ON THE N SIDE OF HACKMAN ROAD POTENTIAL BURROW SITE.						
General:	7/2/1989 - 4 ADULTS OBSERVED HOVER-FORAGING OVER A FLOODED, LOW CROP (ALFALFA?); ONE OR MORE BURROWS PRESUMED TO BE IN THE VICINITY. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	135	Map Index:	21529	EO Index:	19658	Element Last Seen:	1989-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.43183 / -121.71686				Accuracy:	1/5 mile	
UTM:	Zone-10 N4254509 E611994				Elevation (ft):	25	
PLSS:	T07N, R02E, Sec. 23, SE (M)				Acres:	0.0	
Location:	ALONG THE WESTERN THIRD OF THOMSEN ROAD, ON THE NORTH SIDE, APPROXIMATELY 10 MI EAST OF DIXON.						
Detailed Location:							
Ecological:	SURROUNDING HABITAT CONSISTS OF FALLOW FIELDS AND LOW CROPS. 5/5/2003 HABITAT STILL PRESENT.						
General:	A SINGLE ADULT OBSERVED PERCHING ON A TELEPHONE POLE; BURROW SITE PRESUMED NEARBY. 5/5/2003- 0 BIRDS OBSERVED, PROBABLY DUE TO HIGH GREEN GRASS FROM LATE RAINS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	136	Map Index:	21530	EO Index:	19657	Element Last Seen:	1989-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.42421 / -121.71969				Accuracy:	1/5 mile	
UTM:	Zone-10 N4253660 E611759				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 26, NE (M)				Acres:	0.0	
Location:	ON THE EAST SIDE OF BUCKLEY ROAD, BETWEEN MIDWAY RRAD & THOMSEN ROADS, 10 MI EAST OF DIXON.						
Detailed Location:	OWLS UTILIZE AREA BEHIND HOUSES FOR PERCHING AND FORAGING.						
Ecological:	SURROUNDING HABITAT CONSISTS OF AGRICULTURAL/FALLOW FIELDS. 5/5/2003 SITE IS STILL AGRICULTURAL LAND, HOUSES ARE STILL PRESENT.						
General:	TWO ADULTS OBSERVED PERCHED ON FENCES; BURROW SITE PRESUMED TO BE NEARBY. 5/5/2003- 0 BIRDS OBSERVED, PROBABLY DUE TO HIGH GREEN GRASS FROM LATE RAINS HIDING BURROWS.						
Owner/Manager:	UNKNOWN						

Occurrence No.	137	Map Index:	21533	EO Index:	5305	Element Last Seen:	1996-07-19
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1996-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Stable	Record Last Updated:	1996-09-11
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.38743 / -121.69300				Accuracy:	80 meters	
UTM:	Zone-10 N4249611 E614147				Elevation (ft):	15	
PLSS:	T06N, R03E, Sec. 06, SW (M)				Acres:	0.0	
Location:	NORTH SIDE OF ROAD 155, EAST OF WEST LEVEE ROAD, APPROXIMATELY 13 MILES SE OF DIXON.						
Detailed Location:							
Ecological:	SURROUNDING HABITAT CONSISTS MOSTLY OF FALLOW FIELDS AND IRRIGATED PASTURELAND.						
General:	HISTORICAL LOCATION. 1 ADULT OBSERVED IN THE CORRAL VICINITY IN 1989. IN 1990, 3 ADULTS OBSERVED PERCHED ON FENCES NEAR BURROW; 5 YOUNG AND 2 OF UNKNOWN-AGE PERCHED AT BURROW. 2 ADULTS OBSERVED IN 1993 AND ON 19 JULY 1996.						
Owner/Manager:	PVT						



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Occurrence No.	138	Map Index:	21531	EO Index:	8351	Element Last Seen:	1996-07-23
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.42196 / -121.68992				Accuracy:	specific area	
UTM:	Zone-10 N4253446 E614361				Elevation (ft):	20	
PLSS:	T07N, R03E, Sec. 30, SW (M)				Acres:	22.4	
Location:	EAST SIDE OF ROAD 104, BETWEEN THOMSEN ROAD AND MIDWAY ROAD, 12 MI EAST OF DIXON. 2003- POSTED WITH NO TRESPASSING.						
Detailed Location:	OWLS INHABIT FENCELINE BETWEEN DITCH AND PASTURE. NUMEROUS BURROWS ARE FOUND IN BOTH THE NORTH AND SOUTH LEVEES OF THE IRRIGATION DITCH WHICH RUNS WEST-EAST ACROSS THE FIELD.						
Ecological:	HABITAT IS SHORT, DRY GRASSLAND, SURROUNDED BY DRY PASTURE AND AN AGRICULTURAL DITCH. IN 2003 HARVESTED ALFALFA AND GRAZED GRASS NEARBY.						
General:	TWO FAMILY GROUPINGS OBSERVED (2 ADULTS, 8 JUVENILES, AND 1 UNKNOWN-AGE) ON 30 JUNE 1990. 3 BIRDS OF UNKNOWN-AGE OBSERVED ON 23 JULY 1996. 0 BIRDS OBSERVED, HIGH GREEN GRASS FROM LATE RAINS MAYBE HIDING BURROWS 5/5/2003.						
Owner/Manager:	PVT						

Occurrence No.	139	Map Index:	21532	EO Index:	9969	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.41916 / -121.66267				Accuracy:	1/5 mile	
UTM:	Zone-10 N4253170 E616745				Elevation (ft):	10	
PLSS:	T07N, R03E, Sec. 29, SE (M)				Acres:	0.0	
Location:	NORTH SIDE OF ROAD 152, EAST OF VAUGHN RANCH, 14 MI EAST OF DIXON.						
Detailed Location:	OWLS INHABIT GRASSY DITCH ADJACENT TO SHEEP PASTURE.						
Ecological:	SURROUNDING LAND USE IS AGRICULTURE/GRAZING. 5/5/2003 GRASSLAND WITH POWER LINES OVER HEAD WERE OBSERVED.						
General:	6/30/1990 - TWO ADULTS AND FOUR JUVENILES OBSERVED. 5/5/2003- 0 BIRDS OBSERVED, PROBABLY DUE TO HIGH GREEN GRASS FROM LATE RAINS HIDING BURROWS.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	140	Map Index:	21527	EO Index:	9598	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.45632 / -121.71817				Accuracy:	1/5 mile	
UTM:	Zone-10 N4257225 E611842				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 14, NE (M)				Acres:	0.0	
Location:	EAST SIDE OF BUCKLEY ROAD, JUST NORTH OF ROAD 38A (HACKMAN), APPROXIMATELY 9 MI ENE OF DIXON.						
Detailed Location:	6/30/1990 OWL LOCATED IN AN OVERGROWN AREA AROUND AN OLD BARN, WITH A NEARBY DITCH FULL OF RUNNING WATER. 5/5/2003 GRAIN CROPS AND TALL GRASS NEARBY, BARN APPEARS TO BE GONE, OR IS HIDDEN BEHIND THE HOUSE.						
Ecological:	SURROUNDING HABITAT IS AGRICULTURE.						
General:	6/30/1990 ONE ADULT OBSERVED; BURROW SITE PRESUMED TO BE NEARBY. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	141	Map Index:	21535	EO Index:	19691	Element Last Seen:	1990-06-30
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1990-06-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-23
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.37869 / -121.74563				Accuracy:	1/5 mile	
UTM:	Zone-10 N4248577 E609563				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 10, SW (M)				Acres:	0.0	
Location:	ALONG THE EAST SIDE OF SIKES ROAD, BETWEEN TREFOIL ROAD AND DELHI ROAD, 12 MI SE OF DIXON.						
Detailed Location:	INHABITING AN AREA WITH LARGE CHUNKS OF CONCRETE AND RUSTED PIPES.						
Ecological:	SURROUNDING FORAGING HABITAT CONSISTS OF IRRIGATED PASTURE.						
General:	HISTORICAL LOCATION. ONE OWL OBSERVED ON 30 JUN 1990. ONE OWL OBSERVED ON 29 NOV 1999, BUT NO OWLS WERE PRESENT AFTER 1 FEB 2000.						
Owner/Manager:	PVT						

Occurrence No.	173	Map Index:	23878	EO Index:	7349	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-06-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-26
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.35874 / -121.74585				Accuracy:	1/10 mile	
UTM:	Zone-10 N4246363 E609574				Elevation (ft):	15	
PLSS:	T06N, R02E, Sec. 15, SW (M)				Acres:	0.0	
Location:	NORTH SIDE OF SWAN ROAD, 1.3 MILES WEST OF WINSHIP ROAD, WEST OF THE YOLO BYPASS.						
Detailed Location:	BURROWS ARE LOCATED IN A GRAVEL PILE IN THE VICINITY OF NATURAL GAS TANKS.						
Ecological:	SURROUNDING FORAGING HABITAT CONSISTS OF SHEEP AND CATTLE PASTURE.						
General:	BURROW WITH LOTS OF WHITEWASH AND 2 ADULT OWLS OBSERVED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	174	Map Index:	24512	EO Index:	6652	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-06-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1993-07-29
Quad Summary:	Liberty Island (3812136), Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.37670 / -121.69457				Accuracy:	1/5 mile	
UTM:	Zone-10 N4248418 E614026				Elevation (ft):	15	
PLSS:	T06N, R02E, Sec. 12, SE (M)				Acres:	0.0	
Location:	WEST SIDE OF WEST LEVEE ROAD, 0.3 MILE NORTH OF DELHI ROAD, WEST OF THE YOLO BYPASS.						
Detailed Location:	SEVERAL BURROWS LOCATED IN THE WEST SLOPE OF THE LEVEE ROAD.						
Ecological:							
General:	SEVERAL BURROWS, ONE WITH PELLETS, AN OWL WING, NESTING MATERIAL, AND SMALL MAMMAL BONES OUT FRONT, AND ONE ADULT OWL OBSERVED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	175	Map Index:	24511	EO Index:	6655	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-09
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.38595 / -121.72879				Accuracy:	1/5 mile	
UTM:	Zone-10 N4249403 E611023				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 11, NW (M)				Acres:	0.0	
Location:	NW OF THE NORTHERN PACIFIC RAILROAD TRACKS, ABOUT 0.35 MI NE OF ETZEL ROAD AND RR INTERSECTION, 15 MILES S OF DAVIS.						
Detailed Location:	BURROWS WERE LOCATED ON A SMALL LEVEE BANK, ON THE WEST SIDE OF THE ROW OF TRANSMISSION LINES.						
Ecological:							
General:	APPROXIMATELY 10 INDIVIDUALS OBSERVED, CONSISTING OF AT LEAST 2 FAMILY GROUPS, DURING A 1990 SURVEY. 5/5/2000 HABITAT APPEARS INTACT, HIGH GREEN GRASS DUE TO LATE RAINS MAY HAVE HIDDEN BURROWS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	177	Map Index:	24514	EO Index:	6657	Element Last Seen:	1993-08-09
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-03-03
Quad Summary:	Saxon (3812146), Davis (3812156)						
County Summary:	Solano, Yolo						
Lat/Long:	38.49418 / -121.68648			Accuracy:	nonspecific area		
UTM:	Zone-10 N4261465 E614547			Elevation (ft):	25		
PLSS:	T08N, R03E, Sec. 31 (M)			Acres:	607.3		
Location:	GLOBAL COMMUNICATIONS STATION, AT THE N END OF RD 105 & RD 36, 6.5 MI S OF DAVIS. YOLO REGIONAL GRASSLANDS PRK ON WEST.						
Detailed Location:	BURROWS SPREAD THROUGHOUT THE ONE SQUARE MILE COMMUNICATIONS FACILITY. WESTERN ACCESS IS OFF MACE RD. - YOLO REGIONAL GRASSLANDS PARK, SACRAMENTO VALLEY SOARING SOCIETY (SVSS) PARKING AREA.						
Ecological:	HABITAT CONSISTS OF DISTURBED ANNUAL GRASSLAND WITH VERNAL POOLS. OTHER SENSITIVE TAXA: TUCTORIA MUCRONATA & NEOSTAPFIA COLUSANA. 2003: SITE IS SIGNED AS "FEDERALLY PROTECTED HABITAT AREA" GRASS WAS HIGH WITH NO SIGN OF DISKING. AG TO EAST.						
General:	AT LEAST 4 FAMILY GROUPINGS OBS IN 1989, MOSTLY ALONG THE ENTRY ROAD. 1990: 3 GROUPS; 3 ADULTS & 6 JUV OBS, W SIDE OF ENTRY RD. 1993, SEVERAL BURROWS & OWLS OBS. 2003: 0 BIRDS AT SE ENTRANCE RD. 2-PRS SEEN AT BURROWS, E OF SVSS- PARKING.						
Owner/Manager:	DOD-MCCLELLAN AFB						

Occurrence No.	178	Map Index:	24513	EO Index:	6656	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.47654 / -121.65226			Accuracy:	2/5 mile		
UTM:	Zone-10 N4259550 E617560			Elevation (ft):	20		
PLSS:	T07N, R03E, Sec. 04, SW (M)			Acres:	0.0		
Location:	EAST SIDE OF ROAD 106, 0.75 MI N OF GLIDE TULE RANCH, 9 MILES SOUTH OF DAVIS. ACCESS ROAD, SIGN TO HOSSELKUS & KEARNY.						
Detailed Location:	BURROWS LOCATED WHERE THE MARSH CROSSES THE ROAD, SOUTH OF THE BARN. 5/5/2003 MARSH ON THE EAST SIDE OF THE ROAD NOT VISIBLE.						
Ecological:	HABITAT CONSISTS OF SHORT, DRY GRASSLAND/PASTURE. 5/5/2003 SURROUNDING AREA IS GRAIN FIELD (ABOUT 2 FEET TALL) AND ALFALFA TO THE SOUTH.						
General:	22 INDIVIDUALS OBSERVED, AT LEAST 10 OF WHICH WERE YOUNG, IN 4 FAMILY GROUPINGS. 5/5/2003- 0 BIRDS OBSERVED, PROBABLY DUE TO HIGH GREEN GRASS FROM LATE RAINS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	179	Map Index:	24515	EO Index:	6653	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-06-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1993-12-27
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.38763 / -121.6875				Accuracy:	1/5 mile	
UTM:	Zone-10 N4249640 E614627				Elevation (ft):	15	
PLSS:	T06N, R03E, Sec. 06, SW (M)				Acres:	0.0	
Location:	NORTH SIDE OF ROAD 155, 0.9 MILE EAST OF WEST LEVEE ROAD, 13 MILES SE OF DIXON.						
Detailed Location:	OWLS PERCHED ON FENCEPOSTS IN THE VICINITY OF THE BURROW.						
Ecological:	HABITAT SURROUNDING BURROW CONSISTS OF FALLOW FIELDS, ADJACENT TO A WATER-FILLED DITCH.						
General:	IN 1990, 2 ADULTS AND 4 JUVENILES WERE OBSERVED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	210	Map Index:	25473	EO Index:	6907	Element Last Seen:	2016-08-18
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2016-08-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-03-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45542 / -121.42348				Accuracy:	nonspecific area	
UTM:	Zone-10 N4257524 E637558				Elevation (ft):	27	
PLSS:	T07N, R05E, Sec. 15, SW (M)				Acres:	138.0	
Location:	BETWEEN CENTER PKY & BRUCEVILLE RD JUST S OF COSUMNES RIVER BLVD, COSUMNES RIVER COLLEGE, SACRAMENTO.						
Detailed Location:	MAPPED TO INCLUDE LOCATIONS MARKED ON PROVIDED MAP (GUS) & PROVIDED COORDINATES (WIL, CON) & LOCATIONS FROM 1991-1993 CENSUS. MOST BURROWS IN BERMS AROUND THE TRACK/FOOTBALL FIELD.						
Ecological:	HABITAT SURROUNDING THE BURROWS CONSISTS OF INTRODUCED, ANNUAL GRASSLAND. DEVELOPMENT OF KAISER SOUTH & ADJ FIELDS LIKELY LED TO DECLINE/EXTIRPATION OF NEARBY UNION HOUSE CREEK (AKA BEACON CREEK) POPULATION.						
General:	PRESENT SINCE 1991. 12 BURROWS & 18+ ADULTS (6-12 PAIRS) OBSERVED IN 1994. 2 PERCHED ADULTS OBS IN 2002. 1 OWL OBS IN 2004. 3 PAIRS, 8 JUVENILES OBS IN 2007. PRESENT THROUGH 2009. FAMILY GROUP OF 2 ADULTS & 3 JUVS OBS, 2016.						
Owner/Manager:	COSUMNES RIVER COLLEGE						



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Occurrence No.	229	Map Index:	33164	EO Index:	20284	Element Last Seen:	2007-07-06
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-07-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-09
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47748 / -121.46032			Accuracy:	specific area		
UTM:	Zone-10 N4259918 E634302			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 08 (M)			Acres:	95.0		
Location:	VICINITY OF MORRISON, ELDER & FLORIN CRKS, W OF FRANKLIN BLVD, S OF WEYMOUTH LN & N OF DEER CROSS WAY, SOUTH SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES (LOW, CON, WIL, JON) & TO LOCATIONS MARKED ON PROVIDED MAPS (NOS, BAR). EAST FEATURE = S1, CENTER FEATURE = S2, NW FEATURE = S3, SW FEATURES = S4. S4 IS ALSO KNOWN AS "COMMUNITY GARDENS."						
Ecological:	CHANNELIZED STREAM LEVEES WITH ANNUAL GRASSES OR NO VEG. SURROUNDED BY FIELDS & RESIDENTIAL DEVELOPMENT. SITE QUALITY MARKED AS FAIR TO POOR. 2007: LEVEE CONSTRUCTION FROM RR TO FRANKLIN BLVD PLANNED IN SUMMER, CAUSING BURROW CLOSURES.						
General:	1995: 3 BURROWS AT S1. 2001: 3 OWLS AT 2 BURROWS IN S1. 2002: 15 AT 19 BURROWS IN S3&4. 2005: 17 AT 3 BURROWS IN S1 & 5 AT 1 BURROW IN S2. 2006: 15 AT 11 BURROWS IN S1. 2007: 1 AT 1 BURROW IN S3 & 15 AT 8 BURROWS IN S1. YOUNG IN 2001 & '07.						
Owner/Manager:	SAC COUNTY						

Occurrence No.	239	Map Index:	33492	EO Index:	8347	Element Last Seen:	1996-07-19
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1996-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-09-11
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.37309 / -121.72563			Accuracy:	specific area		
UTM:	Zone-10 N4247980 E611319			Elevation (ft):	15		
PLSS:	T06N, R02E, Sec. 11, SW (M)			Acres:	30.3		
Location:	JUST NORTH OF DELHI ROAD, BETWEEN ETZEL ROAD AND WINSHIP ROAD, 2 MILES SE OF LIBFARM.						
Detailed Location:							
Ecological:	LAND USE ON BOTH SIDES OF DELHI ROAD CONSISTS OF IRRIGATED PASTURELAND, PREDOMINANTLY GRASSES.						
General:	2 PAIRS OF ADULTS, ONE WITH 4 JUVNENILES, WERE OBSERVED ON 19 JULY 1996.						
Owner/Manager:	PVT						



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Occurrence No.	240	Map Index:	33493	EO Index:	8346	Element Last Seen:	2004-05-XX
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2004-05-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2004-11-29	

Quad Summary: Liberty Island (3812136), Saxon (3812146)

County Summary: Solano

Lat/Long:	38.37727 / -121.73441	Accuracy:	nonspecific area
UTM:	Zone-10 N4248433 E610545	Elevation (ft):	15
PLSS:	T06N, R02E, Sec. 10, SE (M)	Acres:	46.6

Location: OLD RAILROAD GRADE, BETWEEN ETZEL ROAD AND DELHI ROAD, 2 MILES SE OF LIBFARM.

Detailed Location: BURROWS ARE LOCATED IN THE EAST AND WEST LEVEES (BANKS) OF A LARGE CANAL WHICH TRAVERSES SW-NE FROM DELHI ROAD; OCCUPIED BURROWS BEGIN ABOUT 300 FEET NORTH OF DELHI ROAD, EXTENDING TO AT LEAST 1000 FEET NORTH OF DELHI ROAD.

Ecological: HABITAT CONSISTS OF A CANAL BANK SURROUNDED BY PASTURELAND TO THE SW (ACROSS DELHI ROAD) AND IRRIGATED CROPLAND TO THE WEST AND SE. 5/5/2003 HABITAT APPEARS AS DESCRIBED.

General: 5 ADULTS AND 8 JUVENILES OBSERVED ON 23 JULY 1996. AT LEAST ONE ADULT OWL FLUSHED FROM BURROWS ON 20 FEB 2002 AND AGAIN ON 7 MAY 2002. 5 MAY 2003, NO OWLS WERE SEEN. 6 ACTIVE BURROWS OBSERVED DURING MAY 2004.

Owner/Manager: PVT

Occurrence No.	241	Map Index:	33494	EO Index:	5306	Element Last Seen:	1996-07-19
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		1996-07-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1996-09-12	

Quad Summary: Saxon (3812146)

County Summary: Solano

Lat/Long:	38.38286 / -121.71286	Accuracy:	specific area
UTM:	Zone-10 N4249079 E612419	Elevation (ft):	20
PLSS:	T06N, R02E, Sec. 11, NE (M)	Acres:	17.7

Location: WEST SIDE OF LIBERTY ISLAND ROAD, 1.3 MILES SOUTH OF KING ROAD, 11 MILES EAST OF DIXON.

Detailed Location: BURROWS ARE LOCATED IN THE WEST BANK OF A DITCH THAT PARALLELS LIBERTY ISLAND ROAD.

Ecological: SURROUNDING HABITAT CONSISTS OF IRRIGATED PASTURELANDS.

General: 2 ADULTS OBSERVED ON 19 JULY 1996.

Owner/Manager: PVT



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Occurrence No.	242	Map Index:	33495	EO Index:	25508	Element Last Seen:	1996-07-19
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.44332 / -121.72058				Accuracy:	80 meters	
UTM:	Zone-10 N4255779 E611652				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 23, NE (M)				Acres:	0.0	
Location:	JUST EAST OF BULKLEY ROAD, 0.6 MILE SOUTH OF HACKMAN ROAD, 9 MILES EAST OF DIXON.						
Detailed Location:	BURROW SITE IS LOCATED 200 FEET EAST OF BULKLEY ROAD, ALONG THE SOUTH EDGE OF AN IRRIGATION DITCH. 5/5/2003 BROKEN CONCRETE RUBBLE PRESENT NEAR THE CULVERT, POSSIBLE BURROW AREAS.						
Ecological:	SURROUNDING LAND USE IS PRIMARILY IRRIGATED AGRICULTURE.						
General:	4 OWLS OF UNKNOWN-AGE OBSERVED ON 19 JULY 1996. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	PVT						

Occurrence No.	243	Map Index:	33496	EO Index:	8350	Element Last Seen:	1996-07-23
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.44083 / -121.69427				Accuracy:	specific area	
UTM:	Zone-10 N4255535 E613952				Elevation (ft):	20	
PLSS:	T07N, R02E, Sec. 24, NE (M)				Acres:	31.0	
Location:	JUST WEST OF COUNTY ROAD 104, 0.6 MILE SOUTH OF HACKMAN ROAD, 10.5 MILES EAST OF DIXON.						
Detailed Location:	BURROW SITE IS LOCATED ALONG THE WEST BANK OF A DITCH THAT RUNS PARALLEL TO COUNTY ROAD 104; ONE ACTIVE BURROW IS LOCATED ADJACENT TO THE NE CORNER OF A CORRAL. 5/5/2003- HABITAT APPEARED THE SAME, CORRAL STILL PRESENT.						
Ecological:	SURROUNDING HABITAT CONSISTS OF IRRIGATED PASTURE/AGRICULTURE.						
General:	3 ADULTS AND 2 JUVENILES OBSERVED ON 23 JULY 1996. 5/5/2003- 0 BIRDS OBSERVED, HIGH GREEN GRASS DUE TO LATE RAINS MAYBE HIDING BURROWS.						
Owner/Manager:	PVT						



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Occurrence No.	369	Map Index:	43953	EO Index:	43953	Element Last Seen:	2000-04-28
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2000-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-03
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.17784 / -121.74166				Accuracy:	specific area	
UTM:	Zone-10 N4226295 E610213				Elevation (ft):	90	
PLSS:	T04N, R02E, Sec. 22 (M)				Acres:	11.0	
Location:	AZEVEDO ROAD, 0.9 MILE SOUTH OF THE CARTWRIGHT ROAD JUNCTION, NW OF RIO VISTA.						
Detailed Location:	5+ BURROWS LOCATED ALONG BOTH SIDES (MOST ACTIVITY FOUND ON THE EAST SIDE) OF AZEVEDO ROAD, AT LEAST SEVERAL OF WHICH SHOWED SIGNS OF OWL USE.						
Ecological:	HABITAT SURROUNDING BURROWS CONSISTS OF RUDERAL GRASS AND FORBS.						
General:	1 ADULT OBSERVED ON 28 APR 2000 AT THE BURROW SITE; LATER, SAME OWL (PRESUMABLY) FOUND DEAD ON THE ROAD.						
Owner/Manager:	SOL COUNTY						

Occurrence No.	370	Map Index:	43955	EO Index:	43955	Element Last Seen:	2000-05-20
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2000-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-03
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.16119 / -121.74842				Accuracy:	80 meters	
UTM:	Zone-10 N4224439 E609646				Elevation (ft):	100	
PLSS:	T04N, R02E, Sec. 27, SW (M)				Acres:	0.0	
Location:	ALONG EMIGH ROAD, 0.35 MILE WEST OF THE AZEVEDO ROAD JUNCTION, WEST OF RIO VISTA.						
Detailed Location:	OWL OBSERVED OCCUPYING A BURROW SOUTH OF THE ROAD, JUST OVER THE FENCE LINE, ON THE MARGINS OF A GRAIN FARM.						
Ecological:	HABITAT CONSISTS OF A SOUTH-FACING BURROW ON THE SOUTH SIDE OF THE ROAD AND A SECOND, LESS-USED BURROW ON THE NORTH SIDE OF THE ROAD.						
General:	1 ADULT FIRST OBSERVED ON 21 JAN 2000 AT THE SOUTH BURROW.						
Owner/Manager:	PVT						



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Occurrence No.	375	Map Index:	43974	EO Index:	43974	Element Last Seen:	2002-02-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-02-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-06-19
Quad Summary:	Liberty Island (3812136), Dozier (3812137)						
County Summary:	Solano						
Lat/Long:	38.35974 / -121.74964				Accuracy:	specific area	
UTM:	Zone-10 N4246470 E609241				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 16, SW (M)				Acres:	20.8	
Location:	EAST SIDE OF SIKES ROAD, JUST NORTH OF SWAN ROAD, AND SW OF SIKES ROAD ALONG THE RR GRADE, NNE OF DOZIER.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF CONCRETE IRRIGATION PIPES USED AS BURROWS; SURROUNDED BY IRRIGATED PASTURE AND GRASSLAND USED FOR GRAZING GOATS.						
General:	A SINGLE OWL WAS OBSERVED USING TWO DIFFERENT PIPES ON 29 NOV 1999; DITCH WAS FLOODED OUT BY 1 FEB 2000. AT LEAST ONE OWL OBSERVED USING A RUSTY PIPE AS A BURROW ON 7 FEB 2002.						
Owner/Manager:	PVT						
Occurrence No.	376	Map Index:	43979	EO Index:	43979	Element Last Seen:	2000-02-01
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-02-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-04
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.37342 / -121.74926				Accuracy:	80 meters	
UTM:	Zone-10 N4247988 E609254				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 10, SW (M)				Acres:	0.0	
Location:	EAST SIDE OF SIKES ROAD, 7 MILES SE OF DIXON.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF SEVERAL CONCRETE IRRIGATION PIPES IN AN IRRIGATION DITCH; SURROUNDED BY IRRIGATED PASTURE.						
General:	1 OWL OBSERVED AT BURROW ON 29 NOV 1999. POSSIBLY A WINTERING SITE; OWL NOT OBSERVED AFTER 1 FEB 2000.						
Owner/Manager:	PVT						



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Occurrence No.	385	Map Index:	44099	EO Index:	44099	Element Last Seen:	2000-05-20
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2000-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-24
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.38755 / -121.74942			Accuracy:	80 meters		
UTM:	Zone-10 N4249556 E609219			Elevation (ft):	25		
PLSS:	T06N, R02E, Sec. 03, SE (M)			Acres:	0.0		
Location:	WEST SIDE OF SIKES ROAD, 0.5 MILE SOUTH OF TREFOIL ROAD, SE OF DIXON.						
Detailed Location:	BURROW ENTRANCE IS NEARLY VERTICAL AND IS LOCATED ABOUT 20 FEET WEST OF SIKES ROAD.						
Ecological:	BURROW SITE CONSISTS OF AN OLD GROUND SQUIRREL BURROW, LOCATED AT THE EDGE OF A GUNITE-LINED CULVERT CROSSING AN IRRIGATION CANAL.						
General:	1 OWL FIRST OBSERVED AT THE BURROW SITE ON 24 NOV 1999.						
Owner/Manager:	PVT						
Occurrence No.	386	Map Index:	44101	EO Index:	44101	Element Last Seen:	2000-05-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2000-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-24
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.39422 / -121.74898			Accuracy:	80 meters		
UTM:	Zone-10 N4250296 E609247			Elevation (ft):	25		
PLSS:	T06N, R02E, Sec. 03, SW (M)			Acres:	0.0		
Location:	EAST SIDE OF SIKES ROAD, JUST SOUTH OF TREFOIL ROAD, ESE OF DIXON.						
Detailed Location:	BURROW IS LOCATED ABOUT 30 FEET EAST OF SIKES ROAD.						
Ecological:	BURROW CONSISTS OF A 4-INCH IRRIGATION PIPE IN A DITCH ADJACENT TO IRRIGATED PASTURE.						
General:	1 OWL FIRST OBSERVED AT THE BURROW ON 13 JAN 2000.						
Owner/Manager:	PVT						
Occurrence No.	387	Map Index:	44102	EO Index:	44102	Element Last Seen:	2000-05-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2000-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-24
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.39446 / -121.74393			Accuracy:	80 meters		
UTM:	Zone-10 N4250329 E609688			Elevation (ft):	20		
PLSS:	T06N, R02E, Sec. 03, NW (M)			Acres:	0.0		
Location:	TREFOIL ROAD, 0.3 MILE EAST OF SIKES ROAD, ESE OF DIXON.						
Detailed Location:	BURROWS OPEN TO THE SOUTH, FACING THE ROAD.						
Ecological:	BURROWS CONSIST OF TWO 4-INCH PVC IRRIGATION PIPES IN AN IRRIGATION DITCH.						
General:	1 OWL FIRST OBSERVED USING BOTH BURROWS ON 17 JAN 2000.						
Owner/Manager:	PVT						



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Occurrence No.	388	Map Index:	44122	EO Index:	44122	Element Last Seen:	2003-05-05
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40059 / -121.72126			Accuracy:	80 meters		
UTM:	Zone-10 N4251037 E611658			Elevation (ft):	25		
PLSS:	T06N, R02E, Sec. 02, NE (M)			Acres:	0.0		
Location:	EAST SIDE OF BULKLEY ROAD, JUST SOUTH OF KING ROAD, ESE OF DIXON.						
Detailed Location:	1989 BURROW LOCATED IN A BARNYARD CORRAL. 1999 BURROW OBSERVED IN EQUIPMENT/LUMBER STORED ON A PRIVATE LOT; BURROW FACES EAST, AWAY FROM THE ROAD. 5/5/2003 2 BIRDS OBSERVED USING CENTRAL WOOD POLE (S. CLOTHES LINE POLE) FOR PERCH.						
Ecological:	BURROW SURROUNDED BY RANCH BUILDINGS AND AGRICULTURAL FIELDS. 5/5/2003 ALFALFA TO THE SOUTH AND SHEEP GRAZING NEARBY.						
General:	1 ADULT OWL OBSERVED AT THE BURROW ON 2 JUL 1989. 1 OWL OBSERVED AT THE BURROW ON 18 NOV 1999. 5/5/2003 2 BIRDS SEEN, BURROW ASSUMED NEARBY.						
Owner/Manager:	PVT						
Occurrence No.	389	Map Index:	44131	EO Index:	44131	Element Last Seen:	2000-05-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-18
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.47758 / -121.72194			Accuracy:	80 meters		
UTM:	Zone-10 N4259579 E611480			Elevation (ft):	35		
PLSS:	T07N, R02E, Sec. 02, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF BULKLEY ROAD, 1.25 MILES SOUTH OF TREMONT ROAD, 8 MILES SOUTH OF DAVIS.						
Detailed Location:	OWL USES TWO BURROWS ON THE WEST SIDE OF BULKLEY ROAD.						
Ecological:	HABITAT CONSISTS OF A BURROW AT THE BASE OF A CULVERT AND A BURROW AT THE BERM OF AN IRRIGATION DITCH. 5 MAY 2003 DITCH AND CULVERT STILL PRESENT, HOLES WERE NOTED, UNSURE IF THEY WERE BURROWS. SURROUNDING AREA IS CULTIVATED AGRICULTURE.						
General:	SINGLE OWL OBSERVED SEVERAL TIMES; FIRST OBSERVED AT BURROW AT THE BASE OF CULVERT ON 13 JAN 2000 AND AT BERM OF IRRIGATION DITCH BURROW ON 11 FEB 2000. 5 MAY 2003 NO OWLS SEEN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	455	Map Index:	48023	EO Index:	48023	Element Last Seen:	2002-05-07
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.38828 / -121.72473				Accuracy:	80 meters	
UTM:	Zone-10 N4249666 E611374				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 02, SW (M)				Acres:	0.0	
Location:	SACRAMENTO NORTHERN RAILROAD GRADE, 0.5 MILE NE OF THE ETZEL ROAD INTERSECTION, 5/5/2003 ACCESS IS LOCKED.						
Detailed Location:	BURROW IS LOCATED ON THE SIDE OF THE OLD RAILROAD GRADE, WHICH IS USED INFREQUENTLY AS AN ACCESS ROAD.						
Ecological:	HABITAT SURROUNDING THE BURROW SITE CONSISTS OF GRAZED GRASSLAND AND AGRICULTURE. 5/5/2003 HABITAT APPEARS THE SAME.						
General:	AT LEAST 1 ADULT OWL WAS FLUSHED FROM THE BURROW ON 7 MAY 2002. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	459	Map Index:	48143	EO Index:	48143	Element Last Seen:	2016-04-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2016-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-09-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45528 / -121.67322				Accuracy:	nonspecific area	
UTM:	Zone-10 N4257165 E615766				Elevation (ft):	18	
PLSS:	T07N, R03E, Sec. 17, W (M)				Acres:	106.0	
Location:	ALONG THE SACRAMENTO NORTHERN RR FROM ROAD 38 TO 1 MI SW & ALONG RD 105 BETWEEN RD 38 & RD 38A, SW OF SAXON.						
Detailed Location:	2002-2003: BURROWS IN OLD RR GRADE AND IN BERMS THAT BORDER SOME DITCHES; FENCE POSTS & OLD RAILROAD DETRITUS PROVIDE PERCHES. 2006: DETECTIONS ADJACENT TO RD 105. 2011: SOUTH SIDE OF RD 38. 2016: FOUND WHILE WALKING COVER BOARD TRANSECTS.						
Ecological:	2002-2003: BURROWS IN GRAZED NON-NATIVE GRASSLAND, WITH SOME VERNAL POOLS; CATTLE GRAZING ON THE SITE. 2006: GRASSLAND, PASTURE, & ALFALFA CROP. 2011: BURROW INSIDE OLD TIRE. 2016: FALLOW FIELD WITH NEARBY VERNAL POOLS.						
General:	4+ OWLS OBSERVED AT BURROW SITES, FEB-MAY 2002. 0 BIRDS OBSERVED 5 MAY 2003; HIGH GRASS MAY HAVE HIDDEN BURROWS. AN ESTIMATED 6 PAIRS OBSERVED IN 2006. 1 PAIR OBSERVED ON 4 APR 2011. 1 ADULT FLUSHED FROM BURROW ON 2 APR 2016.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	490	Map Index:	48680	EO Index:	48680	Element Last Seen:	1989-01-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.41539 / -121.72042			Accuracy:	1/5 mile		
UTM:	Zone-10 N4252680 E611709			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 35, NE (M)			Acres:	0.0		
Location:	SE CORNER OF MIDWAY ROAD AND BUCKLEY ROAD; 1 MILE NNW LIBFARM.						
Detailed Location:							
Ecological:	AREA PRIMARILY IN FARMING. 5/5/2003 DITCH AREA SOUTH OF ROAD HAS LITTLE VEGETATION, PROBABLY NEWLY CUT. AGRICULTURE ON SE RECENTLY PLOWED. SEVERAL HOLES SPOTTED IN THE DITCH EDGE.						
General:	2 INDIVIDUALS OBSERVED ROOSTING IN CULVERTS ON 30 JAN 1982. NOT SEEN IN 1987 OR 1988. SEEN AGAIN 7 JAN 1989. 5/5/2003 NO BIRDS SEEN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	551	Map Index:	49290	EO Index:	49290	Element Last Seen:	2002-06-10
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-11-06
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45728 / -121.40609			Accuracy:	80 meters		
UTM:	Zone-10 N4257756 E639071			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 14 (M)			Acres:	0.0		
Location:	NORTH OF COSUMNES RIVER COLLEGE BOULEVARD, EAST OF POWER INN ROAD AND EAST OF HIGHWAY 99, SOUTH SACRAMENTO.						
Detailed Location:	A WELL-KNOWN COLONY OF BUOW EXISTS ABOUT A MILE FROM THIS SITE, AT COSUMNES RIVER COLLEGE.						
Ecological:	HABITAT CONSISTS OF A VACANT LOT (~10 ACRES IN SIZE), DOMINATED BY EXOTIC ANNUAL PLANT SPECIES; SURROUNDED BY AN AREA OF RAPIDLY DEVELOPING COMMERCIAL AND APARTMENTS.						
General:	4 ADULTS OBSERVED AT THIS ACTIVE BURROW SITE ON 10 JUN 2002.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	558	Map Index:	50990	EO Index:	50990	Element Last Seen:	2010-02-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2010-02-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43834 / -121.45161				Accuracy:	specific area	
UTM:	Zone-10 N4255587 E635134				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 20, SE (M)				Acres:	16.0	
Location:	ALONG SIMS ROAD ABOUT 0.2 TO 0.4 MI W OF FRANKLIN BLVD, & AT "SIMS WELL RD" ABOUT 0.5 MI NW OF SIMS RD AT FRANKLIN BLVD.						
Detailed Location:	2002: MAPPED TO PROVIDED COORDINATES; SITE CONSISTS OF 2 BURROWS, LOCATED ABOUT 500 FEET APART. 2009-10: MAPPED TO PROVIDED COORDINATES; DESCRIBED AS "MOSTLY ALONG SIMS WELL RD, IN ARTIFICIAL MOUNDS OR ALONG A BROKEN IRRIGATION LINE."						
Ecological:	HABITAT SURROUNDING BURROWS CONSISTS OF ANNUAL GRASSLAND.						
General:	2 ADULTS & 1 JUVENILE OBS AT BURROW ON W END OF S FEATURE & 1 ADULT OBS AT BURROW ON E END OF S FEATURE, 3 SEP '02. 4 WINTERING OWLS OBS AT N FEATURE (& 1 OCCATIONALLY AT S FEATURE) FROM 4 SEP '09 TO 1 FEB '10; NONE OBS 20 APR TO 4 SEP '09.						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	665	Map Index:	54632	EO Index:	54632	Element Last Seen:	2007-06-28
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-06-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-01-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47086 / -121.49378				Accuracy:	nonspecific area	
UTM:	Zone-10 N4259134 E631395				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 12, S (M)				Acres:	34.0	
Location:	ALONG CANAL SOUTH OF AMHERST ST & E OF I-5, & IN FIELD NEAR STONECREST AVE AT BEACH LAKE RD, SACRAMENTO.						
Detailed Location:	SPECIMEN: "FREEPORT 1 MI N." MAPPED TO COORDS (NW, SW & CENTER FEATURE). WIL COORDS APPEAR TO HAVE WRONG DATUM; MAPPED TO CON COORDS (CENTER FEATURE) OR OFFSET AS PER CON COORDS & BASED ON DESCRIPTION OF "IRRIGATION CANAL BANK" (W FEATURE).						
Ecological:	HABITAT SURROUNDING BURROW SITE CONSISTS OF AGRICULTURE/URBAN. SW BURROW IS NEAR EDGE OF ASPHALT. NW BURROW IS NEAR TOP OF DRAINAGE CANAL (NORTH SLOPE) ABOUT 30' FROM HWY FENCE.						
General:	MVZ EGG SET #5954 COLL 29 APR 1899. 2 ADULTS & 4 JUV OBS AT NW BURROW 6 JUN 2002; NOT OBS IN 2004. 1 AD OBS AT SW BURROW 10 FEB 2004; USUALLY 1-2 OBS PER YEAR. 3 PAIRS OBS IN E FEATURE & 1 PAIR WITH 4 JUV OBS AT CENTER BURROW 28 JUN 2007.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	696	Map Index:	55870	EO Index:	55886	Element Last Seen:	2007-07-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-07-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-10
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49494 / -121.47011				Accuracy:	specific area	
UTM:	Zone-10 N4261841 E633415				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 06, NE (M)				Acres:	11.0	
Location:	TO THE NW AND SW OF THE LUTHER BURBANK HIGH SCHOOL TRACK, JUST E OF THE RAILROAD & SOUTH OF FLORIN ROAD, SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. N: DIRT BERM BESIDE TRACK/PRCTICE FIELD; BURROW IS ON THE SCHOOL SIDE OF THE CHAIN LINK FENCE THAT SEPARATES THE SCHOOL FROM THE RR & FLORIN RD. S: RAILROAD EMBARKMENT.						
Ecological:	SURROUNDING HABITAT CONSISTS OF A DIRT BERM; AREA APPEARS TO BE MOWED AT SOME TIME OF THE YEAR, CREATING THE SHORT, DRY ANNUAL GRASS THE BIRDS PREFER.						
General:	2 ADULTS OBSERVED AT N BURROW SITE ON 15 JUN 2004. 5+ OBSERVED AT N BURROW SITE ON 25 OCT 2004. SEVERAL NESTING PAIRS OBS IN THE AREA BY J. MENTZER (PER CON07) AT UNKNOWN DATE(S) PRIOR TO 2007. 3 ADULTS OBS AT S BURROW SITE ON 11 JUL 2007.						
Owner/Manager:	SACRAMENTO CITY SCHOOL DIST						

Occurrence No.	720	Map Index:	58227	EO Index:	58263	Element Last Seen:	2004-05-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-05-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-11-29
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.46625 / -121.65433				Accuracy:	80 meters	
UTM:	Zone-10 N4258406 E617396				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 09, SW (M)				Acres:	0.0	
Location:	ALONG THE ROAD TO GLIDE RANCH, ON THE EAST SIDE OF ROAD 106, 0.5 MILE NORTH OF ROAD 38 JUNCTION, WEST OF SACRAMENTO.						
Detailed Location:							
Ecological:	HABITAT SURROUNDING BURROWS CONSISTS OF GRAZED GRASSLAND.						
General:	2 ADULTS AND 4 JUVENILES WERE OBSERVED AT A SERIES OF BURROWS UNDERNEATH POWERLINES DURING MAY 2004.						
Owner/Manager:	DFG-YOLO BYPASS WA, PVT						



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Occurrence No.	970	Map Index:	69475	EO Index:	70254	Element Last Seen:	2006-XX-XX
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2009-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.46222 / -121.45696				Accuracy:	nonspecific area	
UTM:	Zone-10 N4258230 E634623				Elevation (ft):	10	
PLSS:	T07N, R05E, Sec. 17, N (M)				Acres:	23.0	
Location:	ALONG BEACON CREEK LEVEE, BETWEEN MORRISON CREEK & FRANKLIN BOULEVARD, NORTH END OF SACRAMENTO TREATMENT PLANT PROPERTY.						
Detailed Location:	2005 BURROWS WERE LOCATED ALONG THE SOUTH FACE OF THE SOUTHERN LEVEE. BIRDS HAVE ALSO WINTERED AT THIS SITE IN 2007 (UP TO 9) AND IN 2009/2010 (UP TO 4).						
Ecological:	HABITAT CONSISTS OF A MAINTAINED LEVEE, WITH MOSTLY-BARREN SOIL AND SOME PERENNIAL PEPPERWEED ALONG THE TOP AND INSIDE CHANNEL. SURROUNDED BY RESIDENTIAL DEVELOPMENT TO THE NORTH AND THE SACRAMENTO BUFFERLANDS TO THE SOUTH.						
General:	REGULAR ON E SIDE OF PROPERTY WITH DECLINING #S SINCE 1995. NO BREEDING IN 2003 OR 2004, BUT EVERY YR PRIOR. 3 SINGLE OWLS & 1 FAMILY OF 4 BIRDS OBS ON 13 OCT 2005 (2 BURROWS IN EACH FEATURE). BREEDING IN 2006, NONE IN 2007-09.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	1255	Map Index:	78075	EO Index:	78948	Element Last Seen:	2007-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-04
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39124 / -121.45572				Accuracy:	80 meters	
UTM:	Zone-10 N4250354 E634863				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 08, NW (M)				Acres:	0.0	
Location:	ABOUT 0.16 MI WEST OF FRANKLIN BLVD AT RR, & ABOUT 0.9 MI N OF FRANKLIN (TOWN), STONE LAKES NWR.						
Detailed Location:	MAPPED TO PROVIDED COORINATES. DESCRIBED AS WEST SIDE OF FRANKLIN BLVD, NORTH OF HOOD-FRANKLIN RD AND TOWN OF FRANKLIN.						
Ecological:	NATURAL GRASSLAND.						
General:	1 PAIR WITH 1-3 JUVENILES OBSERVED DURING THE STATEWIDE SURVEY IN JUL 2007; ALL PREVIOUS STONE LAKE NWR DETECTIONS WERE WEST OF I-5 & ONLY IN THE NON-BREEDING SEASON.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	1256	Map Index:	78068	EO Index:	78950	Element Last Seen:	2009-07-09
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			2009-07-09
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2010-02-09

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.33361 / -121.45201	Accuracy:	specific area
UTM:	Zone-10 N4243964 E635295	Elevation (ft):	20
PLSS:	T06N, R05E, Sec. 32, NE (M)	Acres:	25.0

Location: PASTURES SOUTH OF POINT PLEASANT ROAD & WEST OF FRANKLIN BLVD, ABOUT 6.3 TO 6.9 MI SW OF ELK GROVE PO.

Detailed Location: MAPPED TO PROVIDED COORDINATES (WIL09D03). LOCATION CODES: A (NE FEATURE), B (SE FEATURE), C (SW FEATURE), D (CENTER-W FEATURE), & E (NW FEATURE).

Ecological: OVER-GRAZED CATTLE PASTURE.

General: 1 PAIR FOUND OR ESTIMATED AT EACH OF THE 5 SITES ON 15 JUN 2006 (A-B) & 9 JUL 2006 (C-E); PAIR & 3 JUVENILES AT SITE C. BUOW PRESENT HERE YEAR-ROUND.

Owner/Manager: PVT

Occurrence No.	1257	Map Index:	78069	EO Index:	78952	Element Last Seen:	2007-07-11
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			2007-07-11
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2010-02-09

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.35387 / -121.45276	Accuracy:	80 meters
UTM:	Zone-10 N4246212 E635191	Elevation (ft):	20
PLSS:	T06N, R05E, Sec. 20, SE (M)	Acres:	0.0

Location: ABOUT 0.24 MI SSW OF CORE ROAD AT FRANKLIN BLVD, ABOUT 1.75 MI SOUTH OF FRANKLIN & ABOUT 5.7 MI SW OF ELK GROVE (PO).

Detailed Location: MAPPED TO PROVIDED UTM COORDINATES.

Ecological: WIL09: NATURAL GRASSLAND. GRAZED.

General: 1 PAIR AND THREE JUVENILES OBSERVED ON 11 JUL 2007, DURING THE STATEWIDE SURVEY.

Owner/Manager: UNKNOWN



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Occurrence No.	1258	Map Index:	78071	EO Index:	78953	Element Last Seen:	2007-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-07-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-09
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42337 / -121.39686			Accuracy:	80 meters		
UTM:	Zone-10 N4254007 E639942			Elevation (ft):	40		
PLSS:	T07N, R05E, Sec. 35, NE (M)			Acres:	0.0		
Location:	VICINITY OF LAGUNA BLVD HWY 99-S ON-RAMP, NW ELK GROVE.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES (CON10U0001). DESCRIBED AS "ELK GROVE AT LAGUNA BLVD AND ONRAMP TO HWY 99."						
Ecological:	WIL09D03: PARKING LOT & IRRIGATION CANAL. CON: ADDITIONAL DEVELOPMENT HAS OCCURRED IN THIS AREA SINCE 2007.						
General:	2 ADULTS WITH 7 JUVENILES OBSERVED ON 29 JUN 2007 (CON), AND 2 ADULTS WITH 2 JUVENILES OBS ON 7 JUL 2007 (WIL), DURING THE STATEWIDE SURVEY.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1259	Map Index:	78086	EO Index:	78964	Element Last Seen:	2004-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-08
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34176 / -121.39882			Accuracy:	80 meters		
UTM:	Zone-10 N4244948 E639928			Elevation (ft):	30		
PLSS:	T06N, R05E, Sec. 26, S (M)			Acres:	0.0		
Location:	CARROLL RD ABOUT 0.6 MI SOUTH OF ESCHINGER RD, ABOUT 1.1 MI ENE OF BRUCEVILLE & ABOUT 4 MI SE OF FRANKLIN.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:							
General:	A REGULAR OBSERVATION LOCATION, INCL WINTER. A. ENGILIS NOTED POSSIBILITY OF SEVERAL COLONIES, HAVING FOUND MANY FLEDGLINGS HIT BY CARS ALONG THE ROAD. BREEDING IN 2004 AT THIS SITE, W/ FORAGING OWLS OBSERVED IN LATE OCT OF SAME YEAR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1260	Map Index:	78088	EO Index:	78968	Element Last Seen:	2008-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-01-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.30261 / -121.42922			Accuracy:	specific area		
UTM:	Zone-10 N4240558 E637345			Elevation (ft):	20		
PLSS:	T05N, R05E, Sec. 10, NW (M)			Acres:	17.0		
Location:	FRANKLIN AIRFIELD WEST OF BRUCEVILLE RD NEAR CAMP RD, ABOUT 6.4 MI NEOF WALNUT GROVE.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	BREEDING SITE IN 2008; WINTERING BIRDS OBSERVED THROUGH JAN 2010.						
General:	A. ENGIIS (CON07) NOTED BUOW AT SE FEATURE THROUGH 2004. 3 BREEDING LOCATIONS FOUND ON 4 JUL 2006, AS PER IBP SURVEY. 1 PAIR WITH CONFIRMED BREEDING STATUS FOUND AT SE FEATURE IN 2007 & 2008. BUOW OBS BY CONARD IN WINTER SEASON, 5 JAN 2010.						
Owner/Manager:	SAC COUNTY						

Occurrence No.	1266	Map Index:	78103	EO Index:	78985	Element Last Seen:	2004-10-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-10-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-09
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.37383 / -121.39026			Accuracy:	80 meters		
UTM:	Zone-10 N4248520 E640613			Elevation (ft):	40		
PLSS:	T06N, R05E, Sec. 14, NE (M)			Acres:	0.0		
Location:	ALONG CANAL NORTH OF KAMMERER RD ABOUT 0.5 MI EAST OF MCMILLAN RD, ABOUT 2.6 MI SSW OF ELK GROVE PO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	AGRICULTURAL.						
General:	2 WINTERING BUOW OBS ON 26 OCT 2004 IN BERM ALONG CANAL ON NORTH SIDE OF ROAD.						
Owner/Manager:	PVT						



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Occurrence No.	1631	Map Index:	81420	EO Index:	82397	Element Last Seen:	2010-08-10
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-01-24
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.37099 / -121.38529				Accuracy:	1/10 mile	
UTM:	Zone-10 N4248213 E641053				Elevation (ft):	40	
PLSS:	T06N, R05E, Sec. 13, SW (M)				Acres:	0.0	
Location:	0.75 MI ESE MCMILLAN RD AT KAMMERER RD, ABOUT 2.75 MI SSW ELK GROVE PO.						
Detailed Location:	LOCATION DESCRIBED AS "APPROXIMATELY 600 FT SOUTH OF KAMMERER ROAD, APPROXIMATELY 3,900 FT WEST OF LENT ROAD" [LENT RANCH PARKWAY?].						
Ecological:	SITE AND SURROUNDING PROPERTIES ARE USED FOR ROW CROPS AND VINEYARDS.						
General:	2 ADULT OBSERVED FLYING OUT OF A DITCH ON 10 AUG 2010. BURROWS LOCATED IN DITCH ALONG EASTERN SIDE OF DIRT ROAD SEPARATING 2 AGRICULTURAL FIELDS. ONE INDIVIDUAL RETURNED TO THE BURROWS, WHICH HAD FRESH DIRT AND WHITEWASH AT THE ENTRANCE.						
Owner/Manager:	PVT						

Occurrence No.	1966	Map Index:	A1785	EO Index:	103377	Element Last Seen:	2006-06-06
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2006-06-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-09-26
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.46512 / -121.69186				Accuracy:	nonspecific area	
UTM:	Zone-10 N4258234 E614125				Elevation (ft):	26	
PLSS:	T07N, R03E, Sec. 7, SW (M)				Acres:	22.0	
Location:	FROM ABOUT 0.7-1.1 MILES NW OF RD 38 AT RD 105 AND 1.8 MILES SW-2.0 MILES W OF SAXON, W OF YOLO BYPASS WILDLIFE AREA.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. 1992-1993 DATA MAPPED TO NW POLYGON, AND IS LOWER ACCURACY THAN 2006 DATA MAPPED TO SE POLYGON.						
Ecological:	2006: IRRIGATION CANAL.						
General:	1 PAIR OBSERVED IN 1992 AND 1 IN 1993. PAIR WITH AT LEAST 2 JUVENILES OBSERVED ON 6 JUN 2006.						
Owner/Manager:	PVT						



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Ammodramus savannarum

Element Code: ABPBXA0020

grasshopper sparrow

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** G5

State: None

State: S3

Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern

Habitat: **General:** DENSE GRASSLANDS ON ROLLING HILLS, LOWLAND PLAINS, IN VALLEYS AND ON HILLSIDES ON LOWER MOUNTAIN SLOPES.

Micro: FAVORS NATIVE GRASSLANDS WITH A MIX OF GRASSES, FORBS AND SCATTERED SHRUBS. LOOSELY COLONIAL WHEN NESTING.

Occurrence No.	16	Map Index:	69694	EO Index:	70479	Element Last Seen:	2007-06-19
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2007-06-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2007-07-26	

Quad Summary: Saxon (3812146)

County Summary: Solano

Lat/Long:	38.37841 / -121.73067	Accuracy:	80 meters
UTM:	Zone-10 N4248565 E610870	Elevation (ft):	240
PLSS:	T06N, R02E, Sec. 11, SW (M)	Acres:	0.0

Location: WEST SIDE OF ETZEL ROAD, 0.4 MILE NORTH OF DELHI ROAD, SE OF DIXON.

Detailed Location:

Ecological: HABITAT CONSISTS OF NON-NATIVE GRASSLAND/AGRICULTURE.

General: 1 ADULT OBSERVED ON 19 JUN 2007. THIS SPECIES HAS BEEN OBSERVED BY SEVERAL PEOPLE IN THIS AREA WITHIN THE PAST WEEK, WHILE SEARCHING FOR A LARK BUNTING REPORTED HERE.

Owner/Manager: UNKNOWN

Occurrence No.	19	Map Index:	99864	EO Index:	101410	Element Last Seen:	2015-06-20
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2015-06-20	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-05-03	

Quad Summary: Saxon (3812146)

County Summary: Solano, Yolo

Lat/Long:	38.4434 / -121.6935	Accuracy:	80 meters
UTM:	Zone-10 N4255821 E614015	Elevation (ft):	25
PLSS:	T07N, R03E, Sec. 19, NW (M)	Acres:	5.0

Location: E SIDE OF COUNTY RD 104 (HYDE RD) ABOUT 0.6 MI S OF THE RD 38A (HACKMAN RD) INTERSECTION, W OF THE YOLO BYPASS.

Detailed Location: MAPPED TO PROVIDED COORDINATES. ON TULE RANCH PROPERTY.

Ecological: IRRIGATED PASTURE. SOUTH PART OF RANCH IS IN A SWAINSON'S HAWK CONSERVATION EASEMENT, THE NORTHERN PART WILL BE PLACED IN A "MITIGATION RECEIVING SITE" UNDER THE YOLO COUNTY HCP.

General: PAIR WITH TWO FLEDGLINGS OBSERVED FLYING ALONG ROAD ON 20 JUN 2015.

Owner/Manager: PVT

Melospiza melodia

Element Code: ABPBXA3010

song sparrow ("Modesto" population)

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** G5

State: None

State: S3?

Other: CDFW_SSC-Species of Special Concern

Habitat: **General:** ☐



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Micro: <input type="checkbox"/>							
Occurrence No.	29	Map Index:	89839	EO Index:	90849	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-01
Quad Summary:	Terminous (3812114), Bouldin Island (3812115), Thornton (3812124), Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.12439 / -121.49923			Accuracy:	nonspecific area		
UTM:	Zone-10 N4220680 E631544			Elevation (ft):	0		
PLSS:	T03N, R04E, Sec. 12 (M)			Acres:	276.0		
Location:	ALONG MOKELUMNE RIVER JUST NORTH OF HWY 12, N AND W OF TERMINOUS, AND SE OF STATEN ISLAND.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH & RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	16-26 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR-26 MAY 2009. 25 & 19 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 14 & 26 MAY 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	44	Map Index:	89873	EO Index:	90883	Element Last Seen:	2009-05-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-02
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.13759 / -121.41809			Accuracy:	1/5 mile		
UTM:	Zone-10 N4222263 E638631			Elevation (ft):	5		
PLSS:	T03N, R05E, Sec. 03, W (M)			Acres:	0.0		
Location:	AT INTERSECTION OF UPLAND CANAL AND VICTOR RD (COTTA RD), 2.5 MI WSW OF VILLINGER.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	4 DETECTED AND DETERMINED TO BE NESTING IN AREA 21 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	45	Map Index:	89876	EO Index:	90886	Element Last Seen:	2009-06-26
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-06-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-02	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16800 / -121.43233			Accuracy:	nonspecific area		
UTM:	Zone-10 N4225616 E637326			Elevation (ft):	5		
PLSS:	T04N, R05E, Sec. 28, W (M)			Acres:	177.0		
Location:	BETWEEN HOG SLOUGH AND W WOODBRIDGE RD, ABOUT 1.5 MI W OF I-5.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED MID-BREEDING SEASON OR WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	7 DETECTED DURING MID-BREEDING SEASON ON 12 JUN; 11 DETECTED AND DETERMINED TO BE NESTING IN AREA 26 JUN 2009. 29 & 19 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 16 APR & 7 MAY 2009.						
Owner/Manager:	DFG, DWR						

Occurrence No.	46	Map Index:	89878	EO Index:	90888	Element Last Seen:	2009-06-26
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-06-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-05	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.15447 / -121.44391			Accuracy:	nonspecific area		
UTM:	Zone-10 N4224098 E636336			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 33, NW (M)			Acres:	193.0		
Location:	S OF W WOODBRIDGE RD, ABOUT 2.2 MI W OF I-5.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED MID-BREEDING SEASON OR WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS GRASSLAND & SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	12 OF 21 & 10 OF 13 DETECTED DURING MID-BREEDING SEASON AND DETERMINED TO BE NESTING IN AREA 12 & 26 JUN 2009.						
Owner/Manager:	DFG-WOODBRIDGE ER						



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Occurrence No.	47	Map Index:	89879	EO Index:	90889	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14221 / -121.47498				Accuracy:	nonspecific area	
UTM:	Zone-10 N4222692 E633636				Elevation (ft):	0	
PLSS:	T03N, R05E, Sec. 06, NW (M)				Acres:	32.0	
Location:	ALONG SYCAMORE SLOUGH, ABOUT 1.5 MI E OF SOUTH MOKELUMNE RIVER, 5.5 MI W OF VILLINGER.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	5 & 3 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 & 22 APR 2009. 4 & 1 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 14 & 26 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	48	Map Index:	89880	EO Index:	90890	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14241 / -121.49115				Accuracy:	nonspecific area	
UTM:	Zone-10 N4222691 E632219				Elevation (ft):	0	
PLSS:	T03N, R04E, Sec. 01, NE (M)				Acres:	118.0	
Location:	ALONG SYCAMORE SLOUGH, ABOUT 0.25-1 MI E OF SOUTH MOKELUMNE RIVER, 6-6.75 MI W OF VILLINGER.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	8-14 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR-26 MAY 2009. 8 & 3 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 14 & 26 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	49	Map Index:	89882	EO Index:	90892	Element Last Seen:	2009-04-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Thornton (3812124), Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.16141 / -121.50043				Accuracy:	nonspecific area	
UTM:	Zone-10 N4224787 E631372				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 25, SW (M)				Acres:	28.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, 0.5 MI S OF HOG SLOUGH, E SIDE OF STATEN ISLAND, 6.25 MILES NE OF I-5 AT HWY 12.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	3 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR 2009. 8 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	50	Map Index:	89883	EO Index:	90893	Element Last Seen:	2009-04-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16859 / -121.46869				Accuracy:	1/10 mile	
UTM:	Zone-10 N4225629 E634140				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 30, NE (M)				Acres:	0.0	
Location:	ALONG HOG SLOUGH, 1.3 MI E OF S MOKELUMNE RIVER, 3.75 MI WSW OF I-5 AT W PELTIER RD.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	51	Map Index:	89923	EO Index:	90934	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.17947 / -121.49429				Accuracy:	nonspecific area	
UTM:	Zone-10 N4226800 E631877				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 24, SE (M)				Acres:	62.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, E SIDE OF STATEN ISLAND, ABOUT 4.5 MI SW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	4 & 1 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR & 26 MAY 2009. 4-5 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR-26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	52	Map Index:	89925	EO Index:	90936	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18981 / -121.48377				Accuracy:	nonspecific area	
UTM:	Zone-10 N4227962 E632780				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, SW (M)				Acres:	48.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, NE SIDE OF STATEN ISLAND, ABOUT 4 MI SW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	6 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR 2009. 2-7 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR-26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	53	Map Index:	89926	EO Index:	90937	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19520 / -121.47401				Accuracy:	nonspecific area	
UTM:	Zone-10 N4228573 E633625				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, NE (M)				Acres:	52.0	
Location:	BEAVER SLOUGH AT SOUTH MOKELUMNE RIVER, NE SIDE OF STATEN ISLAND, ABOUT 3.5 MI SW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1-2 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR & 14 MAY 2009. 1-5 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR-26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	54	Map Index:	89929	EO Index:	90939	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20409 / -121.47819				Accuracy:	1/10 mile	
UTM:	Zone-10 N4229554 E633242				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 07, SW (M)				Acres:	0.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, NE SIDE OF STATEN ISLAND, ABOUT 3.3 MI WSW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 SONG SPARROW (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR 2009. 1 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	55	Map Index:	89931	EO Index:	90943	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20957 / -121.49069				Accuracy:	nonspecific area	
UTM:	Zone-10 N4230144 E632138				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 12, NE (M)				Acres:	73.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, N END OF STATEN ISLAND, ABOUT 4 MI WSW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	3 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR & 14 MAY 2009. 6 & 3 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR & 26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	56	Map Index:	89932	EO Index:	90946	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21779 / -121.49849				Accuracy:	1/10 mile	
UTM:	Zone-10 N4231046 E631440				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 01, SW (M)				Acres:	0.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, N END OF STATEN ISLAND, ABOUT 4 MI W OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR 2009. 1-6 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR-26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	57	Map Index:	89935	EO Index:	90947	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20421 / -121.43617				Accuracy:	nonspecific area	
UTM:	Zone-10 N4229628 E636921				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 09, S (M)				Acres:	67.0	
Location:	ALONG BEAVER SLOUGH, ABOUT 1.5 MI S OF FOUR CORNERS, 1.5 MI SSW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	6 DETECTED AND DETERMINED TO BE NESTING IN AREA 14 MAY 2009. 7 & 3 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR & 26 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	58	Map Index:	89936	EO Index:	90948	Element Last Seen:	2009-06-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20831 / -121.45361				Accuracy:	nonspecific area	
UTM:	Zone-10 N4230058 E635387				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 08 (M)				Acres:	52.0	
Location:	N OF BEAVER SLOUGH ALONG WHITE SLOUGH WILDLIFE AREA, 1-1.5 MI SSW OF FOUR CORNERS, HOPE TRACT.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 & 7 DETECTED AND DETERMINED TO BE NESTING IN AREA 14 MAY & 17 JUN 2009. 1 SONG SPARROW (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR 2009.						
Owner/Manager:	DWR						



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Occurrence No.	59	Map Index:	89939	EO Index:	90951	Element Last Seen:	2009-06-17
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-06-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-07	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.22228 / -121.45516			Accuracy:	nonspecific area		
UTM:	Zone-10 N4231606 E635225			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 05 (M)			Acres:	44.0		
Location:	S OF W WALNUT GROVE RD ALONG WHITE SLOUGH WA, 0.5 MI W OF N BLOSSOM RD, HOPE TRACT.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	15 & 8 DETECTED AND DETERMINED TO BE NESTING IN AREA 26 MAY & 17 JUN 2009.						
Owner/Manager:	DWR						

Occurrence No.	60	Map Index:	89941	EO Index:	90954	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-04-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-07	
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.24379 / -121.48229			Accuracy:	1/10 mile		
UTM:	Zone-10 N4233953 E632812			Elevation (ft):	0		
PLSS:	T05N, R05E, Sec. 31, NW (M)			Acres:	0.0		
Location:	ALONG MOKELUMNE RIVER, 1.6 MI E OF WALNUT GROVE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR 2009. 1 SONG SPARROW (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR & 26 MAY 2009.						
Owner/Manager:	TNC						



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Occurrence No.	61	Map Index:	89942	EO Index:	90955	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.14566 / -121.50922				Accuracy:	nonspecific area	
UTM:	Zone-10 N4223027 E630630				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 35, SE (M)				Acres:	82.0	
Location:	SE END OF STATEN ISLAND, JUST NW OF SOUTH MOKELUMNE RIVER AT SYCAMORE SLOUGH.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	2-13 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR-26 MAY 2009. 11 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 14 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	62	Map Index:	89943	EO Index:	90956	Element Last Seen:	2002-08-22
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-08-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.13296 / -121.52318				Accuracy:	1/10 mile	
UTM:	Zone-10 N4221598 E629429				Elevation (ft):	-10	
PLSS:	T03N, R04E, Sec. 03, SE (M)				Acres:	0.0	
Location:	SOUTH END OF STATEN ISLAND, ALONG N STATEN ISLAND RD, 2 MI NW OF TERMINOUS.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	FRESHWATER MARSH IN THE NORTH-SOUTH DRAINAGE CANAL OF THE CONSUMNES RIVER PRESERVE. SURROUNDING LAND USE INCLUDED AGRICULTURE. MODESTO SONG SPARROWS WERE COMMON ALONG THE INTERIOR DITCHES AND THE ISLANDS/WETLANDS IN ADJACENT RIVERS.						
General:	2 ADULTS COUNTER SINGING AND FORAGING IN AREA 22 AUG 2002.						
Owner/Manager:	TNC						



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Occurrence No.	63	Map Index:	89950	EO Index:	90964	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.17536 / -121.66193				Accuracy:	nonspecific area	
UTM:	Zone-10 N4226118 E617200				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 20, SE (M)				Acres:	157.0	
Location:	ALONG SACRAMENTO RIVER, JUST S OF CONFLUENCE WITH STEAMBOAT SLOUGH AND CACHE SLOUGH, 2 MILES NE OF RIO VISTA.						
Detailed Location:	1910 SPECIMENS COLLECTED AT "RIO VISTA" & 1921 SPECIMENS COLLECTED AT "1 MI NE RIO VISTA." MAPPED TO 2009 COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED AS NESTING WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN & MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	7 SPECIMENS (CAS #82048-54) COLLECTED IN 1910. 3 SPECIMENS (MVZ #43165-7) COLLECTED 22 DEC 1921. 1 & 17 DETECTED AND DETERMINED TO BE NESTING IN AREA 13 APR & 28 MAY 2009. 16 SONG SPARROWS PERCHED IN AREA 28 APR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	64	Map Index:	89954	EO Index:	90968	Element Last Seen:	2009-05-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.18419 / -121.65339				Accuracy:	1/10 mile	
UTM:	Zone-10 N4227108 E617934				Elevation (ft):	10	
PLSS:	T04N, R03E, Sec. 21, NW (M)				Acres:	0.0	
Location:	ALONG STEAMBOAT SLOUGH, JUST E OF CACHE SLOUGH, 2.75 MI WNW OF ISLETON AND ABOUT 2.75 MI NE OF RIO VISTA.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS NON-RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 18 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	65	Map Index:	89958	EO Index:	90970	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.18871 / -121.65959				Accuracy:	nonspecific area	
UTM:	Zone-10 N4227602 E617384				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 16, SW (M)				Acres:	58.0	
Location:	ALONG CACHE SLOUGH, JUST N OF CONFLUENCE WITH SACRAMENTO RIVER AND STEAMBOAT SLOUGH, 3.4 MI NW OF ISLETON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1-3 DETECTED AND DETERMINED TO BE NESTING IN AREA 13 APR-28 MAY 2009. 5 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 28 APR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	66	Map Index:	90003	EO Index:	91015	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-12
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25569 / -121.44058				Accuracy:	1/10 mile	
UTM:	Zone-10 N4235335 E636439				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 28, NW (M)				Acres:	0.0	
Location:	ALONG SACRAMENTO RIVER, JUST W OF COUNTY RD J8, JUST N OF MOKELUMNE CITY.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S). GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 14 MAY 2009. 1 & 4 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR & 26 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	67	Map Index:	90004	EO Index:	91016	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25559 / -121.47699			Accuracy:	1/10 mile		
UTM:	Zone-10 N4235271 E633253			Elevation (ft):	0		
PLSS:	T05N, R05E, Sec. 30, N (M)			Acres:	0.0		
Location:	ALONG SACRAMENTO RIVER, 2 MI W OF MOKELUMNE CITY AND 2 MI NE OF WALNUT GROVE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S). GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 14 MAY 2009. 1 SONG SPARROW (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 26 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	68	Map Index:	90011	EO Index:	91023	Element Last Seen:	2009-06-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-12
Quad Summary:	Thornton (3812124), Isleton (3812125), Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.26935 / -121.49695			Accuracy:	nonspecific area		
UTM:	Zone-10 N4236769 E631482			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 24 (M)			Acres:	1985.0		
Location:	ALONG SNODGRASS SLOUGH AND MOKELUMNE RIVER, FROM DEAD HORSE ISLAND NORTH TO LAMBERT RD, AND E TO COSUMNES RIVER.						
Detailed Location:	MAPPED TO 2009 DETECTIONS OF BIRDS WITH NESTING BEHAVIOR. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. PRUETT (2008) ANALYZED SAMPLES FROM "SF BAY, COSUMNES RIVER;" EXACT LOCATION UNKNOWN.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN AND MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	22 BIRDS COLLECTED 1995-2002 GENETICALLY ANALYZED AS HEERMANNI (=MAILLIARDI). UP TO 177 DETECTED & DETERMINED TO BE NESTING 2 APR-29 JUN 2009. 3-76 SONG SPARROWS (ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN VICINITY 2 APR-27 MAY 2009.						
Owner/Manager:	UNKNOWN, TNC, DPR, SAC COUNTY						



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Occurrence No.	69	Map Index:	90014	EO Index:	91026	Element Last Seen:	2009-06-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28736 / -121.46276				Accuracy:	nonspecific area	
UTM:	Zone-10 N4238817 E634440				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 17, NW (M)				Acres:	73.0	
Location:	NW OF TWIN CITIES RD AT I-5, ABOUT 2 MI SW OF FRANKLIN FIELD, 4 MILES NE OF WALNUT GROVE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	HABITAT DESCRIBED AS SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	16 DETECTED IN AREA 10 JUN 2009. AT LEAST 3 DETECTED AND DETERMINED TO BE NESTING IN AREA 24 JUN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	70	Map Index:	90015	EO Index:	91027	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28909 / -121.47609				Accuracy:	1/10 mile	
UTM:	Zone-10 N4238989 E633271				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 18, N (M)				Acres:	0.0	
Location:	1 MI WNW OF TWIN CITIES RD AT I-5, ABOUT 3 MI SSW OF POINT PLEASANT (TOWN), 3.6 MI ENE OF VORDEN.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 28 APR 2009; 6 ADDITIONAL SONG SPARROWS (ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	71	Map Index:	90016	EO Index:	91028	Element Last Seen:	2009-06-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36109 / -121.48700				Accuracy:	nonspecific area	
UTM:	Zone-10 N4246963 E632186				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 24, NE (M)				Acres:	122.0	
Location:	ABOUT 1 MI SW OF HOOD FRANKLIN RD AT I-5, 1.75 MI ESE OF HOOD PO, NE OF SOUTH STONE LAKE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	HABITAT DESCRIBED AS MARSH AND RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	2 & 29 DETECTED IN AREA 2 & 18 JUN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	72	Map Index:	90017	EO Index:	91029	Element Last Seen:	2009-06-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31617 / -121.50280				Accuracy:	nonspecific area	
UTM:	Zone-10 N4241956 E630886				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 02, NE (M)				Acres:	32.0	
Location:	SOUTH OF SOUTH STONE LAKE, ABOUT 2 MI WSW OF LAMBERT RD AT I-5, 3.7 MI ESE OF COURTLAND.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	3-4 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 9 & 28 APR 2009. 1-5 DETECTED AND DETERMINED TO BE NESTING IN AREA 30 APR-27 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	73	Map Index:	90018	EO Index:	91030	Element Last Seen:	2009-06-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32470 / -121.51968				Accuracy:	nonspecific area	
UTM:	Zone-10 N4242878 E629395				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 34, SE (M)				Acres:	28.0	
Location:	JUST N OF LAMBERT RD AT HERZOG RD, ABOUT 2.7 MI E OF COURTLAND, 5.5 MI N OF WALNUT GROVE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	6 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 20 MAY 2009. 8 DETECTED AND DETERMINED TO BE NESTING IN AREA 11 JUN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	74	Map Index:	90019	EO Index:	91031	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.28950 / -121.64543				Accuracy:	nonspecific area	
UTM:	Zone-10 N4238805 E618460				Elevation (ft):	10	
PLSS:	T05N, R03E, Sec. 09, SE (M)				Acres:	61.0	
Location:	ALONG MINER SLOUGH AT FIVE POINTS, NE END OF PROSPECT ISLAND, ABOUT 1.5 MI S OF MEDORA LAKE & 5 MI SW OF COURTLAND.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1-10 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 27 APR-18 MAY 2009. 1 & 3 DETECTED AND DETERMINED TO BE NESTING IN AREA 8-28 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	75	Map Index:	90020	EO Index:	91032	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.27393 / -121.64157				Accuracy:	nonspecific area	
UTM:	Zone-10 N4237081 E618824				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 15, W (M)				Acres:	112.0	
Location:	ALONG MINER SLOUGH, SR 84 AT ELEVATOR RD, E SIDE OF PROSPECT ISLAND, 2-3 MI S OF MEDORA LAKE, 5.5 MI SW OF COURTLAND.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB AND TREES. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1-15 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 22 APR-13 MAY 2009. 2-7 DETECTED AND DETERMINED TO BE NESTING IN AREA 13 APR-28 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	76	Map Index:	90025	EO Index:	91033	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Rio Vista (3812126), Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.26233 / -121.66326				Accuracy:	nonspecific area	
UTM:	Zone-10 N4235767 E616944				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 20 (M)				Acres:	1082.0	
Location:	ALONG PROSPECT AND MINER SLOUGH, FROM CONFLUENCE N TO FIVE POINTS, W AND S SIDES OF PROSPECT ISLAND.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN AND MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	17-140 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 22 APR-28 MAY 2009. UP TO 93 DETECTED AND DETERMINED TO BE NESTING IN AREA 13 APR-28 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	77	Map Index:	90027	EO Index:	91040	Element Last Seen:	2009-04-03
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42326 / -121.49372				Accuracy:	nonspecific area	
UTM:	Zone-10 N4253852 E631486				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 36 (M)				Acres:	40.0	
Location:	STONE LAKES NWR, JUST W OF I-5 AT LAGUNA BLVD, 1.75-2 MI E OF CLARKSBURG.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB AND TREES. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	7 DETECTED AND DETERMINED TO BE NESTING IN AREA 3 APR 2009. 2 & 21 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 3 & 30 APR 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	78	Map Index:	90029	EO Index:	91042	Element Last Seen:	2009-06-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.43640 / -121.49558				Accuracy:	nonspecific area	
UTM:	Zone-10 N4255308 E631300				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 25 (M)				Acres:	87.0	
Location:	JUST NW OF I-5 AT LAGUNA BLVD, 2 MI NE OF CLARKSBURG.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH AND RIPARIAN TREES. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	7-33 DETECTED AND DETERMINED TO BE NESTING IN AREA 19 MAY & 11 JUN 2009. 2-27 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 20 APR-19 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	79	Map Index:	90030	EO Index:	91043	Element Last Seen:	2009-05-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.42899 / -121.50119				Accuracy:	1/10 mile	
UTM:	Zone-10 N4254478 E630824				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 26, SE (M)				Acres:	0.0	
Location:	0.75 MI W OF I-5 AT LAGUNA BLVD, 1.5 MI NE OF CLARKSBURG.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREES. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	4 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 30 APR 2009. 3 DETECTED AND DETERMINED TO BE NESTING IN AREA 19 MAY 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	80	Map Index:	90031	EO Index:	91044	Element Last Seen:	2009-04-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-19
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.41219 / -121.50349				Accuracy:	1/10 mile	
UTM:	Zone-10 N4252610 E630654				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 35, SE (M)				Acres:	0.0	
Location:	ABOUT 1 MI E OF ELK SLOUGH AT SACRAMENTO RIVER, 1 MI W OF I-5 AT ELK GROVE BLVD, 1.4 MI ESE OF CLARKSBURG.						
Detailed Location:	MAPPED TO 2009 COORDINATES FOR "NESTING" BIRDS. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	3 DETECTED & DETERMINED AS NESTING IN AREA 21 APR 2009. 1-8 SONG SPARROWS (ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 3 APR-14 MAY 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	81	Map Index:	90032	EO Index:	91045	Element Last Seen:	2009-04-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.40419 / -121.50488				Accuracy:	1/10 mile	
UTM:	Zone-10 N4251721 E630546				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 02, NE (M)				Acres:	0.0	
Location:	ABOUT 1.2 MI SE OF ELK SLOUGH AT SACRAMENTO RIVER, 1.2 MI WSW OF I-5 AT ELK GROVE BLVD, 1.6 MI SE OF CLARKSBURG.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	2 DETECTED AND DETERMINED TO BE NESTING IN AREA 21 APR 2009. 3 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 1 & 28 APR 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	82	Map Index:	90033	EO Index:	91046	Element Last Seen:	2009-05-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.37949 / -121.50989				Accuracy:	1/10 mile	
UTM:	Zone-10 N4248972 E630153				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 11, S (M)				Acres:	0.0	
Location:	ABOUT 1.8 MI WNW OF I-5 AT HOOD FRANKLIN RD, 2.5 MI SSE OF ELK SLOUGH AT SACRAMENTO RIVER.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 20 MAY 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	92	Map Index:	90115	EO Index:	91127	Element Last Seen:	1927-10-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1927-10-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-19
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.41797 / -121.54329				Accuracy:	1 mile	
UTM:	Zone-10 N4253196 E627168				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 33 (M)				Acres:	0.0	
Location:	VICINITY OF CLARKSBURG; BOUNDED BY WINCHESTER LAKE (N), SACRAMENTO RIVER (E), ELK SLOUGH (S), AND MAIN CANAL (W).						
Detailed Location:	MAPPED GENERALLY TO SPECIMEN LOCATIONS DESCRIBED AS FOLLOWS: 1912 SPECIMEN COLLECTED AT "CLARKSBURG" & 1927 SPECIMEN COLLECTED AT "6-7.5 MI N COURTLAND." EXACT LOCATIONS UNKNOWN.						
Ecological:	THIS AREA IS NOW AGRICULTURAL FIELDS. HISTORIC TOPOGRAPHIC MAP FROM 1914 INDICATES THE AREA MORE AS A WETLAND WITH HISTORIC BIG LAKE, NOW CENTRAL AVE.						
General:	1 COLLECTED (MVZ #46049) 30 DEC 1912. 5 COLLECTED (MVZ #51637-41) 7 & 8 SEP1927.						
Owner/Manager:	UNKNOWN						

Agelaius tricolor		Element Code: ABPBXB0020	
tricolored blackbird			
Listing Status:	Federal:	None	CNDDDB Element Ranks: Global: G2G3
	State:	Threatened	State: S1S2
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	
Habitat:	General:	HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.	
	Micro:	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, AND FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.	

Occurrence No.	6	Map Index:	11515	EO Index:	7319	Element Last Seen:	1998-04-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2015-04-18
Occ. Type:	Natural/Native occurrence			Trend:	Fluctuating	Record Last Updated:	2016-02-01
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44805 / -121.37896				Accuracy:	nonspecific area	
UTM:	Zone-10 N4256773 E641456				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 24, NE (M)				Acres:	51.0	
Location:	NEAR STRAWBERRY CREEK, W OF ELK GROVE FLORIN RD, ABOUT 0.5 MI SW OF CALVIN RD, 0.7 MI NNW OF SHELDON RD.						
Detailed Location:	MAPPED TO PROVIDED MAPS & LOCATION DESCRIPTION OF "ALONG SOUTHERN PACIFIC RR TRACKS S OF CALVINE RD." DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "CALVINE ROAD." AREA INCLUDES PORTIONS OF STRAWBERRY CRK & AREA ADJ TO RR.						
Ecological:	NESTING SUBSTRATE CONSISTS OF BLACKBERRIES; REMOVED BY 1993. DOMINANTS INCLUDE BLACKBERRY AND SANFORD'S ARROWHEAD. ASSOCIATES INCLUDE WATER PLANTAIN. SURROUNDING AREA IS HEAVILY DEVELOPED (2002 -2013 AERIAL PHOTOS).						
General:	320 NESTED IN 1981. 40 TO SEVERAL HUNDRED NESTED IN 1990-1993. 1000+ ADS NESTED IN 1993. ~250-3000 NESTED IN 1994. ~2300 OBS IN 1995; FORAGING. NESTING OCCURRED IN 1998; COLONY SIZE UNDETERMINED. NONE OBS IN 1997, 1999, 2011, 2015.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	7	Map Index:	11446	EO Index:	24793	Element Last Seen:	1981-05-11
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2011-04-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-02-01
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45599 / -121.40529				Accuracy:	2/5 mile	
UTM:	Zone-10 N4257615 E639143				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 14, SW (M)				Acres:	0.0	
Location:	VICINITY OF CALVINE RD AND HWY 99 INTERSECTION, 3.1 MI SW OF FLORIN POST OFFICE, SE OF SACRAMENTO.						
Detailed Location:	MAPPED GENERALLY TO PROVIDED COORDINATES AND LOCATION DESCRIPTIONS OF "HIGHWAY 99 & CALVINE RD." DATA ADDITIONALLY STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME WAS "CALVINE ROAD AT HIGHWAY 99."						
Ecological:	BLACKBERRIES AND CATTAILS IN 1981. PASTURE IN 1982. 2008-2014 AERIAL PHOTOS SHOW THAT THIS AREA HAS BEEN HEAVILY DEVELOPED. MINIMAL VEGETATION VISIBLE ALONG DRAINAGE.						
General:	ABOUT 50 ADULTS WITH FLEDGLING YOUNG NESTING ON 11 MAY 1981; SITE ABANDONED AFTER FLEDGING. A FEEDING FLOCK OF ABOUT 75 BIRDS OBS ON 7 JUN 1982. SEVERAL HUNDRED OBS IN 1991. UNK NUMBER OBS IN 1992. 0 OBS IN 1993-1994, 1997-1999, & IN 2011.						
Owner/Manager:	PVT						

Occurrence No.	9	Map Index:	11420	EO Index:	24792	Element Last Seen:	1981-05-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1981-05-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-01-13
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37249 / -121.41758				Accuracy:	3/5 mile	
UTM:	Zone-10 N4248330 E638229				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 15 (M)				Acres:	0.0	
Location:	NEAR INTERSECTION OF KAMMERER RD & BRUCEVILLE RD, ~0.7 MI W OF RAU RD, 4.3 MI N OF FRANKLIN FIELD, 5.2 MI E OF HOOD PO.						
Detailed Location:	MAPPED TO PROVIDED LOCATION DESCRIPTION. LOCATION DESCRIBED AS "NEAR INTERSECTION OF KAMMERER RD & BRUCEVILLE RD, 4 MI N OF FRANKLIN FIELD." PROVIDED TRS WAS T 6N, R 5E, S15.						
Ecological:	NESTING OCCURRED IN BLACKBERRY. SIZE OF COLONY APPROXIMATELY 0.25 ACRE.						
General:	APPROXIMATELY 100 ADULTS OBSERVED NESTING ON 15 MAY 1981.						
Owner/Manager:	PVT						



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Occurrence No.	19	Map Index:	11473	EO Index:	24784	Element Last Seen:	1982-06-07
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2014-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-01-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43579 / -121.39079				Accuracy:	2/5 mile	
UTM:	Zone-10 N4255395 E640447				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 26 (M)				Acres:	0.0	
Location:	VICINITY OF SHELDON RD & POWER INN RD INTERSECTION, ABOUT 0.5 MI E OF HWY 99, ELK GROVE.						
Detailed Location:	1982 LOCATION DESCRIPTION WAS "ALONG SHELDON ROAD, 0.5 MI E OF HWY 99 (FLORIN, T 7N, R 5E, S26 NNE)." STATEWIDE SURVEY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME IN PORTAL WAS "SHELDON ROAD AT HIGHWAY 99."						
Ecological:	NESTING SUBSTRATE IN 1982 WERE CATTAILS ALONG CULVERT. AREA DESCRIBED IN 2011 AND 2014 AS FULLY DEVELOPED AND SHOULD BE REMOVED FROM FUTURE STATEWIDE SURVEYS. PRIVATE LAKE (SHORTLINE LAKE) EXISTS S OF SHELDON RD.						
General:	ABOUT 130 NESTING PAIRS OBSERVED ON 7 JUN 1982; NESTING STAGE UNKNOWN. NONE OBSERVED ON 16 JUN 1992. NONE OBSERVED ON 16 APR 2011 AND 20 APR 2014 DURING TRIENNIAL STATEWIDE SURVEYS.						
Owner/Manager:	PVT						

Occurrence No.	156	Map Index:	11521	EO Index:	24687	Element Last Seen:	1972-06-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1972-06-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-04-03
Quad Summary:	Galt (3812133), Bruceville (3812134), Elk Grove (3812143), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37739 / -121.37569				Accuracy:	4/5 mile	
UTM:	Zone-10 N4248938 E641879				Elevation (ft):	40	
PLSS:	T06N, R05E, Sec. 13 (M)				Acres:	0.0	
Location:	ABOUT 1.3 MI WSW OF WATERMAN RD & GRANT LINE RD INTERSECTION, 2.3 MI SSE OF HWY 99 AT ELK GROVE BLVD, ELK GROVE.						
Detailed Location:	MAPPED TO PROVIDED LOCATION DESCRIPTIONS. 1972 LOCATION DESCRIBED AS "JUST WEST OF HWY 99 NEAR GRANT LINE EXIT; 12 MILES SOUTH OF SACRAMENTO." ADDITIONALLY DESCRIBED AS "0.5 MI W OF GRANT LINE EXIT."						
Ecological:	NESTING SUBSTRATE CONSISTED OF CATTAILS AND BULRUSH.						
General:	ABOUT 10,000 INDIVIDUALS OBSERVED ON 7 JUN 1972; PROBABLY NESTING BUT NOT CONFIRMED (DEHAVEN UNPUB. FIELD DATA).						
Owner/Manager:	UNKNOWN						



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Occurrence No.	159	Map Index:	11454	EO Index:	24684	Element Last Seen:	2014-04-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2015-04-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-02-03
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35459 / -121.39509			Accuracy:	4/5 mile		
UTM:	Zone-10 N4246377 E640229			Elevation (ft):	30		
PLSS:	T06N, R05E, Sec. 23 (M)			Acres:	0.0		
Location:	ABOUT 1.3 MI E OF ESCHINGER RD & BRUCEVILLE RD INTERSECTION, 2.3 MI SW OF HWY 99 AT GRANT LINE RD, S OF ELK GROVE.						
Detailed Location:	1969-74 LOCATION DESCRIBED AS "2 MI SW OF HWY 99 & ELK GROVE BLVD JUNCTION." 2014 LOCATION WAS "S OF ESCHINGER ROAD, E OF ITS INTERSECTION W/ CARROLL ROAD." 2014 DATA PART OF UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "ESCHINGER RD."						
Ecological:	NESTING IN CATTAILS AND BULRUSH IN 1969-74. BULK OF THE BIRDS IN 2014 WERE PERCHED IN A TALL COTTONWOOD OVER THE BLACKBERRY THICKET. SEVERAL OTHER BIRDS NOTED IN WHEAT FIELD TO THE N OF THE BLACKBERRY. ADJACENT TO ACTIVE FERTILIZER PLANT.						
General:	NESTING COLONY REPORTED BETWEEN 1969 & 1974; EXACT NUMBERS UNKNOWN. ABOUT 1500 BIRDS OBSERVED (BREEDING COLONY) ON 21 APR 2014; REPORTED AS "COLONY BEGINNING TO FORM WITH MANY NOISY MALES SINGING." 0 OBSERVED ON 23 MAY 2014 & 19 APR 2015.						
Owner/Manager:	UNKNOWN						
Occurrence No.	174	Map Index:	17173	EO Index:	9704	Element Last Seen:	1992-06-16
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	2014-04-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-03-04
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39249 / -121.42216			Accuracy:	specific area		
UTM:	Zone-10 N4250542 E637792			Elevation (ft):	25		
PLSS:	T06N, R05E, Sec. 10, NW (M)			Acres:	10.5		
Location:	ALONG FRANKLIN HIGH RD, BETWEEN QUAIL RUN LN AND WHITELOCK PARKWAY, ABOUT 0.2 MILE W OF BRUCEVILLE RD, W OF ELK GROVE.						
Detailed Location:	MAPPED TO PROVIDED MAPS AND LOCATION DESCRIPTION OF NORTH OF QUAIL RUN ROAD, WEST OF BRUCEVILLE ROAD. BLACKBERRY BRAMBLE APPEARS TO HAVE RAN ALONG WHAT IS NOW FRANKLIN HIGH RD. HIGH SCHOOL TO THE W, RESIDENTIAL BUILDINGS TO THE E.						
Ecological:	NESTING IN BLACKBERRY BRAMBLE (1990), ALONG BOUNDARY TO A CULTIVATED FIELD, RUNNING N FROM QUAIL RUN LN, BIRDS RANGE A DISTANCE W FOR FORAGING. AREA DESCRIBED AS "FULLY DEVELOPED WITH HOUSES, NO LONGER A VIABLE SITE" IN 2014.						
General:	ABOUT 500 ADULTS OBSERVED NESTING ON 29 MAY 1990; FEMALES WERE INCUBATING. ABOUT 100 BIRDS OBSERVED ON 16 JUN 1992; NOTED AS BREEDING INDIVIDUALS. NONE OBSERVED ON 19 APR 2014 DURING STATEWIDE SURVEYS.						
Owner/Manager:	PVT						



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Occurrence No.	204	Map Index:	21602	EO Index:	18952	Element Last Seen:	1992-06-18
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2014-04-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-02-11
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43594 / -121.43579			Accuracy:	specific area		
UTM:	Zone-10 N4255343 E636519			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 28, N (M)			Acres:	52.0		
Location:	LAGUNA CREEK, BOTH SIDES OF BIG HORN BLVD, 1 MI W OF BRUCEVILLE ROAD, SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED MAP LOCATIONS. PROVIDED LOCATION DESCRIPTION FOR 1992 WAS "0.5-1 MI W OF BRUCEVILLE... ALONG LAGUNA CREEK." DATA COLLECTED BY UC DAVIS TRICOLORED BLACKBIRD PORTAL, SITE NAME WAS "LAGUNA CREEK AT FRANKLIN BOULEVARD."						
Ecological:	NESTING SUBSTRATE WAS BLACKBERRIES ALONG THE CREEK. 2014 SURVEY NOTED SITE AS A HISTORICAL LOCATION NOW ENTIRELY SURROUNDED BY HOUSING/URBANIZATION; SHOULD BE REMOVED FROM STATEWIDE SURVEYS.						
General:	100-200 NESTING BIRDS OBSERVED NESTING ON 16 & 18 JUN 1992. NONE DETECTED ON 19 APR 2014.						
Owner/Manager:	UNKNOWN						
Occurrence No.	479	Map Index:	95756	EO Index:	96894	Element Last Seen:	2005-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2014-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-03-26
Quad Summary:	Clarksburg (3812145), Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48119 / -121.63259			Accuracy:	2/5 mile		
UTM:	Zone-10 N4260092 E619268			Elevation (ft):	15		
PLSS:	T07N, R03E, Sec. 03, W (M)			Acres:	0.0		
Location:	ABOUT 1.5 MI ESE OF COUNTY RD 36 & COUNTY RD 106 INTERSECTION, SE OF DAVIS, YOLO BYPASS WILDLIFE AREA.						
Detailed Location:	MAPPED GENERALLY TO PROVIDED COORDINATES. SURVEYS CONDUCTED AS PART OF TRIENNIAL STATEWIDE SURVEYS. COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME WAS "GLIDE TULE RANCH."						
Ecological:	"A LOT OF TRICOLORED HABITAT" NOTED IN 2011. NO NESTING SUBSTRATE REPORTED IN 2014.						
General:	APPROXIMATELY 100 OBSERVED ON 30 JUN 2005; OBSERVATION NOTES WERE "SINGING," "CARRYING NEST MATERIAL," AND "FLEDGLINGS OUT OF NEST." NONE DETECTED DURING 17 APR 2011 AND 20 APR 2014 SURVEYS.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	480	Map Index:	95759	EO Index:	96896	Element Last Seen:	1989-05-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2015-04-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-12-14
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.39178 / -121.50108				Accuracy:	3/5 mile	
UTM:	Zone-10 N4250349 E630901				Elevation (ft):	15	
PLSS:	T06N, R04E, Sec. 11 (M)				Acres:	0.0	
Location:	ABOUT 1.5 MI SW OF I-5 & ELK GROVE BLVD INTERSECTION, 1.7 MI NW OF I-5 AT HOOD FRANKLIN RD, NORTH STONE LAKE.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES AND LOCATION DESCRIPTION OF "NORTH STONE LAKE AT WESTERN EDGE WHERE BORROW CHANNEL MEETS THE LAKE." TRS WAS T 6N, R 4E, S11 NE. UC DAVIS TRICOLORED BLACKBIRD PORTAL SITE NAME WAS "NORTH STONE LAKE."						
Ecological:	BLACKBERRY THICKET AT INTERFACE OF BORROW CHANNEL, UPLANDS, BULRUSH MARSH, AND LAKE.						
General:	ABOUT 50-75 BIRDS OBSERVED ON 16 MAY 1989; COLONY SUCCESSFULLY NESTED, INDICATED BY OBSERVATION OF FLEDGED YOUNG. NONE DETECTED ON 20 APR 2014 AND 18 APR 2015.						
Owner/Manager:	DPR-STONE LAKE PARK						

<i>Xanthocephalus xanthocephalus</i>				Element Code: ABPBXB3010			
yellow-headed blackbird							
Listing Status:	Federal:	None		CNDDB Element Ranks:	Global:	G5	
	State:	None			State:	S3	
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern					
Habitat:	General:	NESTS IN FRESHWATER EMERGENT WETLANDS WITH DENSE VEGETATION AND DEEP WATER. OFTEN ALONG BORDERS OF LAKES OR PONDS.					
	Micro:	NESTS ONLY WHERE LARGE INSECTS SUCH AS ODONATA ARE ABUNDANT, NESTING TIMED WITH MAXIMUM EMERGENCE OF AQUATIC INSECTS.					

Occurrence No.	9	Map Index:	63557	EO Index:	63652	Element Last Seen:	1899-06-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1899-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-12-29
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.45140 / -121.50133				Accuracy:	1/5 mile	
UTM:	Zone-10 N4256965 E630771				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 23 (M)				Acres:	0.0	
Location:	0.5 MI SOUTH OF FREEPORT.						
Detailed Location:							
Ecological:							
General:	MVZ #954-957 (EGG SETS) COLLECTED 10 JUN 1899 BY R. H. ELLIOTT.						
Owner/Manager:	UNKNOWN						

<i>Oncorhynchus mykiss irideus pop. 11</i>			Element Code: AFCHA0209K	
steelhead - Central Valley DPS				
Listing Status:	Federal:	Threatened	CNDDB Element Ranks:	Global: G5T2Q
	State:	None		State: S2
	Other:	AFS TH-Threatened		



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Habitat:	General:	POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.					
	Micro:	<input type="checkbox"/>					
Occurrence No.	19	Map Index:	91287	EO Index:	92339	Element Last Seen:	2012-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-03-28
Quad Summary:	Clements (3812121), Lockeford (3812122), Lodi North (3812123), Thornton (3812124), Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.19129 / -121.11651			Accuracy:	nonspecific area		
UTM:	Zone-10 N4228716 E664941			Elevation (ft):			
PLSS:	T04N, R08E, Sec. 20 (M)			Acres:	4969.0		
Location:	MOKELUMNE RIVER, FROM THE SAN JOAQUIN DELTA NEAR WALNUT GROVE TO MOKELUMNE R FISH HATCHERY (MRH) AT CAMANCHE DAM (RM64).						
Detailed Location:	MAPPED TO EXTENT OF RIVER NAVIGABLE BY STEELHEAD (SH); CAMANCHE DAM (CD) (BUILT 1963) IS MIGRATION BARRIER. FISH HATCHERY JUST BELOW CD. RSTS LOCATED D/S OF WOODBRIDGE DAM (WID) (~RM39.6). SPAWNING AREA FROM ELLIOTT RD TO CD.						
Ecological:	RUN HEAVILY INFLUENCED BY MRH; DEBATED IF IT EXISTED PRIOR TO STOCKING. EGGS IMPORTED FROM NIMBUS, BATTLE CK & FEATHER R HATCHERIES RECENTLY AS 2008. GRAVEL AUGMENTATION SINCE 1990. SAC R WATER FROM DELTA CROSS CHANNEL MAY CAUSE STRAYING.						
General:	AVG# FROM RSTS 1993-2010=410; FROM VIDEO WEIR 1998-2005=489; SKEWED BY HATCHERY RELEASES. HATCHERY RETURNS ROSE 1999-2008; 93% HATCHERY ORIGIN, '08. REDD COUNT ROSE 1995-2010(AVG 39); IN-RIVER SPAWNERS MOSTLY WILD, BELIEVED MOSTLY RESIDENT.						
Owner/Manager:	UNKNOWN						
Occurrence No.	24	Map Index:	91514	EO Index:	92591	Element Last Seen:	2013-01-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2013-01-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-02-10
Quad Summary:	Galt (3812133), Bruceville (3812134), Carbondale (3812141), Sloughhouse (3812142), Elk Grove (3812143), Folsom SE (3812151)						
County Summary:	Amador, El Dorado, Sacramento, San Joaquin						
Lat/Long:	38.49658 / -121.06664			Accuracy:	nonspecific area		
UTM:	Zone-10 N4262685 E668600			Elevation (ft):			
PLSS:	T08N, R08E, Sec. 35 (M)			Acres:	4344.0		
Location:	COSUMNES RIVER, FROM ITS MOUTH IN THE MOKELUMNE RIVER TO LATROBE FALLS (NEAR RM37.25).						
Detailed Location:	MAPPED TO RIVER REACH CURRENTLY ACCESSIBLE BY STEELHEAD (SH); LATROBE FALLS IS A NATURAL BARRIER TO ANADROMY. RECENT JUVENILE DETECTIONS BELOW LOW-WATER CROSSING AT ~RM6.75, THOUGH ADULTS SEEN ABOVE IT; IT MAY BE A BARRIER TO JUVENILE SH.						
Ecological:	COSUMNES MAY HOST NON-NATAL REARING HABITAT FOR SH FROM MOKELUMNE, OTHER NEARBY RIVERS. AVAILABLE HABITAT LOW-ELEVATION, LIKELY ONLY SUITABLE FOR SPAWNING IN WET YEARS. SH SEEN RECENTLY PRESUMED HATCHERY STRAYS. UNK IF HISTORIC RUN EXISTED.						
General:	1 PRESUMED "STEELHEAD" CAUGHT IN GILL NET SAMPLES, 5-6 FEB 1974. 0 TROUT CAUGHT IN 2000, 1 IN 2001, & 12 IN 2002 IN QUARTERLY ELECTROFISHING SAMPLES. 7 AD-CLIPPED SH, 16-27", RECORDED PAST CAMERA TRAP AT GRANLEES DAM 6 DEC 2012-7 JAN 2013.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	27	Map Index:	91603	EO Index:	92687	Element Last Seen:	2012-05-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-05-07
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2014-02-27
Quad Summary:	Lathrop (3712173), Stockton West (3712183), Holt (3712184), Woodward Island (3712185), Terminous (3812114), Bouldin Island (3812115), Jersey Island (3812116), Antioch North (3812117), Honker Bay (3812118), Thornton (3812124), Isleton (3812125), Rio Vista (3812126), Courtland (3812135), Liberty Island (3812136), Florin (3812144), Clarksburg (3812145)						
County Summary:	Contra Costa, Sacramento, San Joaquin, Solano, Yolo						
Lat/Long:	38.10457 / -121.59990				Accuracy:	nonspecific area	
UTM:	Zone-10 N4218343 E622752				Elevation (ft):		
PLSS:	T03N, R03E, Sec. 13 (M)				Acres:	55159.0	
Location:	SACRAMENTO-SAN JOAQUIN DELTA, FROM CHIPPS ISLAND TO SAN JOAQUIN R AT DOS REIS(RM51) & SACRAMENTO R AT GARCIA BEND(RM49).						
Detailed Location:	AREA OF DELTA MAPPED INCLUDES 19 BEACH SEINE SITES AT WHICH STEELHEAD WERE REGULARLY DETECTED, 1976-2012; VARIOUS MIDWATER TRAWL SITES SAMPLED 1968-2005; AND THE CHIPPS ISLAND TRAWL SITE, OPERATED SINCE 1976.						
Ecological:	LOWER RIVERS & DELTA MOSTLY UNSUITABLE FOR REARING DUE TO HIGH WATER TEMPS; FUNCTION MAINLY AS MIGRATORY CORRIDOR. 2012 TELEMETRY STUDY SHOWED MAIN JUVENILE EMIGRATION ROUTE THROUGH MAINSTEM SACRAMENTO R; & MIGRATORY SUCCESS LESS THAN 25%.						
General:	ANNUAL SEINE CATCH 1-136 (HIGH IN 1995) SINCE 1976; OVER 90% HATCHERY-ORIGIN (HO) FROM 2000-2012. CHIPPS TRAWL CATCH 9-488 (HIGH IN '95); %HO INCREASED FROM 2000-12. ANALYSIS SUGGESTS PRODUCTION OF 100-300K WILD SMOLTS/YR; MAY BE DECLINING.						
Owner/Manager:	UNKNOWN, DFG, TNC						

Occurrence No.	30	Map Index:	91663	EO Index:	92737	Element Last Seen:	2011-04-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2011-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-02-21
Quad Summary:	Rio Vista (3812126), Courtland (3812135), Liberty Island (3812136), Clarksburg (3812145), Saxon (3812146), Sacramento West (3812155)						
County Summary:	Sacramento, Solano, Yolo						
Lat/Long:	38.51671 / -121.58429				Accuracy:	nonspecific area	
UTM:	Zone-10 N4264097 E623420				Elevation (ft):		
PLSS:	T08N, R04E, Sec. 30 (M)				Acres:	10025.0	
Location:	EASTERN EDGE OF YOLO BYPASS; INCLUDING TOE DRAIN, SACRAMENTO DEEP WATER SHIP CHANNEL (DWSC), AND SACRAMENTO BYPASS.						
Detailed Location:	USFWS & DWR FYKE TRAPS & SCREW TRAPS (RSTS) LOCATED IN TOE DRAIN (TD). SACRAMENTO RIVER FLOOD FLOWS CONNECT TD WITH YOLO BYPASS (YB) & PUTAH CREEK (PC), ENABLING FURTHER MIGRATION (NOT MAPPED). DWSC IS A DEAD END FOR STEELHEAD.						
Ecological:	ADULTS MIGRATE UP CHANNELS INTO YB (& OCCASIONALLY PC), BUT BARRIERS INCL. FREMONT WEIR BLOCK RIVER ACCESS. STUDIES SHOW JUVENILE SH USE YB AS REARING HABITAT, BUT ADULTS & JUVS STRANDED AS FLOODS RECEDE. PC TROUT INFLUENCED BY STOCKING.						
General:	ANALYSIS OF OTOLITHS FROM 40 PC TROUT SHOWED 0 SH PROGENY. TD FYKE TRAPS CAUGHT 15 MIGRATING SH, 2001-2006. TD RST CAUGHT 91 SH, 1998-2006. STRANDED SH SEINED FROM SACRAMENTO BYPASS 1998-99 & FROM BELOW FREMONT WEIR IN 1998-99 & 2011.						
Owner/Manager:	UNKNOWN						

Hypomesus transpacificus				Element Code: AFCHB01040			
Delta smelt							
Listing Status:	Federal:	Threatened		CNDDDB Element Ranks:	Global:	G1	
	State:	Endangered			State:	S1	
	Other:	AFS_TH-Threatened, IUCN_EN-Endangered					
Habitat:	General:	SACRAMENTO-SAN JOAQUIN DELTA. SEASONALLY IN SUISUN BAY, CARQUINEZ STRAIT & SAN PABLO BAY.					
	Micro:	SELDOM FOUND AT SALINITIES > 10 PPT. MOST OFTEN AT SALINITIES < 2PPT.					



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Occurrence No.	6	Map Index:	66770	EO Index:	66919	Element Last Seen:	2006-05-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2006-05-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-10-17
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.20316 / -121.51747				Accuracy:	80 meters	
UTM:	Zone-10 N4229395 E629805				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 11, SW (M)				Acres:	0.0	
Location:	NORTH FORK MOKELUMNE RIVER, PUMPING STATION.						
Detailed Location:							
Ecological:	RIPRAPPED BANKS. CAPTURED AT 1350 HRS. WATER TEMP = 17.1 C, DISSOLVED OXYGEN = 9.15 MG/L.						
General:	1 ADULT (75 MM) CAPTURED BY ELECTROFISHING, RELEASED IN HEALTHY CONDITION ON 2 MAY 2006.						
Owner/Manager:	UNKNOWN						
Occurrence No.	7	Map Index:	66772	EO Index:	66921	Element Last Seen:	2017-11-14
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2017-11-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-08-30
Quad Summary:	Jersey Island (3812116), Antioch North (3812117), Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.09181 / -121.73612				Accuracy:	nonspecific area	
UTM:	Zone-10 N4216755 E610829				Elevation (ft):	0	
PLSS:	T03N, R02E, Sec. 22 (M)				Acres:	4853.0	
Location:	LOWER SACRAMENTO RIVER BETWEEN SHERMAN ISLAND AND RIO VISTA.						
Detailed Location:	ROUGHLY CORRESPONDS TO "LOWER SACRAMENTO RIVER" ESTUARY REGION FROM INTERAGENCY ECOLOGICAL PROGRAM MONITORING (MER11A0001). HIGHEST DENSITIES OF SUB-ADULTS & JUVS FOUND HERE. SUMMARIES OF IEP/DFG ANNUAL SURVEYS IN ECOLOGICAL COMMENTS BELOW.						
Ecological:	SEINE: AVG CATCH 195, 1976-89; 20, 1992-99; 15, 2000-11. SPRING KODIAK TRAWL: AVG OF 98, 2002-12. LARVAL: AVG OF 27, 2009-12. 20MM TOWNET: AVG OF 31, 1995-2012. FALL MIDWATER TRAWL: AVG 69, 1967-78; 149, 1980-99; 58, 2000-16. SPAWNING AREA.						
General:	1129 CAUGHT IN NOV-DEC 2000. 842 IN NOV 02. 1420 IN NOV 2003. 1803 IN NOV-DEC 2004. 11, JAN-MAR 2005. 24 JUVENILES, AUG-SEP 2008. 75, DEC 2009. 103, NOV 2016. 100, NOV 2017. OVERALL DECLINE OF CPUE SINCE 2000 MAY BE EVIDENCE OF POP DECLINE.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	9	Map Index:	79760	EO Index:	80753	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX	Record Last Updated:	2010-08-30
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33314 / -121.64774			Accuracy:	80 meters		
UTM:	Zone-10 N4243643 E618188			Elevation (ft):	0		
PLSS:	T06N, R03E, Sec. 28, SE (M)			Acres:	0.0		
Location:	SACRAMENTO DEEP WATER CHANNEL BETWEEN LIGHTS 59 AND 60.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 719.						
Ecological:	MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. STATION 719 ADDED IN 2005. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT DETECTED HERE IN 2005, 2006 & 2007.						
Owner/Manager:	UNKNOWN						

Occurrence No.	10	Map Index:	79761	EO Index:	80755	Element Last Seen:	2005-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2005-XX-XX	Record Last Updated:	2010-08-30
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.23603 / -121.55888			Accuracy:	80 meters		
UTM:	Zone-10 N4232986 E626122			Elevation (ft):	2		
PLSS:	T05N, R04E, Sec. 33, SW (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER AT THE RYDE HOTEL.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 724.						
Ecological:	MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT DETECTED HERE IN 2005. NOT DETECTED IN 2002, 2003, 2004 OR 2006 & 2007.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	11	Map Index:	79762	EO Index:	80756	Element Last Seen:	2006-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-09-03	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19435 / -121.47811			Accuracy:	80 meters		
UTM:	Zone-10 N4228474 E633267			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 18 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER AT THE MOUTH OF BEAVER SLOUGH.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 922.						
Ecological:	SURVEY MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT DETECTED HERE IN 2002, 2003, 2004 & TWICE IN 2006. NOT DETECTED IN 2005 OR 2007.						
Owner/Manager:	UNKNOWN						

Occurrence No.	12	Map Index:	79767	EO Index:	80761	Element Last Seen:	2002-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-08-31	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16469 / -121.49272			Accuracy:	80 meters		
UTM:	Zone-10 N4225161 E632042			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 25, SE (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER AT THE MOUTH OF HOG SLOUGH.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 921. COORDINATES GIVEN ARE ON LAND ON BRACK TRACT. MAPPED TO THE STATED LOCATION AT THE MOUTH OF HOG SLOUGH.						
Ecological:	SURVEY MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT DETECTED HERE IN 2002. NOT DETECTED IN 2003, 2004, 2005, 2006 OR 2007.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	13	Map Index:	79768	EO Index:	80762	Element Last Seen:	2006-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-08-31	

Quad Summary: Isleton (3812125)

County Summary: San Joaquin

Lat/Long:	38.14158 / -121.50401	Accuracy:	80 meters
UTM:	Zone-10 N4222581 E631094	Elevation (ft):	1
PLSS:	T03N, R04E, Sec. 02, NE (M)	Acres:	0.0

Location: SOUTH MOKELUMNE RIVER AT SYCAMORE SLOUGH.

Detailed Location: SPRING KODIAK TRAWL SURVEY STATION 920. COORDINATES GIVEN ARE ON LAND ON TERMINOUS TRACT. MAPPED TO THE STATED LOCATION AT THE MOUTH OF SYCAMORE SLOUGH.

Ecological: SURVEY MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.

General: SMELT DETECTED HERE IN 2004, 2005 & 2006. NOT DETECTED IN 2002, 2003 OR 2007.

Owner/Manager: UNKNOWN

Occurrence No.	15	Map Index:	79770	EO Index:	80771	Element Last Seen:	2003-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-08-31	

Quad Summary: Isleton (3812125)

County Summary: Sacramento, San Joaquin

Lat/Long:	38.13707 / -121.55802	Accuracy:	80 meters
UTM:	Zone-10 N4222005 E626368	Elevation (ft):	0
PLSS:	T03N, R04E, Sec. 05, NE (M)	Acres:	0.0

Location: MOKELUMNE RIVER IN BEND ABOVE SOUTH MODELUMNE RIVER.

Detailed Location: SPRING KODIAK TRAWL SURVEY STATION 923.

Ecological: SURVEY MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.

General: SMELT TAKEN TWICE IN 2003. NOT TAKEN IN 2002 OR 2004 - 2007.

Owner/Manager: UNKNOWN

Spirinchus thaleichthys

Element Code: AFCHB03010

longfin smelt

Listing Status: **Federal:** Candidate
State: Threatened
Other:

CNDDDB Element Ranks: **Global:** G5
State: S1

Habitat: **General:** EURYHALINE, NEKTONIC & ANADROMOUS. FOUND IN OPEN WATERS OF ESTUARIES, MOSTLY IN MIDDLE OR BOTTOM OF WATER COLUMN.
Micro: PREFER SALINITIES OF 15-30 PPT, BUT CAN BE FOUND IN COMPLETELY FRESHWATER TO ALMOST PURE SEAWATER.



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Occurrence No.	14	Map Index:	89689	EO Index:	90689	Element Last Seen:	2004-01-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-09-27
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2013-08-05
Quad Summary:	Courtland (3812135), Florin (3812144), Clarksburg (3812145), Sacramento West (3812155), Taylor Monument (3812165), Grays Bend (3812166)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.53243 / -121.52712				Accuracy:	nonspecific area	
UTM:	Zone-10 N4265920 E628376				Elevation (ft):	20	
PLSS:	T08N, R04E, Sec. 22 (M)				Acres:	7834.0	
Location:	ABOUT 31 MILES OF THE SACRAMENTO RIVER FROM THE I-5 CROSSING (RM70.5) NEAR SACRAMENTO AIRPORT, SOUTH TO HOOD (RM38).						
Detailed Location:	1973 DETECTIONS FROM DFG TRAWLS AT CLARKSBURG & HOOD. DETECTED AT USFWS SITES, N TO S: SR071E (ELKHORN) SR060E (DISCOVERY PARK), SR055M (SHERWOOD HARBOR), SR049E (GARCIA BEND) & SR043W (CLARKSBURG); ALL BEACH SEINE SITES EXCEPT SR055M.						
Ecological:	USFWS BEACH SEINES BEGUN 1976-81, WEEKLY SINCE '90S. SR055M: KODIAK TRAWLS OCT-MAR, MIDWATER TRAWLS APR-SEP, 2-3/WK. CATCH INTERMITTENT & AT LOW LEVELS; MAX WAS 10 IN 1 TRAWL. WELL UPSTREAM OF MAIN SAC RIVER SPAWNING AREA, BELOW RIO VISTA.						
General:	COLLECTED IN 1940. UP TO 9 ADULTS(A) & 3 YOY CAUGHT IN TRAWLS, '73. ADULTS CAUGHT AT SR060E IN '84, '87. 1A IN '88 TRAWLS. 12A AT 3 STATIONS, '93. 3A & 1 JUV AT 3 STNS, '94. 1A IN '97 TRAWLS. 8A & 1 JUV AT 2 STNS, 2002. 1A IN 2004 TRAWLS.						
Owner/Manager:	UNKNOWN, STATE						

Occurrence No.	15	Map Index:	89692	EO Index:	90690	Element Last Seen:	2002-05-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-09-25
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2016-07-29
Quad Summary:	Isleton (3812125), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.23960 / -121.55477				Accuracy:	specific area	
UTM:	Zone-10 N4233387 E626476				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 33 (M)				Acres:	782.0	
Location:	SACRAMENTO RIVER, FROM LOCKE (RM27.3) TO RYDE (RM 24.4).						
Detailed Location:	MAPPED TO 1973-1974 CDFW TRAWL LOCATION AT WALNUT GROVE AND USFWS BEACH SEINE STATION SR024E (KOKET).						
Ecological:	BEACH SEINES AT USFWS SITE BEGUN IN MAR 1976, PERFORMED WEEKLY SINCE THE 1990S. THIS AREA IS WELL UPSTREAM OF THE MAIN SACRAMENTO RIVER SPAWNING GROUNDS, BELOW RIO VISTA.						
General:	ADULTS & JUVENILES CAUGHT IN TRAWLS IN 1973, NONE IN 1974. 6 ADULTS CAUGHT IN APR 1996. 1 JUVENILE (25 MM FL) CAUGHT ON 20 MAY 2002. SUBSEQUENT EFFORTS DETECTED NO LONGFIN SMELT.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	16	Map Index:	89693	EO Index:	90692	Element Last Seen:	2002-05-10
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2012-09-25		
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:	2013-07-25		
Quad Summary:	Isleton (3812125), Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16300 / -121.61158			Accuracy:	1 mile		
UTM:	Zone-10 N4224811 E621631			Elevation (ft):	0		
PLSS:	T04N, R03E, Sec. 26 (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER AT ISLETON (RM 17.4).						
Detailed Location:	SPECIMEN LOCALITY "SACRAMENTO RIVER, ISLETON BRIDGE." USFWS BEACH SEINE SITE SR017E.						
Ecological:	USFWS BEACH SEINING SINCE 1976, WEEKLY SINCE THE '90S. A FEW MILES UPSTREAM OF THE CENTRAL SPAWNING GROUNDS AS CURRENTLY UNDERSTOOD, BELOW RIO VISTA. LONGFIN SMELT SPAWN FURTHER UPSTREAM IN YEARS WITH LOW INFLOWS FROM RIVERS TO DELTA.						
General:	1 COLLECTED IN 1949 (CAS #212385). 3 ADULTS CAUGHT IN SEINES, MAR 1979. 1 JUVENILE (28 MM FL) CAUGHT IN MAY 2002. SUBSEQUENT EFFORTS DETECTED NO LONGFIN SMELT.						
Owner/Manager:	UNKNOWN						

Occurrence No.	17	Map Index:	89700	EO Index:	90695	Element Last Seen:	2012-04-11
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2012-09-27		
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:	2013-08-05		
Quad Summary:	Jersey Island (3812116), Antioch North (3812117), Honker Bay (3812118), Rio Vista (3812126)						
County Summary:	Contra Costa, Sacramento, Solano						
Lat/Long:	38.11975 / -121.69699			Accuracy:	nonspecific area		
UTM:	Zone-10 N4219903 E614216			Elevation (ft):	0		
PLSS:	T03N, R02E, Sec. 12 (M)			Acres:	12111.0		
Location:	SACRAMENTO RIVER FROM CACHE SLOUGH (RIO VISTA) DOWNSTREAM TO UPPER SUISUN BAY NEAR PITTSBURG.						
Detailed Location:	6 USFWS BEACH SEINE SITES, N TO S: SR014W (RIO VISTA), SR012E&W (STUMP/SANDY BEACH), TM001N (BRANNAN ISLAND), & MS001N (SHERMAN ISLAND). 10 MULTI-STUDY CDFW MONITORING STATIONS #513, 520, 703, 704, 705, 706, 707, 711, 801, 804.						
Ecological:	A KEY SPAWNING GROUNDS FOR THE BAY-DELTA POPULATION. SURVEYS IN AREA (& START YEAR): CDFW SPRING [=SPAWNING] KODIAK TRAWL (2002), 20MM [=LARVA] (1995), SMELT LARVAL SURVEY[SLS] (2009); USFWS BEACH SEINES (1979); DREDGE MONITORING (2006-08).						
General:	396 COLLECTED 1946-48, 4 IN 1974. LOW #S CAUGHT IN FWS SEINES. 20MM(SLS) CATCH/YR: 232/'96 7650/'97 409/'99 3022/'00 2636/'01 9278/'02 2040/'03 2305/'04 361/'05 0/'06 753/'07 3956/'08 2270(3214)/'09 1160(3586)/'10 4(4195)/'11 501 (5412)/'12.						
Owner/Manager:	UNKNOWN, DPR, DFG, STATE						



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Occurrence No.	19	Map Index:	89710	EO Index:	90714	Element Last Seen:	2012-06-04
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2012-06-18	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-05	
Quad Summary:	Liberty Island (3812136), Dozier (3812137)						
County Summary:	Solano						
Lat/Long:	38.25938 / -121.76674			Accuracy:	nonspecific area		
UTM:	Zone-10 N4235314 E607896			Elevation (ft):	0		
PLSS:	T05N, R02E, Sec. 21 (M)			Acres:	1589.0		
Location:	LINDSEY SLOUGH FROM ABOUT 1 MILE WEST OF THE CACHE SLOUGH CONFLUENCE TO THE BARKER SLOUGH CONFLUENCE.						
Detailed Location:	INCLUDES CDFW 20 MM ICHTHYOPLANKTON MONITORING STATIONS 718 AND 720.						
Ecological:	SAMPLING STARTED HERE IN 2008; CONDUCTED BI-WEEKLY MAR/APR-JUL/AUG. POSSIBLE RISK OF ENTRAINMENT FROM BARKER SLOUGH PUMPING PLANT ABOUT 1 MILE UPSTREAM.						
General:	20 MM SURVEY CATCH/YEAR: 19/2008, 20/2009, 18/2010, 126/2011, 130/2012.						
Owner/Manager:	UNKNOWN, DFG						

Occurrence No.	20	Map Index:	89715	EO Index:	90717	Element Last Seen:	2012-03-12
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2012-06-04	
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:		2013-07-25	
Quad Summary:	Rio Vista (3812126), Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.26941 / -121.64108			Accuracy:	nonspecific area		
UTM:	Zone-10 N4236581 E618873			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 15 (M)			Acres:	779.0		
Location:	MINER SLOUGH, FROM THE VICINITY OF THE CACHE SLOUGH CONFLUENCE NORTH TO THE VICINITY OF ELEVATOR ROAD, WEST RYER ISLAND.						
Detailed Location:	MAPPED TO VICINITY OF COORDINATES GIVEN FOR CDFW 20 MM SAMPLING STATIONS 724 AND 726.						
Ecological:	CDFW 20 MM LARVAL SURVEY STARTED IN 1995; SAMPLING AT THE MINER SLOUGH STATIONS STARTED IN 2008. SAMPLING CONDUCTED WITH PLANKTON NETS, BI-WEEKLY FROM MAR-AUG EVERY YEAR. DELTA SMELT AND SPLITTAIL LARVAE ALSO FOUND.						
General:	LOW NUMBERS OF SMELT LARVAE CAUGHT IN 2008 (4), 2009 (2), AND 2012 (1).						
Owner/Manager:	UNKNOWN, USBOR						



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Occurrence No.	21	Map Index:	89716	EO Index:	90718	Element Last Seen:	2012-06-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Rio Vista (3812126), Liberty Island (3812136)						
County Summary:	Solano, Yolo						
Lat/Long:	38.25600 / -121.68844			Accuracy:	nonspecific area		
UTM:	Zone-10 N4235033 E614752			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 19 (M)			Acres:	7500.0		
Location:	CACHE SLOUGH N OF ELKHORN SLOUGH CONFLUENCE, LIBERTY ISLAND, & SACRAMENTO RIVER DEEP WATER SHIP CHANNEL TO COURTLAND RD.						
Detailed Location:	CDFW 20MM/SMELT LARVAL SURVEY(SLS)/SPRING KODIAK TRAWL(SKT) STATIONS 713, 715, 716, 719, 723. DWR SAMPLED W/SCREW TRAPS IN DEEP WATER CHANNEL 1999-2002. IEP SAMPLED FISH OCCUPANCY OF LIBERTY ISLAND (LI) 2010-12 W/BEACH SEINE & LARVAL TRAWLS.						
Ecological:	DWR STUDY FOUND HIGHER FISH DIVERSITY IN DEEP WATER CHANNEL/YOLO BYPASS THAN SACRAMENTO RIVER SITES; WINTER/SPRING FLOODING MAY BENEFIT NATIVE FISH. LI SURVEY INDICATED HIGH OCCUPANCY BY SPLITTAIL; LARVAL LFS BUT NO ADULTS DETECTED.						
General:	59 YOY FROM DWR TRAPS, '02. 20 MM CATCH/YEAR: 3/'97 24/'01 296/'02 15/'03 1/'05 22/'08 47/'09 35/'10 6/'11 62/'12. SKT: 23/'02 1/'04 1/'06 1/'08 1/'09 2/'10 1/'11 1/'12. SLS: 97/'09 235/'10 316/'11 255/'12. 137 LARVAE FROM LI, 2010-12.						
Owner/Manager:	UNKNOWN						

Occurrence No.	44	Map Index:	89774	EO Index:	90782	Element Last Seen:	1966-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2013-07-26
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16677 / -121.48968			Accuracy:	nonspecific area		
UTM:	Zone-10 N4225397 E632304			Elevation (ft):	-5		
PLSS:	T04N, R04E, Sec. 25 (M)			Acres:	344.0		
Location:	HOG SLOUGH, EAST OF SOUTH MOKELUMNE RIVER, ABOUT 3 MILES WNW OF W WOODBRIDGE RD AT INTERSTATE 5, 17 MI N OF STOCKTON.						
Detailed Location:	MAPPED TO LOCALITY REPORTED IN CDFW STATUS REVIEW.						
Ecological:	MOST UPSTREAM DETECTION OF THE SPECIES IN THIS DRAINAGE. IN YEARS OF LOW OUTFLOW, LONGFIN SMELT SPAWN FURTHER UPSTREAM, INCREASING THEIR RISK OF ENTRAINMENT.						
General:	RADTKE CAUGHT ADULT SMELT AT THIS LOCATION IN WINTER/SPRING 1966. NOT DETECTED IN KODIAK TRAWLS CONDUCTED MONTHLY EACH SPRING SINCE 2002.						
Owner/Manager:	UNKNOWN						



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Pogonichthys macrolepidotus

Element Code: AFCJB34020

Sacramento splittail

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** GNR

State: None

State: S3

Other: AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered

Habitat: **General:** ENDEMIC TO THE LAKES AND RIVERS OF THE CENTRAL VALLEY, BUT NOW CONFINED TO THE DELTA, SUISUN BAY AND ASSOCIATED MARSHES.

Micro: SLOW MOVING RIVER SECTIONS, DEAD END SLOUGHS. REQUIRES FLOODED VEGETATION FOR SPAWNING AND FORAGING FOR YOUNG.

Occurrence No.	1	Map Index:	24986	EO Index:	881	Element Last Seen:	1995-02-26
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:			1995-02-26
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			1996-01-02

Quad Summary: Courtland (3812135), Florin (3812144), Clarksburg (3812145), Sacramento West (3812155), Taylor Monument (3812165), Grays Bend (3812166), Verona (3812175), Knights Landing (3812176), Eldorado Bend (3812177), Nicolaus (3812185)

County Summary: Sacramento, Sutter, Yolo

Lat/Long:	38.61362 / -121.56075	Accuracy:	specific area
UTM:	Zone-10 N4274883 E625304	Elevation (ft):	20
PLSS:	T09N, R04E, Sec. 20 (M)	Acres:	5037.5

Location: SACRAMENTO RIVER FROM MISSOURI BEND N OF KNIGHTS LANDING TO S OF COURTLAND. ALSO, LOWER 10 MILES OF THE FEATHER RIVER.

Detailed Location: IN THE SACRAMENTO RIVER FROM RIVER MILE 33 SOUTH OF COURTLAND TO RIVER MILE 97 NORTH OF KNIGHTS LANDING, AND THE LOWER 10 MILES OF THE FEATHER RIVER.

Ecological: MODERATE CURRENT & SANDY BOTTOM. RIVERBANKS VARIABLE, WATER TEMP AVERAGES LOW 60'S F. MOST FISH TAKEN FROM THE END OF DECEMBER TO THE END OF MAY.

General: INFORMATION TAKEN FROM A SACRAMENTO RIVER ANGLER SURVEY CONDUCTED BETWEEN 1991 & 1995. FISH WERE TAKEN BY HOOK & LINE MOSTLY FROM SHORE. MOST OF THE SPLITTAIL CAUGHT WERE TAKEN INCIDENTALLY & WERE NOT THE SPECIES TARGETED BY THE ANGLER.

Owner/Manager: PVT, STATE



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<i>Lasiurus cinereus</i>				Element Code: AMACC05030	
hoary bat					
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G5
	State:	None		State:	S4
	Other:	IUCN_LC-Least Concern, WBWG_M-Medium Priority			
Habitat:	General:	PREFERS OPEN HABITATS OR HABITAT MOSAICS, WITH ACCESS TO TREES FOR COVER AND OPEN AREAS OR HABITAT EDGES FOR FEEDING.			
	Micro:	ROOSTS IN DENSE FOLIAGE OF MEDIUM TO LARGE TREES. FEEDS PRIMARILY ON MOTHS. REQUIRES WATER.			
Occurrence No.	207	Map Index: 68993	EO Index: 69701	Element Last Seen:	1999-09-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1999-09-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-04-19
Quad Summary:	Rio Vista (3812126)				
County Summary:	Sacramento				
Lat/Long:	38.14667 / -121.64745		Accuracy:	1/10 mile	
UTM:	Zone-10 N4222952 E618515		Elevation (ft):	20	
PLSS:	T04N, R03E, Sec. 33, SE (M)		Acres:	0.0	
Location:	BRANNAN ISLAND, ABOUT 1.8 ROAD MILES SE OF INTERSECTION OF HWYS 12 AND 160.				
Detailed Location:	MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY SOURCE, WITH LOCALITY "RIVER EDGE." SOURCE LISTS 4 COORDINATES FOR "BRANNAN SRA." BAT ASSUMED TO BE DETECTED AT ALL 4 LOCATIONS (OCC #206-207).				
Ecological:	NO TREES. CONSISTS OF GRASSLAND OR SHRUBS.				
General:	BAT(S) DETECTED ON 24 SEP 1999.				
Owner/Manager:	UNKNOWN				

<i>Lasiurus blossevillii</i>				Element Code: AMACC05060	
western red bat					
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G5
	State:	None		State:	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_H-High Priority			
Habitat:	General:	ROOSTS PRIMARILY IN TREES, 2-40 FT ABOVE GROUND, FROM SEA LEVEL UP THROUGH MIXED CONIFER FORESTS.			
	Micro:	PREFERS HABITAT EDGES AND MOSAICS WITH TREES THAT ARE PROTECTED FROM ABOVE AND OPEN BELOW WITH OPEN AREAS FOR FORAGING.			



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Occurrence No.	65	Map Index:	68993	EO Index:	69702	Element Last Seen:	1999-09-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-09-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2007-04-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.14667 / -121.64745			Accuracy:	1/10 mile		
UTM:	Zone-10 N4222952 E618515			Elevation (ft):	20		
PLSS:	T04N, R03E, Sec. 33, SE (M)			Acres:	0.0		
Location:	BRANNAN ISLAND, ABOUT 1.8 ROAD MILES SE OF INTERSECTION OF HWYS 12 AND 160.						
Detailed Location:	MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY SOURCE, WITH LOCALITY "RIVER EDGE." SOURCE LISTS 4 COORDINATES FOR "BRANNAN SRA." BAT ASSUMED TO BE DETECTED AT ALL 4 LOCATIONS (OCC #64-65).						
Ecological:	NO TREES. CONSISTS OF GRASSLAND OR SHRUBS.						
General:	BAT(S) DETECTED ON 24 SEP 1999.						
Owner/Manager:	DPR-BRANNAN ISLAND SRA						
Occurrence No.	67	Map Index:	68994	EO Index:	69705	Element Last Seen:	1999-07-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-07-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2007-04-19
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.23560 / -121.57857			Accuracy:	1/10 mile		
UTM:	Zone-10 N4232912 E624400			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 31, E (M)			Acres:	0.0		
Location:	GRAND ISLAND, ABOUT 1.3 MILES ENE OF HOWARD LANDING.						
Detailed Location:	MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY SOURCE, WITH LOCALITY "PARKING." SOURCE LISTS 3 COORDINATES FOR "ISLETON, GRAND ISLAND." BAT ASSUMED TO BE DETECTED AT ALL 3 LOCATIONS (OCC #67-68).						
Ecological:	NO TREES. GRASSLAND OR SHRUBS.						
General:	BAT(S) DETECTED ON 26 JUL 1999.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	68	Map Index:	68996	EO Index:	69707	Element Last Seen:	1999-07-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-07-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2007-04-19
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.23176 / -121.56195				Accuracy:	nonspecific area	
UTM:	Zone-10 N4232507 E625861				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 32, SE (M)				Acres:	30.0	
Location:	GRAND ISLAND, ABOUT 0.2 TO 0.5 MILE SOUTH OF RYDE.						
Detailed Location:	MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY SOURCE, WITH LOCALITY "ROCK LEVEE" AND "WILLOW/COTTONWOOD." SOURCE LISTS 3 COORDINATES FOR "ISLETON, GRAND ISLAND." BAT ASSUMED TO BE DETECTED AT ALL 3 LOCATIONS (OCC #67-68).						
Ecological:	GRASSLAND/SHRUBS, NO TREES AT "ROCK LEVEE." COTTONWOOD/SYCAMORE; DOMINATED BY MATURE TREES AND CONSISTS OF STRIP THAT IS 2-3 TREES WIDE AT "WILLOW/COTTONWOOD."						
General:	BAT(S) DETECTED ON 26 JUL 1999.						
Owner/Manager:	UNKNOWN						

Sylvilagus bachmani riparius

Element Code: AMAEB01021

riparian brush rabbit

Listing Status:	Federal:	Endangered	CNDDDB Element Ranks:	Global:	G5T1
	State:	Endangered		State:	S1
	Other:				
Habitat:	General:	RIPARIAN AREAS ON THE SAN JOAQUIN RIVER IN NORTHERN STANISLAUS COUNTY.			
	Micro:	DENSE THICKETS OF WILD ROSE, WILLOWS, AND BLACKBERRIES.			

Occurrence No.	15	Map Index:	91784	EO Index:	92877	Element Last Seen:	2013-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2013-XX-XX		
Occ. Type:	Refugium; Artificial Habitat/Occurrence	Trend:	Unknown	Record Last Updated:	2014-03-07		
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16876 / -121.43492			Accuracy:	specific area		
UTM:	Zone-10 N4225696 E637097			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 28, N (M)			Acres:	60.0		
Location:	WHITE SLOUGH WILDLIFE AREA (NORTH UNIT/POND 6), ON N SIDE OF W WOODBRIDGE RD ABOUT 1.75 MILES W OF THE I-5 UNDERPASS.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SPECIMENS, WHICH WERE COLLECTED FROM ALL 3 BREEDING PENS AT SITE. RABBITS USED HERE FOR BROODSTOCK TRAPPED FROM "SOUTH DELTA" POPULATION (OCC#4-8). SURVIVING BREEDERS REPATRIATED TO LOCATIONS OF CAPTURE.						
Ecological:	3 1.24-1.7 ACRE BREEDING PENS BUILT 2001-2002 TO PROPAGATE RABBITS FOR REINTRODUCTION AT SAN JOAQUIN RIVER NWR (OCC#16). HABITAT INCLUDED WILLOW, COTTONWOOD, & HIMALAYAN BLACKBERRY. PENS STILL USED AS OF 2013, BUT 2 OF 3 SLATED FOR CLOSURE.						
General:	6 RABBITS TRAPPED FROM WILD & RELEASED INTO PENS NOV-DEC 2001 PRODUCED 64 YOUNG. 20 WILD-CAUGHT RABBITS RELEASED INTO PENS DEC 2002-APR 2003 PRODUCED 284 YOUNG. SPECIMENS COLLECTED FROM MORTALITIES (2 IN '04, 6 IN '05, 3 IN '06, 5 IN '07).						
Owner/Manager:	DWR						



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Taxidea taxus

Element Code: AMAJF04010

American badger

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G5
State: None **State:** S3
Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern
Habitat: **General:** MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.
Micro: NEEDS SUFFICIENT FOOD, FRIABLE SOILS AND OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.

Occurrence No. 209 **Map Index:** 56999 **EO Index:** 57015 **Element Last Seen:** 1938-10-22
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1938-10-22
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2004-09-27

Quad Summary: Bruceville (3812134), Courtland (3812135), Florin (3812144), Clarksburg (3812145)

County Summary: Sacramento, Yolo

Lat/Long: 38.37192 / -121.51617 **Accuracy:** 1 mile
UTM: Zone-10 N4248124 E629618 **Elevation (ft):** 5
PLSS: T06N, R04E, Sec. 14 (M) **Acres:** 0.0

Location: INDIAN MOUND, NORTH OF HOOD.

Detailed Location: MAPPED TO LAT/LONG GIVEN BY MVZ WITH AN ERROR DISTANCE OF 1 MILE. LOCATION STATED AS "INDIAN MOUND, N OF HOOD."

Ecological:

General: MVZ #88217; COLLECTED BY DAVID H. JOHNSON ON 22 OCT 1938.

Owner/Manager: UNKNOWN

Emys marmorata

Element Code: ARAAD02030

western pond turtle

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G3G4
State: None **State:** S3
Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive
Habitat: **General:** A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS AND IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.
Micro: NEEDS BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.



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Occurrence No.	68	Map Index:	11417	EO Index:	629	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-01-18
Quad Summary:	Terminous (3812114), Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.11491 / -121.40967				Accuracy:	1 mile	
UTM:	Zone-10 N4219759 E639413				Elevation (ft):	3	
PLSS:	T03N, R05E, Sec. 15 (M)				Acres:	0.0	
Location:	COLDANI MARSH; 0.8 MILE WEST OF THORTON ROAD AT HIGHWAY 12.						
Detailed Location:							
Ecological:							
General:	TURTLES COLLECTED AT TWO SITES BY DFG, DATES AND NUMBERS OF SPECIMENS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	148	Map Index:	41455	EO Index:	41455	Element Last Seen:	1999-05-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1999-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1999-08-10
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.16222 / -121.54343				Accuracy:	80 meters	
UTM:	Zone-10 N4224816 E627604				Elevation (ft):	-10	
PLSS:	T04N, R04E, Sec. 28 (M)				Acres:	0.0	
Location:	TYLER ISLAND, 0.7 MILE EAST OF BROAD SLOUGH, 3 MILES EAST OF ISLETON.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF AN IRRIGATION DITCH WITH EMERGENT VEGETATION; VEGETATED BY TYPHA SP, SCIRPUS SP, PRIMROSE.						
General:	6 ADULTS OBSERVED ON 26 MAY 1999.						
Owner/Manager:	UNKNOWN						

Occurrence No.	150	Map Index:	41457	EO Index:	41457	Element Last Seen:	1999-07-13
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	1999-07-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1999-08-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18333 / -121.44660				Accuracy:	nonspecific area	
UTM:	Zone-10 N4227296 E636047				Elevation (ft):	-2	
PLSS:	T04N, R05E, Sec. 20 (M)				Acres:	58.4	
Location:	NORTH OF HOG SLOUGH AND SOUTH OF PELTIER ROAD, 2.5 MILES WEST OF I-5, SSW OF THORNTON						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF A NORTH-SOUTH RUNNING IRRIGATION DITCH CONTAINING WELL-DEVELOPED EMERGENT VEGETATION (SMARTWEED, WILLOWS, TYPHA, SCIRPUS, LUDWIGIA) AND SEVERAL BASKING AREAS; SURROUNDED BY AGRICULTURAL FIELDS.						
General:	6 INDIVIDUALS OBSERVED ON 13 JUL 1999.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	161	Map Index:	43972	EO Index:	43972	Element Last Seen:	2016-08-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2016-08-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-01-26
Quad Summary:	Terminous (3812114), Thornton (3812124), Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.13437 / -121.50616				Accuracy:	nonspecific area	
UTM:	Zone-10 N4221778 E630919				Elevation (ft):	5	
PLSS:	T03N, R04E, Sec. 2, SE (M)				Acres:	108.0	
Location:	SOUTH MOKELUMNE RIVER, 0.9 MILE SSE OF CONFLUENCE OF SYCAMORE SLOUGH & S MOKELUMNE RIVER, SE CORNER OF STATEN ISLAND.						
Detailed Location:	2000: SITES 4, 5, & 6; AT ABOUT 0.1 MI SW & 0.9 MI SSE OF THE CONFLUENCE. MAPPED TO SURVEY AREA DESCRIBED ON 2016 FIELD SURVEY FORM (EXACT DETECTION LOCATIONS NOT GIVEN).						
Ecological:	2000: SACRAMENTO & SAN JOAQUIN RIVER DELTA. 2016: FOUND BASKING ON LOGS AT/NEAR EDGE OF RIPRAPPED LEVEES; IN DISTURBED RIPARIAN HABITAT WITH OAKS, WILLOWS, & INVASIVE AQUATIC VEGETATION; WATER HYACINTH HARVESTING PROGRAM UNDERWAY.						
General:	6 ADULTS AND 1 JUVENILE OBSERVED ON 31 AUG 2000. 2 ADULTS AND 1 JUVENILE OBSERVED BASKING ON 9 AUG 2016.						
Owner/Manager:	UNKNOWN						
Occurrence No.	163	Map Index:	43978	EO Index:	43978	Element Last Seen:	2000-09-28
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2000-09-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-01-26
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.15618 / -121.50370				Accuracy:	specific area	
UTM:	Zone-10 N4224201 E631095				Elevation (ft):	1	
PLSS:	T04N, R04E, Sec. 36 (M)				Acres:	20.4	
Location:	SOUTH MOKELUMNE RIVER, 0.1 TO 0.35 MILE NORTH OF RIVER MILE 12, 1 MILE SW OF CONFLUENCE WITH HOG SLOUGH.						
Detailed Location:	OBSERVED ON HALF SUBMERGED CONCRETE TUBES (SITE #7 & #8) STATEN ISLAND SIDE OF RIVER, OPPOSITE OF BRACK TRACT NEAR END OF WOODBRIDGE ROAD, 8/31; ALONG LEVEE BASE 28 SEP 2000.						
Ecological:	SACRAMENTO AND SAN JOAQUIN RIVER DELTA.						
General:	2 ADULTS OBSERVED 31 AUG, AND 2 ADULTS OBSERVED 28 SEP 2000.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	166	Map Index:	43983	EO Index:	43983	Element Last Seen:	2000-09-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2000-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20347 / -121.47830			Accuracy:	80 meters		
UTM:	Zone-10 N4229485 E633234			Elevation (ft):	1		
PLSS:	T04N, R05E, Sec. 07 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER, 0.6 MILE NORTH OF CONFLUENCE WITH BEAVER SLOUGH, 0.1 MILE SOUTH OF LAMB ROAD AND THE LEVEE.						
Detailed Location:	BASKING ON EXPOSED LOG NEAR SOUTHWEST END OF NEW HOPE TRACT.						
Ecological:	SACRAMENTO AND SAN JOAQUIN RIVER DELTA.						
General:	1 TURTLE OBSERVED ON THE EXPOSED PART OF A SUBMERGED LOG.						
Owner/Manager:	UNKNOWN						
Occurrence No.	174	Map Index:	44282	EO Index:	44282	Element Last Seen:	2000-09-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-09-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-11-13
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.26749 / -121.50272			Accuracy:	80 meters		
UTM:	Zone-10 N4236554 E630981			Elevation (ft):	1		
PLSS:	T05N, R04E, Sec. 24 (M)			Acres:	0.0		
Location:	MEADOWS SLOUGH, 1.2 MILES NNE OF LOCKE, 1.3 MILES EAST OF TWIN CITIES AND RIVER ROADS.						
Detailed Location:	OBSERVED ON SUBMERGED LOG.						
Ecological:	FRESHWATER SLOUGH.						
General:	2 ADULTS OBSERVED STACKED ON TOP OF EACH OTHER ON A SUBMERGED LOG, 2000.						
Owner/Manager:	UNKNOWN						
Occurrence No.	249	Map Index:	52267	EO Index:	52267	Element Last Seen:	2003-07-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-07-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-08-27
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18181 / -121.48958			Accuracy:	80 meters		
UTM:	Zone-10 N4227065 E632285			Elevation (ft):	1		
PLSS:	T04N, R04E, Sec. 24 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER, BETWEEN HOG SLOUGH AND BEAVER SLOUGH, EAST SIDE OF STATEN ISLAND.						
Detailed Location:	TURTLES UTILIZE A FLOATING LOG FOR BASKING.						
Ecological:	HABITAT CONSISTS OF RIVERINE WITHIN A RIPRAPPED LEVEE; SOME TULE S NEARBY.						
General:	1 ADULT TURTLE OBSERVED ON 24 JUL 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	250	Map Index:	52269	EO Index:	52269	Element Last Seen:	2003-07-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-07-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-08-27
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.14605 / -121.50780			Accuracy:	80 meters		
UTM:	Zone-10 N4223071 E630753			Elevation (ft):	1		
PLSS:	T04N, R04E, Sec. 35 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER, IN A CHANNEL BETWEEN THE STATEN AND BRACK TRACT LEVEES, 5.5 MILES EAST OF ISLETON.						
Detailed Location:	TURTLE SEEN ON A FLOATING LOG, NEXT TO SEVERAL PARTIALLY-SUBMERGED PILINGS NEAR A CHANNEL ISLAND IN THE DELTA.						
Ecological:	HABITAT CONSISTS OF RIVERINE, WITH THICK STANDS OF TULE SURROUNDING THE PILINGS AND THE FLOATING LOG.						
General:	1 ADULT TURTLE OBSERVED ON 24 JUL 2003.						
Owner/Manager:	UNKNOWN						
Occurrence No.	363	Map Index:	70793	EO Index:	71705	Element Last Seen:	2007-10-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-10-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-02-25
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14971 / -121.40511			Accuracy:	80 meters		
UTM:	Zone-10 N4223627 E639745			Elevation (ft):	11		
PLSS:	T04N, R05E, Sec. 35 (M)			Acres:	0.0		
Location:	JUNCTION OF WEST MAIN CANAL AND UNNAMED IRRIGATION DITCH, NW OF THE INTERSECTION OF I-5 AND TURNER ROAD.						
Detailed Location:							
Ecological:	PERENNIAL DIRT-LINED SLOUGH WITH VEGETATION PRESENT ON BOTH SIDES. PORTIONS OF SLOUGH BOTTOM WERE OVERGROWN WITH VEGETATION.						
General:	2 ADULTS OBSERVED ON 3 OCT 2007.						
Owner/Manager:	PVT						



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Occurrence No.	448	Map Index:	32826	EO Index:	977	Element Last Seen:	2003-09-23
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-09-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-02-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39316 / -121.49886			Accuracy:	nonspecific area		
UTM:	Zone-10 N4250506 E631092			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 12 (M)			Acres:	110.1		
Location:	STONE LAKE PRESERVE, APPROXIMATELY 1.5 TO 2.5 MILES NORTHEAST OF HOOD.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF A SEMI-NATURAL LAKE BORDERED BY SOME BULRUSHES, GRAZED GRASSLAND, AND RIPARIAN VEGETATION.						
General:	COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN (PRIOR TO 1988). 10+ ADULTS OBSERVED (1 ADULT MALE CAPTURED) ON 21 SEP 2003; 10+ ADULTS OBSERVED (1 ADULT MALE CAPTURED) ON 23 SEP 2003.						
Owner/Manager:	DPR-STONE LAKE PARK						

Occurrence No.	449	Map Index:	11275	EO Index:	623	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-03-07
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43234 / -121.49818			Accuracy:	nonspecific area		
UTM:	Zone-10 N4254853 E631081			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 25 (M)			Acres:	61.0		
Location:	BEACH LAKE PRESERVE; APPROX. 1.5 MILES SOUTH OF FREEPORT.						
Detailed Location:							
Ecological:							
General:	COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.						
Owner/Manager:	SAC COUNTY, PVT						

Occurrence No.	450	Map Index:	32827	EO Index:	4662	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-01-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39069 / -121.45214			Accuracy:	specific area		
UTM:	Zone-10 N4250298 E635177			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 08, NE (M)			Acres:	5.2		
Location:	NORTH OF FRANKLIN; DITCH EAST OF FRANKLIN BLVD X WESTERN PACIFIC RR.						
Detailed Location:							
Ecological:							
General:	COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	451	Map Index:	32828	EO Index:	978	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1996-02-14		
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27537 / -121.45360			Accuracy:	1 mile		
UTM:	Zone-10 N4237499 E635264			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 20 (M)			Acres:	0.0		
Location:	LOST SLOUGH. NNW OF MOKELUMNE CITY; 0.5 MILE WEST OF DESMOND RD X WESTERN PACIFIC RR.						
Detailed Location:							
Ecological:							
General:	COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	514	Map Index:	43290	EO Index:	43290	Element Last Seen:	2000-04-12
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2000-04-12		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2000-07-25		
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23855 / -121.48695			Accuracy:	80 meters		
UTM:	Zone-10 N4233365 E632413			Elevation (ft):	3		
PLSS:	T05N, R05E, Sec. 31 (M)			Acres:	0.0		
Location:	EAST SIDE OF MOKELUMNE RIVER, 0.9 MILE NORTH OF THE WALNUT GROVE ROAD BRIDGE, 3.5 MILES WEST OF THORNTON.						
Detailed Location:	SITE IS LOCATED ON THE WEST SIDE OF NEW HOPE TRACT, JUST WEST OF KMUV RADIO TOWER.						
Ecological:							
General:	1 INDIVIDUAL OBSERVED ON 11-12 APR 2000.						
Owner/Manager:	UNKNOWN						

Occurrence No.	517	Map Index:	43294	EO Index:	43294	Element Last Seen:	1999-07-05
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1999-07-05		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2000-07-25		
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.15188 / -121.53885			Accuracy:	specific area		
UTM:	Zone-10 N4223675 E628023			Elevation (ft):	1		
PLSS:	T04N, R04E, Sec. 34 (M)			Acres:	7.5		
Location:	WEST SIDE OF THE NORTH MOKELUMNE RIVER, 3.5 MILES EAST OF ISLETON.						
Detailed Location:							
Ecological:							
General:	2 INDIVIDUALS OBSERVED ON 5 JUL 1999.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	518	Map Index:	43300	EO Index:	43300	Element Last Seen:	1999-07-05
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1999-07-05	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2000-07-25	

Quad Summary: Isleton (3812125)

County Summary: Sacramento

Lat/Long:	38.16669 / -121.58228	Accuracy:	80 meters
UTM:	Zone-10 N4225259 E624192	Elevation (ft):	
PLSS:	T04N, R04E, Sec. 30 (M)	Acres:	0.0

Location: EAST SIDE OF GEORGIANA SLOUGH, 1 MILE EAST OF ISLETON.

Detailed Location:

Ecological:

General: 1 INDIVIDUAL OBSERVED ON 5 JUL 1999.

Owner/Manager: UNKNOWN

Occurrence No.	633	Map Index:	60252	EO Index:	60288	Element Last Seen:	2004-XX-XX
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2004-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-02-28	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.44693 / -121.45081	Accuracy:	2/5 mile
UTM:	Zone-10 N4256541 E635188	Elevation (ft):	15
PLSS:	T07N, R05E, Sec. 20, NE (M)	Acres:	0.0

Location: SACRAMENTO BUFFERLANDS, ENCOMPASSING LOST LAKE, LAGUNA CREEK, AND FISH HEAD LAKE, SOUTH OF SACRAMENTO.

Detailed Location:

Ecological: HABITAT CONSISTS OF MOSTLY MAN-MADE WATER BODIES WITH VARYING HABITAT QUALITY. VEGETATED BY A COMBINATION OF AQUATIC, EMERGENT, AND RIPARIAN VEGETATION; SURROUNDED BY GRASSLANDS.

General: 6 MALES AND 4 FEMALES WERE CAPTURED THROUGHOUT THE 2004 SEASON; ALL WERE VERY OLD ADULTS AND INCLUDED ONE GRAVID FEMALE.

Owner/Manager: SRCSD-BUFFERLANDS



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Occurrence No.	1331	Map Index:	A3304	EO Index:	104936	Element Last Seen:	2016-07-28
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2016-07-28	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2017-01-09	

Quad Summary: Thornton (3812124)

County Summary: San Joaquin

Lat/Long:	38.1442 / -121.4925	Accuracy:	1/5 mile
UTM:	Zone-10 N4222888 E632099	Elevation (ft):	0
PLSS:	T04N, R04E, Sec. 36, S (M)	Acres:	70.0

Location: SYCAMORE SLOUGH, ABOUT 0.6 MILES E OF ITS CONFLUENCE WITH THE MOKELUMNE RIVER & 2.1 MILES NNE OF TERMINOUS.

Detailed Location: MAPPED GENERALLY TO PROVIDED COORDINATES, WHICH WERE BASED ON NOTES, PHOTOS AND GOOGLE EARTH.

Ecological: THICK MATS OF AQUATIC VEGETATION AROUND ISLANDS IN SYCAMORE SLOUGH. INDIVIDUALS WERE DISCOVERED UNDER MAT OF WATER HYACINTH DURING VEGETATION REMOVAL. CHANNEL USED FOR RECREATIONAL BOATING, SURROUNDED BY AGRICULTURE.

General: 4 ADULTS OR SUB-ADULTS CAUGHT AND RELEASED ON 26 JUL AND 1 ON 28 JUL 2016.

Owner/Manager: UNKNOWN

Occurrence No.	1332	Map Index:	A3307	EO Index:	104938	Element Last Seen:	2016-08-16
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2016-08-16	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2017-01-09	

Quad Summary: Thornton (3812124)

County Summary: San Joaquin

Lat/Long:	38.14113 / -121.44867	Accuracy:	specific area
UTM:	Zone-10 N4222610 E635945	Elevation (ft):	0
PLSS:	T03N, R05E, Sec. 5, NE (M)	Acres:	16.0

Location: SYCAMORE SLOUGH, ABOUT 1.8 MILES NNE OF HWY 12 AT N PEATLAND RD AND 2.7 MI WSW OF I-5 AT W TURNER RD.

Detailed Location: MAPPED TO INCLUDE PROVIDED COORDINATES.

Ecological: LARGE MATS OF AQUATIC VEGETATION IN SYCAMORE SLOUGH. INDIVIDUALS WERE DISCOVERED UNDER MATS OF WATER HYACINTH AND PRIMROSE DURING VEGETATION REMOVAL. CHANNEL USED FOR RECREATIONAL BOATING, SURROUNDED BY AGRICULTURE.

General: 2 ADULTS OBSERVED ON 1 AUG, 1 ON 9 AUG, 1 ON 11 AUG, & 1 ON 16 AUG 2016.

Owner/Manager: UNKNOWN

Thamnophis gigas

Element Code: ARADB36150

giant gartersnake

Listing Status: Federal: Threatened

CNDDDB Element Ranks: Global: G2

State: Threatened

State: S2

Other: IUCN_VU-Vulnerable

Habitat: General: PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS AND IRRIGATION DITCHES.

Micro: THIS IS THE MOST AQUATIC OF THE GARTERSNAKES IN CALIFORNIA.



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Occurrence No.	13	Map Index:	11466	EO Index:	13783	Element Last Seen:	1982-07-26
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:	1987-XX-XX	Record Last Updated:	2014-12-01
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41559 / -121.39989			Accuracy:	3/5 mile		
UTM:	Zone-10 N4253140 E639692			Elevation (ft):	45		
PLSS:	T07N, R05E, Sec. 35 (M)			Acres:	0.0		
Location:	VICINITY OF ELK GROVE CREEK, JUST NW OF ELK GROVE AND HWY 99 INTERSECTION, ABOUT 1.2 MILES WNW OF ELK GROVE POST OFFICE.						
Detailed Location:	MAPPED GENERALLY TO PROVIDED LOCATION DESCRIPTIONS; 1929: TEN MILES SOUTH OF SACRAMENTO. 1976: 0.1 MI N ELK GROVE BLVD, W OF HWY 99. 1982: ELK GROVE CR, 0.4 MI W US 99, 0.5 MI N ELK GROVE BLVD.						
Ecological:	THE MARSH AT THIS LOCATION WAS FILLED AND LEVELED FOR INDUSTRIAL PARK DEVELOPMENT AS OF MAY 1984.						
General:	1 COLLECTED IN MAY 1929 BY W. WILSON (CAS# 178600). AT LEAST 1 DETECTED ON 1 JUL 1976; G. HANSEN FIELD NOTES #268. 2 JUVENILES OBSERVED BASKING ON 26 JUL 1982. NO SNAKES OBSERVED DURING 1986-87 STUDY BY G. HANSEN; LEVEL OF EFFORT UNKNOWN.						
Owner/Manager:	PVT						

Occurrence No.	14	Map Index:	11413	EO Index:	27599	Element Last Seen:	1976-08-03
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:	1987-XX-XX	Record Last Updated:	2014-12-04
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43691 / -121.42307			Accuracy:	1/5 mile		
UTM:	Zone-10 N4255470 E637628			Elevation (ft):	25		
PLSS:	T07N, R05E, Sec. 27, NW (M)			Acres:	0.0		
Location:	LAGUNA CREEK, JUST SOUTH OF SHELTON RD, ABOUT 0.3 MI W OF BRUCEVILLE RD, ELK GROVE.						
Detailed Location:	MAPPED ACCORDING TO PROVIDED LOCATION DESCRIPTION OF "SHELTON RD AT CREEK CROSSING, 0.3 MI W OF BRUCEVILLE RD" AND "200 FT S SHELTON RD AT LAGUNA CREEK." 1999-2014 AERIAL PHOTOS SHOW HEAVY DEVELOPMENT SURROUNDING LAGUNA CREEK.						
Ecological:	1982 DESCRIPTION: MARSH AREA SURROUNDED BY CULTIVATED FIELDS & HEAVILY GRAZED GRASSLANDS. GRAZED AREAS CHARACTERIZED BY COMPACTED SOIL, FEW RODENT BURROWS, & SPARSE VEGETATION, THEREBY PROVIDING LITTLE COVER FOR SNAKES DURING FLOODS.						
General:	AT LEAST 1 SNAKE DETECTED ON 3 AUG 1976 BY G. HANSEN (FIELD NOTES #301). NO SNAKES DETECTED DURING JUL-AUG 1982 & 1986-87 STUDY BY G. HANSEN; LEVEL OF EFFORT UNKNOWN.						
Owner/Manager:	PVT						



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Occurrence No.	15	Map Index:	94616	EO Index:	624	Element Last Seen:	1992-07-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1992-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-04
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.42806 / -121.49442			Accuracy:	nonspecific area		
UTM:	Zone-10 N4254384 E631417			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 25 (M)			Acres:	705.0		
Location:	BEACH LAKE/STONE LAKE PRESERVE, JUST W OF I-5 AND LAGUNA BLVD INTERSECTION, APPROXIMATELY 2.4 MILES S OF FREEPORT.						
Detailed Location:	MAPPED TO PROVIDED MAP AND LOCATION DESCRIPTIONS OF "SNODGRASS SLOUGH 20' W. ELLIOT RD BEACH L. PRSV" (1974), "BEACH LAKE PRESERVE, 1 MI S. FREEPORT" (1976), & "EASTERN FACE OF THE LEVEE BETWEEN MORRISON CREEK AND THE LAKE" (1992).						
Ecological:	SHORE VEGETATION DOMINATED BY SCIRPUS ACUTA. LEVEE SERVES AS ACCESS TO AGRICULTURAL FIELD (PROPOSED CALTRANS MITIGATION BANK) TO EAST. LIGHT FISHING/RECREATIONAL USE FROM BLP MEMBERS (BEACH LAKE PROPERTIES).						
General:	SNAKES DETECTED ON 26 JUN & 3 JUL 1974 (A. SARTAIN FIELD NOTES #42). UNKNOWN NUMBER DETECTED IN 1976 BY G. HANSEN. 1 ADULT OBSERVED EATING A BULLFROG ON 19 JUL 1992.						
Owner/Manager:	SAC COUNTY, PVT						

Occurrence No.	52	Map Index:	11349	EO Index:	27579	Element Last Seen:	1976-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-02
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36740 / -121.45523			Accuracy:	1/5 mile		
UTM:	Zone-10 N4247709 E634951			Elevation (ft):	8		
PLSS:	T06N, R05E, Sec. 17, SW (M)			Acres:	0.0		
Location:	VICINITY OF FRANKLIN BLVD, ABOUT 0.5 MI S OF INTERSECTION WITH HOOD-FRANKLIN RD, 3.5 MI E OF HOOD PO, SW OF ELK GROVE.						
Detailed Location:	MAPPED GENERALLY TO PROVIDED LOCATION DESCRIPTION OF "FRANKLIN BLVD. ~0.5 MI S. OF HOOD-FRANKLIN RD."						
Ecological:							
General:	UNKNOWN NUMBER DETECTED ON 7 JUL 1976 BY G. HANSEN (FIELD NOTES # 271). NONE DETECTED DURING 1986-1987 SURVEYS CONDUCTED BY G. HANSEN; LEVEL OF EFFORT UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	79	Map Index:	10758	EO Index:	27547	Element Last Seen:	1987-XX-XX
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2005-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-12
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.35809 / -121.73889				Accuracy:	2/5 mile	
UTM:	Zone-10 N4246300 E610183				Elevation (ft):	15	
PLSS:	T06N, R02E, Sec. 22, NE (M)				Acres:	0.0	
Location:	CANAL CROSSING SWAN RD, ABOUT 1.5 MILES W OF LIBERTY ISLAND RD, 7.7 MILES SE OF DIXON, YOLO BYPASS.						
Detailed Location:	MAPPED TO PROVIDED LOCATION DESCRIPTION OF "CANAL CROSSING SWAN RD," "2.5 MI W OF SOLANO/YOLO" COUNTY LINE, & 1.3 MI W LIBERTY ISLAND RD AND TRS OF T 6N, R 2E, NW 1/4 OF NE 1/4 SEC 22. SURROUNDED BY LIVESTOCK PASTURES.						
Ecological:	20 FT WIDE CANAL CONTAINED WITHIN LEVEES; CATTAIL/TULE MARGINS, SOME YELLOW WATERWEED IN CHANNEL, ANNUAL GRASSES AND THISTLES ON BANKS.						
General:	ANECDOTALLY DETECTED PRIOR TO 1986. ADULT OBSERVED ON 8 AUG 1986. OBSERVED IN 1987. USGS SURVEYED AREA NEAR LIBERTY FARMS IN 2004 & 2005 AND FOUND NO SNAKES. WYLIE & MARTIN (2005) SUSPECTED THAT SPECIES MAY NO LONGER OCCUR IN SOLANO COUNTY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	82	Map Index:	10820	EO Index:	13284	Element Last Seen:	1994-XX-XX
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2005-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-08-21
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.33934 / -121.71301				Accuracy:	1/5 mile	
UTM:	Zone-10 N4244250 E612473				Elevation (ft):	10	
PLSS:	T06N, R02E, Sec. 26, NE (M)				Acres:	0.0	
Location:	LIBERTY ISLAND ROAD, 1.3 MILES SOUTH OF THE SWAN ROAD INTERSECTION, 9 MILES SE OF DIXON, YOLO BYPASS.						
Detailed Location:	MAPPED TO PROVIDED LOCATION DESCRIPTION OF "LIBERTY ISLAND RD, 1.3 MILES S SWAN RD, 9 MILES SE DIXON." PROVIDED TRS WAS T 6N, R 3E, SE 1/4 OF NE 1/4 SEC 26.						
Ecological:	HABITAT CONSISTED OF AN AGRICULTURAL CANAL WITH TULE AND CATTAIL MARGINS. VEGETATED TOE DRAINS PARALLELING THE CANAL LEVEES. SITE IS FAIR ACCORDING TO HANSEN (1987).						
General:	1 INDIVIDUAL OBSERVED ON 21 SEP 1987. UNKNOWN NUMBER OBSERVED IN 1994. USGS SURVEYED AREA NEAR LIBERTY FARMS IN 2004 AND 2005 AND FOUND NO SNAKES. WYLIE AND MARTIN (2005) SUSPECTED THAT SPECIES MAY NO LONGER OCCUR IN SOLANO COUNTY.						
Owner/Manager:	PVT						



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Occurrence No.	84	Map Index:	11449	EO Index:	27544	Element Last Seen:	1982-08-03
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43119 / -121.40279				Accuracy:	1/5 mile	
UTM:	Zone-10 N4254866 E639409				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 26, NW (M)				Acres:	0.0	
Location:	LAGUNA CREEK, JUST W OF HWY 99 OVERPASS, ABOUT 0.8 MI SE OF JCT OF BRUCEVILLE RD & SHELDON RD, ELK GROVE.						
Detailed Location:	MAPPED TO PROVIDED LOCATION OF "0.2 MILES W US 99, 0.5 MILES S SHELDON RD" (1982). 1976 DETECTION LOCATION GIVEN AS "LAGUNA CRK, W OF HWY 99 AT ARNO RD OVERCROSSING." ARNO RD RUNS ABOUT 8 MI TO THE SE; ATTRIBUTED TO LAGUNA CK W OF HWY 99.						
Ecological:	1982: SNAKE FOUND SWIMMING AMONG CATTAILS & TULE; AREA ALSO KNOWN AS "CONFLUENCE MARSH" (JCT OF LAGUNA CR & ELK GROVE CR). POTENTIAL PREY SPECIES INCLUDE CARP, BULLHEAD, MOSQUITOFISH, & BULLFROG.						
General:	UNKNOWN NUMBER OF SNAKES DETECTED ON 1 JUL 1976 BY G. HANSEN (FIELD #270). 1 ADULT OBSERVED SWIMMING ON 3 AUG 1982. NONE OBSERVED DURING 1986-87 STUDY BY G. HANSEN DUE TO HEAVY FLOOD EVENT.						
Owner/Manager:	PVT						
Occurrence No.	132	Map Index:	32428	EO Index:	2292	Element Last Seen:	19XX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	19XX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-08-10
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32642 / -121.52032				Accuracy:	1/5 mile	
UTM:	Zone-10 N4243069 E629337				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 34, SE (M)				Acres:	0.0	
Location:	SNODGRASS SLOUGH; 0.6 KM NORTH OF THE CROSSING OF SNODGRASS SLOUGH AND LAMBERT ROAD.						
Detailed Location:							
Ecological:							
General:	SNAKES OBSERVED PRIOR TO BUT NOT DURING A 1986-87 STUDY BY G. HANSEN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	133	Map Index:	32429	EO Index:	2291	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		XXXX-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1996-01-18	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.36134 / -121.48735	Accuracy:	3/5 mile
UTM:	Zone-10 N4246990 E632155	Elevation (ft):	10
PLSS:	T06N, R04E, Sec. 24, NE (M)	Acres:	0.0

Location: STONE LAKE; SOUTHWEST OF THE INTERSECTION OF HOOD FRANKLIN ROAD & I-5.

Detailed Location:

Ecological:

General: SNAKE OBSERVED PRIOR TO, BUT NOT DURING A 1986-87 STUDY BY G. HANSEN.

Owner/Manager: UNKNOWN

Occurrence No.	147	Map Index:	37128	EO Index:	32125	Element Last Seen:	1965-XX-XX
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1965-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1997-10-08	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.43521 / -121.48503	Accuracy:	1/10 mile
UTM:	Zone-10 N4255191 E632223	Elevation (ft):	7
PLSS:	T07N, R04E, Sec. 25 (M)	Acres:	0.0

Location: SOUTH OF SOUTH BEACH LAKE AND WEST OF I-5, VICINITY OF LOWER MORRISON CREEK, SOUTH OF SACRAMENTO.

Detailed Location: SNAKES WERE FOUND IN OLD "PIT" BLINDS AT A SMALL DUCK CLUB.

Ecological: AT THE TIME OF THE ORIGINAL OBSERVATIONS (1955 AND 1965), THIS AREA CONSISTED OF FARMLAND (WHEAT, CORN) ADJACENT TO MORRISON CREEK RIPARIAN/FLOODPLAIN. SITE IS NOW MANAGED AS SANITATION DISTRICT BUFFER LANDS (MANAGED MARSH).

General: 1 GGS OBSERVED IN 1955; 2 OBSERVED IN 1965. GGS IS PRESUMED TO BE EXTANT AT THIS SITE DUE TO THE PERSISTENCE OF SUITABLE WETLANDS AT THIS SITE AND OBSERVATIONS OF GGS FROM NEARBY UPSTREAM AND DOWNSTREAM LOCATIONS.

Owner/Manager: SRCSD-BUFFERLANDS



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Occurrence No.	198	Map Index:	61361	EO Index:	61397	Element Last Seen:	2005-05-01
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-05-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-03-03
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45477 / -121.46375			Accuracy:	80 meters		
UTM:	Zone-10 N4257392 E634044			Elevation (ft):	10		
PLSS:	T07N, R05E, Sec. 17 (M)			Acres:	0.0		
Location:	LAGUNA CREEK, ON THE BUFFERLANDS AREA, SOUTH OF SACRAMENTO.						
Detailed Location:	SNAKE WAS BASKING ON A SMALL ISLAND IN THE CREEK.						
Ecological:	HABITAT CONSISTS OF A RIPARIAN AREA ALONG LAGUNA CREEK, DOMINATED BY RUMEX CRISPUS AND TYPHA LATIFOLIA, WITH ASSOCIATES WHICH INCLUDE SALIX SPP AND POPULUS FREMONTII.						
General:	1 JUVENILE (~1.5' IN LENGTH) OBSERVED ON 1 MAY 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	247	Map Index:	64680	EO Index:	64759	Element Last Seen:	1992-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1992-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-05-12
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.26075 / -121.50076			Accuracy:	3/5 mile		
UTM:	Zone-10 N4235810 E631165			Elevation (ft):	10		
PLSS:	T05N, R04E, Sec. 24 (M)			Acres:	0.0		
Location:	VICINITY OF SNODGRASS SLOUGH, 0.75 MI NNE OF LOCKE.						
Detailed Location:							
Ecological:							
General:	UNKNOWN NUMBER OF SNAKES OBSERVED DURING 1992.						
Owner/Manager:	UNKNOWN						
Occurrence No.	250	Map Index:	73292	EO Index:	74250	Element Last Seen:	2008-06-20
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2008-06-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-12-31
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.40322 / -121.64831			Accuracy:	80 meters		
UTM:	Zone-10 N4251420 E618024			Elevation (ft):	10		
PLSS:	T07N, R03E, Sec. 33, SW (M)			Acres:	0.0		
Location:	POPE RANCH MITIGATION/CONSERVATION BANKS IN THE YOLO BYPASS.						
Detailed Location:							
Ecological:	MIXTURE OF OPEN WATER AND CHANNELS, PERENNIAL AND SEASONAL MARSH AND UPLAND HABITATS.						
General:	1 ADULT CAPTURED IN A MESH FUNNEL TRAP ON 20 JUN 2008. SNAKE WAS PIT TAGGED & RELEASED.						
Owner/Manager:	PVT-WILDLANDS INC						



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Occurrence No.	308	Map Index:	92493	EO Index:	93637	Element Last Seen:	2012-09-08
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2012-09-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-05-27
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.38858 / -121.63002				Accuracy:	specific area	
UTM:	Zone-10 N4249819 E619645				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 03, SW (M)				Acres:	13.0	
Location:	E END OF COUNTY RD 155, JUST W OF SHIP CHANNEL, ~1.5 MI WSW OF CENTRAL AVE & ALAMEDA AVE INTERSECTION, W OF CLARKSBURG.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. LAND MANAGED AS WETLANDS AND A DUCK CLUB. WETLANDS LOCATED TO THE W OF SACRAMENTO DEEP WATER SHIP CHANNEL. LANDOWNER DISKED AREA IN PREPARATION OF HUNTING SEASON. NEAR YOLO BYPASS TOE DRAIN.						
Ecological:	SEASONAL WETLAND MANAGED FOR WATERFOWL, SILT/MUD SUBSTRATE. TERRESTRIAL VEGETATION CONSISTED OF VARIOUS GRASSES AND RUDERALS. AQUATIC VEGETATION CONSISTED OF CATTAILS, TULE, AND OTHE EMERGENT MACROPHYTES. RICE FIELDS LOCATED TO THE N.						
General:	1 ADULT RETRIEVED FROM UNDERGROUND DUCK BLIND ON 11 AUG 2011; SNAKE WEIGHED, MEASURED, PIT TAGGED, MARKED, PHOTOGRAPHED AND RELEASED. 1 DISCOVERED IN DUCK BLIND ON 8 SEP 2012.						
Owner/Manager:	PVT						

Occurrence No.	309	Map Index:	92494	EO Index:	93638	Element Last Seen:	2012-03-21
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2012-03-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.40153 / -121.63855				Accuracy:	80 meters	
UTM:	Zone-10 N4251244 E618879				Elevation (ft):	10	
PLSS:	T07N, R03E, Sec. 33, SE (M)				Acres:	0.0	
Location:	ABOUT 1 MILE N OF COUNTY RD 155 & COUNTY RD 107 INTERSECTION, JUST W OF DEEP WATER CHANNEL, BETWEEN DIXON & CLARKSBURG.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. COORDINATES DERIVED FROM GOOGLEEARTH.						
Ecological:	MANAGED WETLAND AND AGRICULTURE.						
General:	1 ADULT GIANT GARTER SNAKE WAS INCIDENTALLY DISCOVERED ALONG DIRT ROADWAY ON 21 MAR 2012; SNAKE HAD BEEN STRUCK BY AN UNKNOWN VEHICLE AND WAS STILL ALIVE AND WARM WHEN FIRST DISCOVERED, HOWEVER, SNAKE DIED SHORTLY THEREAFTER.						
Owner/Manager:	PVT						



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Occurrence No.	310	Map Index:	92495	EO Index:	93639	Element Last Seen:	2012-03-19
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2012-03-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.41388 / -121.63968				Accuracy:	specific area	
UTM:	Zone-10 N4252613 E618760				Elevation (ft):	10	
PLSS:	T07N, R03E, Sec. 33, NE (M)				Acres:	16.0	
Location:	ALONG DIRT ROAD ABOUT 1.9 MILES E OF COUNTY RD 104 AND COUNTY RD 152 INTERSECTION, 6.2 MILES W OF CLARKSBURG.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. 2009 DETECTION LOCATION DESCRIBED AS "GRAVEL ROAD APPROXIMATELY 4.84 KM E OF COUNTY RD 104." ADDITIONAL LOCATION INFORMATION INCLUDED T 7N, R 33E, SEC 33 NE.						
Ecological:	DIRT ROAD SURROUNDED BY CULTIVATED EMERGENT RICE FIELDS WHICH WERE BORDERED BY MANAGED WETLAND HABITAT UTILIZED PRIMARILY FOR WATERFOWL.						
General:	1 GIANT GARTER SNAKE OBSERVED ALONG DIRT ROAD ON 1 JUL 2009; SNAKE HAD BEEN STRUCK BY VEHICLE BUT WAS NOT MORTALLY WOUNDED, SNAKE PIT TAGGED AND RELEASED INTO ADJACENT IRRIGATION CANAL. 1 SNAKE OBSERVED BASKING ALONG ROADWAY ON 19 MAR 2012.						
Owner/Manager:	PVT						
Occurrence No.	350	Map Index:	94528	EO Index:	95644	Element Last Seen:	1976-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1976-07-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-11-24
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25589 / -121.44069				Accuracy:	2/5 mile	
UTM:	Zone-10 N4235357 E636429				Elevation (ft):	30	
PLSS:	T05N, R05E, Sec. 28 (M)				Acres:	0.0	
Location:	VICINITY OF THORTON RD AND MOKELUMNE RIVER INTERSECTION, ABOUT 2.4 MILES NNW OF THORTON POST OFFICE, JUST E OF I-5.						
Detailed Location:	MAPPED ACCORDING TO PROVIDED LOCATION DESCRIPTION OF "THORNTON RD, N. END OF BENSON FERRY BRIDGE." USED HISTORICAL USGS MAPS (1894 & 1941) TO DETERMINE LIKELY LOCATION OF "BENSON BRIDGE" AND "BENSON."						
Ecological:							
General:	AT LEAST 1 COLLECTED ON 7 JUL 1976; PART OF G. HANSEN FIELD COLLECTION #275.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	424	Map Index:	A6905	EO Index:	108694	Element Last Seen:	2017-10-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2017-10-19	Record Last Updated:	2017-10-20
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.291 / -121.6936				Accuracy:	80 meters	
UTM:	Zone-10 N4238910 E614246				Elevation (ft):	1	
PLSS:	T05N, R03E, Sec. 7, SW (M)				Acres:	5.0	
Location:	W BANK OF SHAG SLOUGH, ABOUT 3.4 MI W OF HWY 84 AT RYER RD, LIBERTY ISLAND.						
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES/KMZ FILE. ALONG SHAG SLOUGH.						
Ecological:							
General:	ONE FOUND AS ROADKILL ON 19 OCT 2017. THE SNAKE WAS IDENTIFIED BASED ON COLORING, APPEARANCE, & LABIAL SCALE COUNT BY THE BIOLOGICAL MONITOR WITH GGS HANDLING PERMIT. APPROXIMATELY 30 IN & WAS COLLECTED, BAGGED, & FROZEN.						
Owner/Manager:	UNKNOWN						

Branchinecta conservatio				Element Code: ICBRA03010			
Conservancy fairy shrimp							
Listing Status:	Federal:	Endangered		CNDDDB Element Ranks:	Global:	G2	
	State:	None			State:	S2	
	Other:	IUCN_EN-Endangered					
Habitat:	General:	ENDEMIC TO THE GRASSLANDS OF THE NORTHERN TWO-THIRDS OF THE CENTRAL VALLEY; FOUND IN LARGE, TURBID POOLS.					
	Micro:	INHABIT ASTATIC POOLS LOCATED IN SWALES FORMED BY OLD, BRAIDED ALLUVIUM; FILLED BY WINTER/SPRING RAINS, LAST UNTIL JUNE.					

Occurrence No.	19	Map Index:	54520	EO Index:	54520	Element Last Seen:	2008-03-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-06-11
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43662 / -121.66998				Accuracy:	specific area	
UTM:	Zone-10 N4255098 E616078				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20, SW (M)				Acres:	10.3	
Location:	YOLO BYPASS WILDLIFE AREA, 1.7 MI SE OF INTERSECTION OF HYDE RD (ROAD 104) AND HACKMAN RD (ROAD 38A), SW OF SACRAMENTO.						
Detailed Location:	POOL LOCATED NORTH OF BARN.						
Ecological:	A TURBID PLAYA POOL WITH DISTINCTIVE CUTBANKS, DOMIATED BY ELEOCHARIS AND ERYNGIUM ARISTULATUM. SURROUNDING AREA GRAZED BY CATTLE. LEPIDURUS PACKARDI AND CYZICUS CALIFORNICUS ALSO FOUND AT THIS SITE.						
General:	MANY ADULTS OBSERVED ON 7 APR 2003 AND 14 MAR 2008.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Branchinecta lynchi				Element Code: ICBRA03030			
vernal pool fairy shrimp							
Listing Status:	Federal:	Threatened	CNDDDB Element Ranks:		Global:	G3	
	State:	None			State:	S3	
	Other:	IUCN VU-Vulnerable					



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Habitat:	General:	ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MOUNTAINS, AND SOUTH COAST MOUNTAINS, IN ASTATIC RAIN-FILLED POOLS.					
	Micro:	INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.					
Occurrence No.	138	Map Index:	34812	EO Index:	29267	Element Last Seen:	1997-01-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1997-01-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39538 / -121.46627			Accuracy:	specific area		
UTM:	Zone-10 N4250798 E633934			Elevation (ft):	15		
PLSS:	T06N, R05E, Sec. 06 (M)			Acres:	570.1		
Location:	BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF BILBY ROAD, ELK GROVE.						
Detailed Location:	ELLIOTT RANCH & ELK GROVE BLVD EXTENSION/I-5 INTERCHANGE MITIGATION SITES. 1995: 23 WETLANDS SURVEYED. 1996: 74 WETLANDS SURVEYED. LINDERIELLA OCCIDENTALIS AND/OR MIDVALLEY SHRIMP (BRANCHINECTA SP) ALSO PRESENT. 1997: 52 WETLANDS SAMPLED.						
Ecological:	NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS IN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.						
General:	1995: 50+ ADULTS OBS IN 3 POOLS (VP101, VP221 & VPG2), 3 COLLECTED & DEPOSITED IN CAS CASIZ#103133,103130, & 103111). 1996: 50+ ADULTS OBS IN 27 POOLS. 1997: OBS IN 43 OF 52 SAMPLED WETLANDS. 1998: BRANCHINECTA SP OBS IN 11 POOLS.						
Owner/Manager:	PVT-GRUPE DEVELOPMENT CO						
Occurrence No.	161	Map Index:	33873	EO Index:	30426	Element Last Seen:	2013-01-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2013-01-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-05-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44580 / -121.45917			Accuracy:	nonspecific area		
UTM:	Zone-10 N4256403 E634460			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 20, W (M)			Acres:	33.0		
Location:	ALONG WESTERN PACIFIC RAILROAD TRACKS, FROM LAGUNA CREEK (UNION HOUSE CREEK) SOUTH TO SIMS RD, 2.25 MI ESE OF FREEPORT.						
Detailed Location:	MAPPED TO LAT/LONG GIVEN FOR 2012-13 DETECTIONS AND SPECIMEN LOCALITIES "SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, E OF PLANT, W OF [RR TRACKS]" (OR SIMILAR). 1999/2000 DETECTIONS IN SRWTP BUFFERLANDS PRESERVE, EXACT LOCATION UNKNOWN.						
Ecological:	1999/2000: NATURAL VERNAL POOLS ON 732 ACRE PRESERVE. 2012/2013: GRASSY-BOTTOMED DEPRESSIONS ON BOTH SIDES OF RAILROAD TRACKS, 2-20 INCHES DEEP; SOME POOLS INVADDED BY WEEDS. LEPIDURUS PACKARDI & LINDERIELLA OCCIDENTALIS CO-OCCURRED.						
General:	REPORTEDLY DETECTED PRIOR TO 1993. COLLECTED JAN 1995 (CASIZ #103316, 104239) & APR 1998 (#115430, 115431). DETECTED, 1999-2000. 600 FOUND IN 5 BASINS, DEC 2012-JAN 2013 (4 BASINS MAPPED HERE, SEE ALSO OCC#671); COLLECTED (CASIZ #192828).						
Owner/Manager:	SRCSD-BUFFERLANDS, PG&E, PVT						



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Occurrence No.	187	Map Index:	36815	EO Index:	31812	Element Last Seen:	1993-02-04
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1993-02-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41294 / -121.46223				Accuracy:	nonspecific area	
UTM:	Zone-10 N4252753 E634254				Elevation (ft):	10	
PLSS:	T07N, R05E, Sec. 32 (M)				Acres:	953.0	
Location:	UP TO 2 MILES EAST OF I-5, 4 MILES SOUTH OF SACRAMENTO.						
Detailed Location:	TRS GIVEN FOR 1991 COLLECTIONS WAS SOUTH HALF OF T7N R5E SEC 31, BUT DESCRIBED AS "2 MILES EAST OF INTERSTATE 5" WHICH WOULD BE SEC 32 OR 33. 1993 DETECTION LOCATION GIVEN AS T7N R5E SEC 32.						
Ecological:							
General:	AT LEAST 15 COLLECTED ON 13 MAR 1991 (DB #1019, 1021, 1022, 1024; USNM #1072653). FOUND IN 1 OF 4 POOLS IN SECTION 32, 4 FEB 1993 (SUGNET #57).						
Owner/Manager:	PVT						

Occurrence No.	312	Map Index:	46122	EO Index:	46122	Element Last Seen:	2001-03-11
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2001-03-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-30
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43553 / -121.38764				Accuracy:	80 meters	
UTM:	Zone-10 N4255371 E640723				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 25, NW (M)				Acres:	0.0	
Location:	NW ELK GROVE; ABOUT 0.75 MILE SE OF HIGHWAY 99 AT SHELDON RD, ALONG SHORTLINE LN.						
Detailed Location:	EAST SIDE OF ROAD, VERNAL POOL 10.						
Ecological:	VERNAL POOLS AND SEASONAL WETLANDS ON DISKED FIELDS. PLANT SPECIES INCLUDED ANNUAL GRASSES, WITH CARTER'S BUTTERCUP, WINGED WATER-STARWORT, SLENDER POPCORN FLOWER IN POOLS. DEVELOPMENT.						
General:	FEWER THAN 100 INDIVIDUALS OBSERVED ON 11 MAR 2001, 8 COLLECTED (CASIZ #158787).						
Owner/Manager:	PVT						



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Occurrence No.	328	Map Index:	48477	EO Index:	48477	Element Last Seen:	2002-02-06
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2002-04-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43560 / -121.68267				Accuracy:	specific area	
UTM:	Zone-10 N4254969 E614972				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 19 (M)				Acres:	40.9	
Location:	SAXON, 1.2 TO 1.9 MILES ALONG THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE FROM ROAD 106.						
Detailed Location:	SITE NUMBERS 51-04 AND 51-06, ADJACENT TO EAST SIDE OF RAILROAD GRADE.						
Ecological:	HABITAT CONSISTS OF 2 LARGE, SHALLOW, NATURAL VERNAL POOLS. WHEN FULL, THE POOLS OVERFLOW INTO A DRAINAGE DITCH ON SE SIDE OF RAILROAD GRADE. SURROUNDING AREA IS A CATTLE GRAZED GRASSLAND. Hyla REGILLA IN VICINITY.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 23 & 24 JAN 2002 AND 6 FEB 2002.						
Owner/Manager:	UNKNOWN, PVT						

Occurrence No.	332	Map Index:	48476	EO Index:	48476	Element Last Seen:	2002-03-05
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-03-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.39340 / -121.72014				Accuracy:	specific area	
UTM:	Zone-10 N4250240 E611767				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 02 (M)				Acres:	72.5	
Location:	0.1-1.2 MILES SW OF KING RD ALONG SE SIDE OF ABANDONED SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE, 7 MILES SE OF DIXON.						
Detailed Location:	SITES NUMBERS 47-06 AND 48-11.						
Ecological:	HABITAT CONSISTS OF 2 LONG, NARROW, SEASONALLY PONDED DITCHES IN A GRASSLAND ALONG GRADE. SURROUNDING AREA USED FOR CATTLE GRAZING. LINDERIELLA OCCIDENTALIS, Hyla REGILLA AND CYZICUS CALIFORNICUS PRESENT IN VICINITY.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 24 JAN; 6, 7 & 21 FEB, AND 5 MAR 2002.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	333	Map Index:	48478	EO Index:	48478	Element Last Seen:	2002-02-06
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-09-24
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.44536 / -121.67336				Accuracy:	specific area	
UTM:	Zone-10 N4256063 E615769				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, SW (M)				Acres:	20.9	
Location:	3 MILES NE OF YOLANO, APPROX 1 TO 1.2 MILES SW ALONG THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE FROM ROAD 38.						
Detailed Location:	SITE NUMBERS 52-10F, 52-10E, 52-10, 52-10B AND 52-10C; SE SIDE OF RAILROAD GRADE.						
Ecological:	5 POOLS IN A VERNAL POOL COMPLEX PRIMARILY AROUND DITCHES & EDGES OF BERMS; NATURAL TOPOGRAPHY MOSTLY ABSENT. SURROUNDING LAND USED FOR GRAZING. LEPIDURUS PACKARDI, B. MESOVALLENSIS & LINDERIELLA OCCIDENTALIS FOUND IN VICINITY.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 11 & 23 JAN 2002 AND 5 & 6 FEB 2002; 11 COLLECTED AND ACCESSIONED IN CAS (CASIZ #161123).						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	340	Map Index:	48493	EO Index:	48493	Element Last Seen:	2002-03-05
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-03-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Liberty Island (3812136), Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.37617 / -121.73554				Accuracy:	specific area	
UTM:	Zone-10 N4248310 E610448				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 10, SE (M)				Acres:	26.6	
Location:	1.9 TO 2.4 MILES SW OF KING ROAD ALONG THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE, 7 MILES SE OF DIXON.						
Detailed Location:	SITE NUMBERS 45-05, 45-13, 46-04, 46-06 AND 46-07; BETWEEN DELHI ROAD AND ETZEL ROAD.						
Ecological:	HABITAT CONSISTS OF 5 SEASONALLY PONDED DEPRESSIONS (SOME ON ELEVATED GRADIENT, OTHERS IN BORROW PITS) ALONG RAILROAD GRADE. RAILROAD CORRIDOR HAS REVERTED TO A GRASSLAND. AREA SURROUNDING RAILROAD GRADE IS UNDER AGRICULTURAL PRODUCTION.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 14 & 23 JAN 2002; 7 FEB 2002, & 5 MAR 2002. LINDERIELLA OCCIDENTALIS IN VICINITY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	632	Map Index:	82002	EO Index:	82962	Element Last Seen:	2009-03-10
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-03-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-23
Quad Summary:	Bruceville (3812134), Courtland (3812135), Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.37476 / -121.49674			Accuracy:	specific area		
UTM:	Zone-10 N4248466 E631310			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 13, NW (M)			Acres:	71.0		
Location:	JUST N OF HOOD FRANKLIN RD, 1 MI W OF I-5, 1 MI E OF HOOD PO.						
Detailed Location:	BY STONE LAKES NATIONAL WILDLIFE REFUGE AND CATTLE GRAZING. POOL ID: 16, 22, 23, 27, 37, 56 & 65. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	VERNAL POOL GRASSLAND DOMINATED BY HORDEUM MARINUM SSP. GUSSONEANUM, LOLIUM MULTIFLORUM, PLAGIOBOTHRYIS STIPITATUS & LASTHENIA GLABERRIMA. HISTORICAL GRADING CAUSED POOLS TO BE POORLY DEFINED & SHALLOW. DEEPEST POOLS OCCUR BY BERMS & ROADS.						
General:	ABOUT 100 BREEDING ADULTS OBSERVED AMONG 7 POOLS; ASSOCIATED MUSEUM RECORDS INCLUDE: CAS-IZ #180491 -180495 ON 6 MAR, AND #18496 & 18497 ON 10 MAR 2009 COLLECTED BY E. PIMENTEL ET AL.						
Owner/Manager:	PVT, DWR						

Occurrence No.	656	Map Index:	93062	EO Index:	94214	Element Last Seen:	2010-02-25
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2010-02-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49435 / -121.68594			Accuracy:	80 meters		
UTM:	Zone-10 N4261484 E614594			Elevation (ft):	25		
PLSS:	T08N, R03E, Sec. 31 (M)			Acres:	0.0		
Location:	MCCLELLAN AFB DAVIS COMMUNICATIONS FACILITY, 0.5 MILE E OF INTERSECTION OF TREMONT RD AND ROAD 104, 4 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO LOCATION OF POOL #37 GIVEN IN 2010 REPORT. DETECTED IN 2 OF 13 POOLS SURVEYED IN 2010 (1 MAPPED HERE, SEE ALSO EO #657).						
Ecological:	POOLS HIGHLY DISTURBED FROM HISTORICAL MILITARY USE. LEPIDURUS PACKARDI AND LINDERIELLA OCCIDENTALIS ALSO FOUND IN AREA.						
General:	DETECTED DURING SURVEYS ON 14 AND 25 FEB 2010.						
Owner/Manager:	DOD, YOL COUNTY						



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Occurrence No.	657	Map Index:	93065	EO Index:	94217	Element Last Seen:	2010-02-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-02-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49233 / -121.67895				Accuracy:	80 meters	
UTM:	Zone-10 N4261269 E615206				Elevation (ft):	25	
PLSS:	T08N, R03E, Sec. 31, SE (M)				Acres:	0.0	
Location:	MCCLELLAN AFB DAVIS COMMUNICATIONS FACILITY, 0.3 MI NNW OF INTERSECTION OF ROAD 105 AND ROAD 36, 5 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO LOCATION OF POOL #124 GIVEN IN 2010 REPORT. DETECTED IN 2 OF 13 POOLS SURVEYED IN 2010 (1 MAPPED HERE, SEE ALSO EO #656).						
Ecological:	POOLS ARE HIGHLY DISTURBED FROM HISTORICAL MILITARY USE. LEPIDURUS PACKARDI AND LINDERIELLA OCCIDENTALIS ALSO FOUND IN AREA.						
General:	DETECTED DURING SURVEYS ON 14 AND 25 FEB 2010.						
Owner/Manager:	DOD, YOL COUNTY						
Occurrence No.	658	Map Index:	93068	EO Index:	94219	Element Last Seen:	2008-03-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45708 / -121.67208				Accuracy:	80 meters	
UTM:	Zone-10 N4257367 E615862				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	0.0	
Location:	TULE RANCH, YOLO BYPASS WILDLIFE AREA, 0.2 MILE SE OF INTERSECTION OF ROAD 38 AND ROAD 105, 8 MILES EAST OF DIXON.						
Detailed Location:	MAPPED TO LOCATION GIVEN IN 2008 REPORT.						
Ecological:	CLEAR-WATER POOL IN A PASTURE.						
General:	DETECTED DURING FIELD TRAINING EXERCISES ON 14 MAR 2008; NO SPECIMENS COLLECTED.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	659	Map Index:	54520	EO Index:	94220	Element Last Seen:	2008-03-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43662 / -121.66998				Accuracy:	specific area	
UTM:	Zone-10 N4255098 E616078				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20, SW (M)				Acres:	10.3	
Location:	TULE RANCH, YOLO BYPASS WILDLIFE AREA, 1.1 MILES SSE OF INTERSECTION OF ROAD 38A AND ROAD 105, 8 MILES EAST OF DIXON.						
Detailed Location:	MAPPED TO LOCATION GIVEN IN 2008 REPORT. "NORTH OF BARN."						
Ecological:	HIGHLY TURBID PLAYA POOL. B. CONSERVATIO, LEPIDURUS PACKARDI, AND LINDERIELLA OCCIDENTALIS ALSO FOUND HERE.						
General:	DETECTED DURING FIELD TRAINING EXERCISES ON 14 MAR 2008; NO SPECIMENS COLLECTED.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	660	Map Index:	93078	EO Index:	94228	Element Last Seen:	2011-01-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2011-01-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-09
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.35394 / -121.66455				Accuracy:	80 meters	
UTM:	Zone-10 N4245930 E616685				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 20, NE (M)				Acres:	0.0	
Location:	YOLO BYPASS, 2.0 AIR MILES SE OF DELHI RD AT LEVEE RD (ROAD 104), 11 MILES SE OF DIXON.						
Detailed Location:	MAPPED TO COORDINATES PROVIDED ON FIELD SURVEY FORM.						
Ecological:	VERNAL POOL SURROUNDED BY NON-NATIVE ANNUAL GRASSES AND DISTICHLIS. POTENTIAL MAX DEPTH 11 INCHES. REGULARLY FLOODED BY YOLO BYPASS, HYDROLOGICAL DISTURBANCES FROM AGRICULTURE. SMALL POPULATION OF LINDERIELLA OCCIDENTALIS CO-OCCURRED.						
General:	FEWER THAN 20 OBSERVED THROUGH ENTIRE SAMPLING SEASON IN 2011.						
Owner/Manager:	WESTLANDS WATER DISTRICT						



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Occurrence No.	671	Map Index:	93331	EO Index:	94477	Element Last Seen:	2013-01-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2013-01-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43454 / -121.45776				Accuracy:	80 meters	
UTM:	Zone-10 N4255156 E634605				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 29, NW (M)				Acres:	0.0	
Location:	NW CORNER OF DWIGHT RD AND THE WESTERN PACIFIC RAILROAD TRACKS, 0.9 MILE NW OF LAGUNA BLVD AT FRANKLIN BLVD, ELK GROVE.						
Detailed Location:	UNDATED SPECIMEN LOCALITY GIVEN AS "RAILROAD SIDE DITCH... NW CORNER OF DWIGHT ROAD AND WESTERN PACIFIC RAILROAD." 1993 DETECTION LOCATION GIVEN AS T7N R5E SEC 29. MAPPED TO LAT/LONG GIVEN FOR 2012/2013 DETECTION.						
Ecological:	1993: NATURAL VERNAL POOLS. 2012/2013: GRASSY-BOTTOMED DEPRESSIONS ON BOTH SIDES OF RAILROAD TRACKS, 2-20 INCHES DEEP; SOME POOLS INVADED BY WEEDS. LEPIDURUS PACKARDI AND LINDERIELLA OCCIDENTALIS CO-OCCURRED.						
General:	FOUND IN 1 OF 1 POOL SURVEYED, 4 FEB 1993. 2 COLLECTED ON 29 MAR 1995 (CASIZ #103317). 600 DETECTED IN 5 BASINS, 28 DEC 2012 - 16 JAN 2013 (1 OF 5 MAPPED HERE, SEE ALSO OCCURRENCE #161).						
Owner/Manager:	SRCSD-BUFFERLANDS, PG&E, PVT						

Occurrence No.	672	Map Index:	93281	EO Index:	94480	Element Last Seen:	1995-01-31
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1995-01-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45089 / -121.48269				Accuracy:	2/5 mile	
UTM:	Zone-10 N4256935 E632399				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 24 (M)				Acres:	0.0	
Location:	NORTH SIDE OF MORRISON CREEK, ABOUT 0.9 MILE NE OF THE I-5 CROSSING, 1.75 MILES SOUTH OF SACRAMENTO.						
Detailed Location:	MAPPED GENERALLY TO LOCALITY "INUNDATED WHEAT FIELD NORTH OF MORRISON CREEK LEVEE ROAD, 50 FEET EAST OF PUMPING STATION, 7/8 MILE EAST OF INTERSTATE 5."						
Ecological:	POOL DEPTH OF 0.07 METERS.						
General:	1 COLLECTED ON 31 JAN 1995 (CASIZ #104243).						
Owner/Manager:	SRCSD-STONE LAKES NWP						



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Occurrence No.	673	Map Index:	93335	EO Index:	94482	Element Last Seen:	1995-01-25
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1995-01-25	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-08-13	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.48953 / -121.46909	Accuracy:	1/10 mile
UTM:	Zone-10 N4261242 E633514	Elevation (ft):	15
PLSS:	T07N, R05E, Sec. 06, NE (M)	Acres:	0.0

Location: ALONG THE WESTERN PACIFIC (=UNION PACIFIC) RAILROAD TRACKS, ABOUT 0.4 MILE SOUTH OF FLORIN RD INTERSECTION, SACRAMENTO.

Detailed Location: MAPPED TO SPECIMEN LOCALITY: "S OF FLORIN RD, W OF UNION PACIFIC RAILROAD, E OF POCKET SUBSTATION IN A SEASONALLY PONDED DEPRESSION."

Ecological: POOL WITH DEPTH OF 1-6 INCHES.

General: 6 COLLECTED ON 25 JAN [YEAR LIKELY 1995] (CAS #94832).

Owner/Manager: PVT-UNION PACIFIC RR

Occurrence No.	891	Map Index:	95340	EO Index:	96470	Element Last Seen:	1998-04-30
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1998-04-30	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-03-02	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.44351 / -121.46676	Accuracy:	nonspecific area
UTM:	Zone-10 N4256138 E633802	Elevation (ft):	10
PLSS:	T07N, R05E, Sec. 19, NE (M)	Acres:	27.0

Location: SACTO REGIONAL WASTEWATER TREATMENT PLANT, PARCEL BOUNDED BY LAGUNA STATION RD (E), S LANDFILL WAY (N), & SIMS RD (W).

Detailed Location: MAPPED TO BOUNDARY OF SURVEYED SITE. PROVIDED MAP GAVE LOCATIONS OF WETLAND FEATURES, BUT DID NOT INDICATE WHICH WERE OCCUPIED.

Ecological: ANNUAL GRASSLAND WITH VERNAL POOLS, SEASONAL WETLANDS & DRAINAGES. PSILOCARPHUS PRESENT. SITE PROPOSED FOR A BIOSOLIDS DEWATERING FACILITY IN 1998, BUT AERIAL PHOTOS INDICATE THIS PARCEL HAD NOT BEEN DEVELOPED AS OF 2014.

General: 10 CYSTS FOUND IN 2 OF 11 SITES EXAMINED IN APR 1998, COLLECTED AND DEPOSITED IN CAS (CASIZ #115430 & 115431).

Owner/Manager: SRCSD

Branchinecta mesoallensis

Element Code: ICBRA03150

midvalley fairy shrimp

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2

State: None

State: S2S3

Other:

Habitat: **General:** VERNAL POOLS IN THE CENTRAL VALLEY.

Micro: ☐



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Occurrence No.	18	Map Index:	46082	EO Index:	46082	Element Last Seen:	2007-03-08
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-03-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43050 / -121.38704				Accuracy:	specific area	
UTM:	Zone-10 N4254814 E640785				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 25, W (M)				Acres:	8.0	
Location:	NEAR WHITE PEACOCK COURT, NORTH OF LAGUNA CREEK, ELK GROVE.						
Detailed Location:	2 BASINS REPRESENTED. NORTH BASIN, "VERNAL POOL #5," WAS SITE OF 2001 DETECTION AND IS MAPPED TO LOCATION GIVEN ON VICINITY MAP. SOUTH BASIN, SITE OF 2006 & 2007 DETECTIONS, IS MAPPED TO GIVEN COORDINATES.						
Ecological:	DISKED FIELDS INTERSPERSED WITH VERNAL POOLS AND SEASONAL WETLANDS, MANY DISKED BUT STILL EVIDENT (2001). AERIAL PHOTOS INDICATE THAT SINCE 2001, THE NORTHERN POOL HAS BEEN DEVELOPED. THE SOUTH POOL WAS 195 SQUARE M, 8 CM DEEP IN 2006.						
General:	MORE THAN 100 FOUND IN VERNAL POOL #5, 11 MAR 2001. 100S OBSERVED ON 25 JAN 2006. 100S OBSERVED ON 8 MAR 2007.						
Owner/Manager:	PVT						
Occurrence No.	26	Map Index:	34812	EO Index:	48247	Element Last Seen:	1997-03-06
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1997-03-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39538 / -121.46627				Accuracy:	specific area	
UTM:	Zone-10 N4250798 E633934				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 06 (M)				Acres:	570.1	
Location:	BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF BILBY ROAD, ELK GROVE.						
Detailed Location:	MAPPED TO SURVEYED AREA AT ELLIOTT RANCH MITIGATION SITE; DETECTED AT POOLS VP201, VP202 AND SW235 IN 1997. SPECIMEN WITH LOCALITY "5.0 MILES SOUTH OF SACRAMENTO ALONG I-5," ALSO ATTRIBUTED HERE.						
Ecological:	NATURAL & CONSTRUCTED HARDPAN VERNAL POOLS, SEASONAL MARSHES & WETLANDS WITHIN NON-NATIVE ANNUAL GRASSLAND.						
General:	3 COLLECTED ON 13 MAR 1991 (BELK #1018, USNM #1084032). FOUND IN UNKNOWN # OUT OF 21 SAMPLED POOLS, FEB 1995. IN 70 POOLS, FEB-MAR 1996. FOUND IN 3 OF 52 POOLS ON 10, 14 JAN & 6 MAR 1997. BRANCHINECTA SP OBS IN 11 POOLS 25 JAN-22 FEB 1998.						
Owner/Manager:	PVT-GRUPE DEVELOPMENT CO						



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Occurrence No.	27	Map Index:	48248	EO Index:	48248	Element Last Seen:	1991-03-13
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1991-03-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40934 / -121.44630			Accuracy:	1/10 mile		
UTM:	Zone-10 N4252377 E635652			Elevation (ft):	10		
PLSS:	T07N, R05E, Sec. 32, SW (M)			Acres:	0.0		
Location:	ABOUT 4 MILES SOUTH OF SACRAMENTO AND 2 MILES EAST OF I-5.						
Detailed Location:	MAPPED TO LOCATION FROM ROGERS MAPS AND SPECIMEN LOCALITY, "4.0 MILES SOUTH OF SACRAMENTO, 2 MILES EAST OF INTERSTATE 5."						
Ecological:	VERNAL POOL. 2008 AERIAL PHOTO SHOWS THAT THIS AREA HAS BEEN COMPLETELY DEVELOPED.						
General:	10 COLLECTED ON 13 MAR 1991 (BELK #1021, USNM #1144062).						
Owner/Manager:	UNKNOWN						
Occurrence No.	40	Map Index:	48348	EO Index:	48348	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2009-06-08
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40933 / -121.45822			Accuracy:	1/10 mile		
UTM:	Zone-10 N4252358 E634611			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 32, SW (M)			Acres:	0.0		
Location:	5.2 MILES WEST OF ELK GROVE, 200 FT NORTH OF ELK GROVE BLVD, 0.45 MILE WEST OF FRANKLIN BLVD.						
Detailed Location:							
Ecological:	2008 AERIAL PHOTO SHOWS THAT THIS AREA HAS BEEN COMPLETELY DEVELOPED.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #015. DATE OF COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.						
Owner/Manager:	UNKNOWN						
Occurrence No.	41	Map Index:	48349	EO Index:	48349	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-07-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42421 / -121.44625			Accuracy:	1/10 mile		
UTM:	Zone-10 N4254026 E635629			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 29, SE (M)			Acres:	0.0		
Location:	4.5 MILES WEST OF ELK GROVE, 1.1 MILES NORTH OF ELK GROVE BLVD ALONG FRANKLIN BLVD AND 400 FT TO THE EAST.						
Detailed Location:							
Ecological:							
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #005. DATE OF COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	53	Map Index:	48498	EO Index:	48498	Element Last Seen:	2002-02-06
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-02-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.44605 / -121.67314				Accuracy:	specific area	
UTM:	Zone-10 N4256140 E615787				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, SE (M)				Acres:	27.5	
Location:	1.6 MILES SW OF SAXON, 1 TO 1.3 MILES SW ALONG THE NORTHERN ELECTRIC RAILROAD GRADE FROM ROAD 38.						
Detailed Location:	SITE NUMBERS 52-10, 52-10B, 52-10C, 52-10G, 52-10H AND 52-24; EAST SIDE OF RAILROAD GRADE.						
Ecological:	SHALLOW SHORT-LIVED POOLS IN A CATTLE GRAZED GRASSLAND. POOLS OCCURRED NEAR ARTIFICIALLY CONSTRUCTED BERMS. NATURAL TOPOGRAPHY MAINLY ABSENT. BRANCHINECTA LYNCHI, LEPIDURUS PACKARDI & LINDERIELLA OCCIDENTALIS IN COMPLEX.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 11 AND 23 JAN 2002 AND 6 FEB 2002.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	58	Map Index:	51552	EO Index:	51552	Element Last Seen:	2003-01-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-01-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-06-16
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45404 / -121.66678				Accuracy:	80 meters	
UTM:	Zone-10 N4257035 E616330				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	0.0	
Location:	JUST NW OF THE OLD SACRAMENTO NORTHERN RAILROAD.						
Detailed Location:	POOLS FILLED WITH WATER DURING THE HEAVY RAINS OF DECEMBER 2002 AND WERE DRY BY MID-FEBRUARY.						
Ecological:	HABITAT CONSISTS OF TWO SHALLOW VERNAL POOLS IN GRAZED NON-NATIVE GRASSLAND. CYZICUS CALIFORNICUS FOUND IN POOL #52-06A. LINDERIELLA AND BRANCHINECTA LYNCHI ALSO OCCUR IN NEARBY POOLS.						
General:	FEW INDIVIDUALS OBSERVED IN JAN 2003.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	65	Map Index:	60907	EO Index:	60943	Element Last Seen:	2004-03-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-03-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-04-11
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44821 / -121.41953				Accuracy:	1/10 mile	
UTM:	Zone-10 N4256729 E637915				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 22, NW (M)				Acres:	0.0	
Location:	NORTHWEST CORNER OF INTERSECTION OF BRUCEVILLE RD AND JACINTO RD.						
Detailed Location:							
Ecological:	SITE IS COMPOSED OF NON-NATIVE ANNUAL GRASSLAND AND APPEARS TO BE DISKED AT LEAST ANNUALLY FOR WEED CONTROL AND FIRE PREVENTION.						
General:	6 SEASONAL WETLAND FEATURES SAMPLED BETWEEN 2 JAN & 12 MAR 2004. 1 MALE FAIRY SHRIMP OBSERVED IN VP-01 ON 12 MAR 2004.						
Owner/Manager:	PVT						

<i>Linderiella occidentalis</i>				Element Code: ICBRA06010			
California linderiella							
Listing Status:	Federal:	None			CNDDDB Element Ranks:	Global:	G2G3
	State:	None				State:	S2S3
	Other:	IUCN_NT-Near Threatened					
Habitat:	General:	SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.					
	Micro:	WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TOTAL DISSOLVED SOLIDS.					

Occurrence No.	27	Map Index:	24533	EO Index:	1788	Element Last Seen:	2013-01-29
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:			2013-01-29
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2014-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44335 / -121.45897			Accuracy:	specific area		
UTM:	Zone-10 N4256132 E634483			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 20 (M)			Acres:	49.0		
Location:	ALONG RAILROAD TRACKS FROM JUST E OF SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, S TO DWIGHT RD, S OF SACRAMENTO.						
Detailed Location:	FOUND ALONG BOTH SIDES OF THE WESTERN PACIFIC RR TRACKS. 1995 SPECIMEN TAKEN "E OF SRWTP, W OF RR TRACKS" ATTRIBUTED HERE. N-MOST POLYGON REPRESENTS 1992-1993 DETECTIONS; REST OF POLYGONS MAPPED TO LAT/LONG GIVEN FOR 2012/13 DETECTIONS.						
Ecological:	WEEDY, WATER-FILLED DEPRESSIONS WITHIN RAILROAD ROW; SLIGHTLY TURBID WATER; DOMINANT PLANTS WERE JUNCUS BUFONIUS, PLAGIOBOTHRYUS STIPITATUS VAR. MICRANTHUS, GRATIOLA EBRACTEATA, LYTHRUM HYSSOPIFOLIA (1993). LEPIDURUS PACKARDI ALSO FOUND.						
General:	DETECTED ON 2 APR 1992. DETECTED AND COLLECTED ON 11 FEB; OVER 100 DETECTED ON 23 FEB 1993. 1 COLLECTED ON 6 JAN 1995 (CASIZ #104241). 60,000 DETECTED IN 17 BASINS BETWEEN 10 DEC 2012 AND 29 JAN 2013.						
Owner/Manager:	SRCSD, PVT-WESTERN PACIFIC RR						



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Occurrence No.	127	Map Index:	34794	EO Index:	12558	Element Last Seen:	1992-04-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1992-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-06-19
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49582 / -121.47084				Accuracy:	80 meters	
UTM:	Zone-10 N4261937 E633350				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 06, SE (M)				Acres:	0.0	
Location:	CORNER OF FLORIN ROAD AND UNION PACIFIC (WESTERN PACIFIC) RAILROAD, WEST OF HIGHWAY 99.						
Detailed Location:							
Ecological:							
General:	LINDERIELLA OBSERVED BY KOFORD DURING SURVEY IN SPRING OF 1992. LEPIDURUS PACKARDI ALSO PRESENT.						
Owner/Manager:	PVT-UNION PACIFIC RR						
Occurrence No.	140	Map Index:	34812	EO Index:	29268	Element Last Seen:	2003-02-17
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-02-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-28
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39538 / -121.46627				Accuracy:	specific area	
UTM:	Zone-10 N4250798 E633934				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 06 (M)				Acres:	570.1	
Location:	BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF HOOD FRANKLIN ROAD, ELK GROVE.						
Detailed Location:	ELLIOTT RANCH & ELK GROVE BLVD EXTENSION/I-5 INTERCHANGE MITIGATION SITES. 1991 LOCALITY "5.0 MILES SOUTH OF SACRAMENTO ALONG I-5," MAPPED HERE. 1995: 23 WETLANDS SAMPLED. 1996: 74 WETLANDS SAMPLED. 1997: 52 WETLANDS SAMPLED.						
Ecological:	NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS, SEASONAL MARSHES AND WETLANDS WITHIN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.						
General:	52 COLLECTED IN 1991 (USNM #1144050 & 1144061). MORE THAN 50 L. OCCIDENTALIS AND/OR MIDVALLEY FAIRY SHRIMP FOUND IN 12 POOLS IN 1995, AND IN 43 POOLS IN 1996. FOUND IN 23 POOLS, 1997. 100S TO 1000S IN 11 POOLS, 1998. 100S FOUND IN 2003.						
Owner/Manager:	PVT-GRUPE DEVELOPMENT CO						



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Occurrence No.	178	Map Index:	42552	EO Index:	42552	Element Last Seen:	1998-10-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1998-10-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-03-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43614 / -121.39915				Accuracy:	specific area	
UTM:	Zone-10 N4255421 E639718				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 26, NW (M)				Acres:	8.2	
Location:	EAST SIDE OF HIGHWAY 99, BETWEEN WHITEHOUSE CREEK AND SHELDON ROAD, SOUTH OF SACRAMENTO.						
Detailed Location:							
Ecological:							
General:	OBSERVED DURING DRY-SEASON SAMPLING OF SEASONAL WETLANDS ON 15 OCT 1998.						
Owner/Manager:	PVT						

Occurrence No.	179	Map Index:	37071	EO Index:	42553	Element Last Seen:	1998-04-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1998-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-03-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45613 / -121.41327				Accuracy:	nonspecific area	
UTM:	Zone-10 N4257618 E638447				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 15, SW (M)				Acres:	161.6	
Location:	INTERSECTION OF COSUMNES RIVER COLLEGE BOULEVARD AND HIGHWAY 99, SOUTH OF SACRAMENTO.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF BOTH NATURAL AND MAN-MADE VERNAL POOLS.						
General:	DRY/WET SEASON SAMPLING CONDUCTED JAN-APR 1998 OF A CREATED VERNAL POOL AND A CONTROL SITE; UNKNOWN NUMBER OF INDIVIDUALS FOUND.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	206	Map Index:	48434	EO Index:	48434	Element Last Seen:	2003-01-15
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-01-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-12-23
Quad Summary:	Liberty Island (3812136), Dozier (3812137)						
County Summary:	Solano						
Lat/Long:	38.35739 / -121.75320			Accuracy:	specific area		
UTM:	Zone-10 N4246205 E608933			Elevation (ft):	18		
PLSS:	T06N, R02E, Sec. 21 (M)			Acres:	122.6		
Location:	5.5 MILES NW OF DOZIER, EXTENDING 4.4 MILES NW FROM BUNKER ALONG ABANDONED SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE.						
Detailed Location:	LOCATED BETWEEN BINGHAMTON ROAD (TO THE SOUTH) AND DEHLI ROAD (TO THE NORTH). SOUTHERN SECTION: 27 POOLS. MIDDLE SECTION: 16 POOLS. NORTHERN SECTION: 12 POOLS.						
Ecological:	HABITAT CONSISTS OF STRING OF SEASONALLY PONDED POOLS. MOST POOLS ARE BORROW PITS/DITCHES. A FEW NATURALLY OCCURRING VERNAL POOLS LOCATED IN SECTION 15 WITHIN A CATTLE GRAZED GRASSLAND. SOME AREAS GRAZED BY SHEEP AND GOATS.						
General:	UNKNOWN NUMBER OBSERVED BETWEEN JAN AND FEB 2002, AND JAN 2003. MOST OF HABITAT SURROUNDING CORRIDOR IS UNDER AGRICULTURAL PRODUCTION.						
Owner/Manager:	UNKNOWN						

Occurrence No.	212	Map Index:	48496	EO Index:	48496	Element Last Seen:	2008-03-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-08-26
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45179 / -121.66785			Accuracy:	specific area		
UTM:	Zone-10 N4256784 E616239			Elevation (ft):	15		
PLSS:	T07N, R03E, Sec. 17 (M)			Acres:	131.0		
Location:	ALONG HISTORIC RAILROAD GRADE, 0.3 TO 1.9 MILES SW OF ITS INTERSECTION WITH COUNTY ROAD 106, 8 MILES EAST OF DIXON.						
Detailed Location:	2002/2003: OBSERVED AT 28 DIFFERENT SITES ALONG BOTH SIDES OF THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE. 2008: OBSERVED IN 2 FEATURES SE OF THE RAILROAD GRADE IN SECTION 20.						
Ecological:	2002/2003: PONDED DEPRESSIONS (BORROW PITS, DITCHES) & SOME NATURAL VERNAL POOLS IN GRAZED GRASSLAND; NATURAL TOPOGRAPHY MAINLY ABSENT. BRANCHINECTA LYNCHI & LEPIDURUS PACKARDI FOUND. 2008: HIGHLY TURBID PLAYA POOL & LARGE CLEAR-WATER POOL.						
General:	DETECTED FROM 3 JAN - 2 APR 2002, AND IN JAN 2003. DETECTED DURING FIELD TRAINING EXERCISES ON 14 MAR 2008; NO SPECIMENS COLLECTED.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	213	Map Index:	48497	EO Index:	48497	Element Last Seen:	2002-01-14
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2002-01-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.42764 / -121.68946				Accuracy:	80 meters	
UTM:	Zone-10 N4254077 E614392				Elevation (ft):	20	
PLSS:	T07N, R03E, Sec. 30, NW (M)				Acres:	0.0	
Location:	1.4 MILES NE OF YOLANO, 0.3 MILE SE OF THOMSEN ROAD, NORTH OF UNNAMED SLOUGH & EAST OF NORTHERN ELECTRIC RAILROAD GRADE.						
Detailed Location:	SITE NUMBERS 50-09 AND 50-10.						
Ecological:	HABITAT CONSISTS OF 2 SMALL ARTIFICIALLY CREATED DEPRESSIONS THAT SEASONALLY POND RAINWATER. AREA IS GENERALLY DISTURBED AND SURROUNDING LAND IS UNDER AGRICULTURAL PRODUCTION.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 14 JAN 2002.						
Owner/Manager:	UNKNOWN						

Occurrence No.	238	Map Index:	59076	EO Index:	59112	Element Last Seen:	2002-02-04
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-02-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-01-03
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39514 / -121.45328				Accuracy:	80 meters	
UTM:	Zone-10 N4250791 E635069				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 05 (M)				Acres:	0.0	
Location:	ABOUT 1.2 MILES NORTH OF FRANKLIN, ON WEST SIDE OF WESTERN PACIFIC RAILROAD TRACKS.						
Detailed Location:	FOUND IN A SHALLOW TOPOGRAPHIC DEPRESSION IN RAILROAD RIGHT-OF-WAY.						
Ecological:	HERBACEOUS AND GRASSY SUBSTRATE.						
General:	5-10 ADULTS OBSERVED VISUALLY ON 4 FEB 2002, NO AQUATIC SAMPLING.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	265	Map Index:	65888	EO Index:	65967	Element Last Seen:	2007-03-08
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-03-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-28
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43147 / -121.39101			Accuracy:	specific area		
UTM:	Zone-10 N4254915 E640436			Elevation (ft):	30		
PLSS:	T07N, R05E, Sec. 26 (M)			Acres:	14.0		
Location:	FROM 0.4 TO 0.7 MILE NE OF HWY 99 AT LAGUNA BLVD, 0.4 TO 0.75 MILE S OF SHELDON RD AT POWER INN RD, ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR POOLS VP21, VP11, AND SW14 FROM FIELD SURVEY FORMS. COORDINATES NOT GIVEN FOR ADDITIONAL DETECTIONS IN 2006 AT VP6, VP14, VP22, SW2, & SW3; BUT THESE POOLS WERE WITHIN 600' OF VP21.						
Ecological:	VERNAL POOLS AND SEASONAL WETLANDS IN ANNUAL GRASSLAND. SURFACE AREA OF POOLS RANGED FROM 489 TO 9849 SQ M; AVG DEPTH 7-30 CM; WATER TEMPERATURE 15-25 DEGREES C. SURROUNDING LAND USE RESIDENTIAL AND COMMERCIAL.						
General:	100S OF INDIVIDUALS OBSERVED IN 7 BASINS DURING SURVEYS ON 25 JAN, 8 FEB, AND 5 APR 2006. 100S OBSERVED IN 2 BASINS ON 8 MAR 2007.						
Owner/Manager:	PVT						

Occurrence No.	387	Map Index:	82079	EO Index:	83068	Element Last Seen:	2009-03-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-03-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-23
Quad Summary:	Bruceville (3812134), Courtland (3812135), Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.37888 / -121.50013			Accuracy:	specific area		
UTM:	Zone-10 N4248918 E631007			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 13, NW (M)			Acres:	234.0		
Location:	1 MI W OF HOOD FRANKLIN RD AT I-5, 1 MI NE HOOD PO.						
Detailed Location:	JUST S OF NORTH STONE LAKE. POOL ID: 16, 20-23, 26-28, 30, 32, 37, 56-58, 63, 65-67, 80 & 84. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	MAXIMUM DEPTH OF POOLS RANGED FROM 6 IN TO 24 IN; WATER TEMPERATURE RANGED FROM 13 TO 21 DEGREES CELSIUS.						
General:	10S OF CALIFORNIA LINDERIELLA OBSERVED AT 13 DIFFERENT POOLS AND 2 DITCHES; 100S OBSERVED AT 5 DIFFERENT POOLS DURING WET-SEASON FIELD SURVEYS BETWEEN 6-11 MAR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	388	Map Index:	82080	EO Index:	83072	Element Last Seen:	2009-03-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-03-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-22
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.36839 / -121.50884				Accuracy:	specific area	
UTM:	Zone-10 N4247742 E630265				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 14, SE (M)				Acres:	39.0	
Location:	ABOUT 0.5 MI E OF HOOD PO, 1 MI WSW OF I-5 AT HOOD FRANKLIN RD.						
Detailed Location:	JUST S OF NORTH STONE LAKE. POOL ID: 110, 42, 43, 45, 50, 52 & 54. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	MAXIMUM DEPTH OF POOLS RANGED FROM 8 TO 21 IN; WATER TEMPERATURE RANGED FROM 8 TO 11 DEGREES CELSIUS. GLYCERIA, ELEOCHARIS, SNAIL EGGS, TREE FROG EG MASSES & ALGAE ALSO FOUND ON SITE.						
General:	10S OF CALIFORNIA LINDERIELLA OBSERVED IN EACH POOL DURING WET-SEASON FIELD SURVEYS ON 10 MAR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	389	Map Index:	82082	EO Index:	83074	Element Last Seen:	2009-03-06
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-03-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.34804 / -121.50593				Accuracy:	specific area	
UTM:	Zone-10 N4245489 E630555				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 26, NE (M)				Acres:	8.0	
Location:	JUST NW OF STONE LAKE, ABOUT 1.5 MI SSE HOOD PO.						
Detailed Location:	STONE LAKES NWR. POOL ID: 4B. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	POOL HAS COMBINED WITH SMALLER SURROUNDING POOLS. MAXIMUM DEPTH OF 20 IN; WATER TEMPERATURE OF 11 DEGREES CELSIUS. GLYCERIA, SPIDERS, WORMS AND A DEAD ADULT BULLFROG ALSO FOUND ON SITE.						
General:	10S OF CALIFORNIA LINDERIELLA OBSERVED IN EACH POOL DURING WET-SEASON FIELD SURVEYS ON 6 MAR 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	394	Map Index:	93229	EO Index:	94369	Element Last Seen:	2008-05-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-05-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38010 / -121.37821				Accuracy:	specific area	
UTM:	Zone-10 N4249234 E641654				Elevation (ft):	35	
PLSS:	T06N, R05E, Sec. 12 (M)				Acres:	28.0	
Location:	ABOUT 0.9 MILE WNW OF HIGHWAY 99 AT GRANT LINE ROAD & 1.1 MILES NE OF KAMMERER RD AT MCMILLAN ROAD, SOUTH OF ELK GROVE.						
Detailed Location:	"STERLING MEADOWS PROPERTY." MAPPED TO LOCATIONS GIVEN IN 2008 REPORT.						
Ecological:	200-ACRE PROPERTY. BRANCHINECTA CYSTS ALSO FOUND.						
General:	LINDERIELLA OCCIDENTALIS CYSTS WERE FOUND IN 8 OUT OF 15 BASINS DRY-SAMPLED ON 2 MAY 2008.						
Owner/Manager:	PVT						



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Occurrence No.	395	Map Index:	93078	EO Index:	94393	Element Last Seen:	2011-01-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2011-01-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.35394 / -121.66455				Accuracy:	80 meters	
UTM:	Zone-10 N4245930 E616685				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 20, NE (M)				Acres:	0.0	
Location:	YOLO BYPASS, 2.0 AIR MILES SE OF DELHI RD AT LEVEE RD (ROAD 104), 11 MILES SE OF DIXON.						
Detailed Location:	MAPPED TO COORDINATES PROVIDED ON FIELD SURVEY FORM.						
Ecological:	VERNAL POOL SURROUNDED BY NON-NATIVE ANNUAL GRASSES AND DISTICHLIS. POTENTIAL MAX DEPTH 11". REGULARLY FLOODED BY YOLO BYPASS, HYDROLOGICAL DISTURBANCES FROM AGRICULTURE. VERY SMALL POPULATION OF BRANCHINECTA LYNCHI CO-OCCURRED.						
General:	DETECTED ON 20 JAN 2011.						
Owner/Manager:	WESTLANDS WATER DISTRICT						

Occurrence No.	399	Map Index:	93267	EO Index:	94403	Element Last Seen:	2005-01-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-01-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-23
Quad Summary:	Rio Vista (3812126), Birds Landing (3812127)						
County Summary:	Solano						
Lat/Long:	38.19089 / -121.75059				Accuracy:	3/5 mile	
UTM:	Zone-10 N4227733 E609411				Elevation (ft):	80	
PLSS:	T04N, R02E, Sec. 15 (M)				Acres:	0.0	
Location:	VICINITY OF CANRIGHT ROAD BETWEEN MCCORMACK ROAD (TO N) AND HWY 12 (TO S), ABOUT 3 MILES NW OF RIO VISTA.						
Detailed Location:	MAPPED TO VICINITY OF BRANN PROPERTY AS DESCRIBED IN 2006 REPORT. EXACT DETECTION LOCATIONS WITHIN PROPERTY UNKNOWN.						
Ecological:	DETECTIONS ON 313-ACRE PROPERTY CHARACTERIZED BY SLOPING HILLS AND OPEN GRASSLANDS, WITH FOUR SEASONAL WETLANDS IN THE FLOOD PLAIN ADJACENT TO AN UNNAMED TRIBUTARY.						
General:	OBSERVED AND CAPTURED IN 2 OF THE SEASONAL WETLAND FEATURES ONSITE, 25 JAN 2005.						
Owner/Manager:	PVT						



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Occurrence No.	404	Map Index:	93281	EO Index:	94417	Element Last Seen:	1995-01-31
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1995-01-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45089 / -121.48269				Accuracy:	2/5 mile	
UTM:	Zone-10 N4256935 E632399				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 24 (M)				Acres:	0.0	
Location:	NORTH SIDE OF MORRISON CREEK, ABOUT 0.9 MILE NE OF THE I-5 CROSSING, 1.75 MILES SOUTH OF SACRAMENTO.						
Detailed Location:	MAPPED GENERALLY TO LOCALITY "INUNDATED WHEAT FIELD NORTH OF MORRISON CREEK LEVEE ROAD, 50 FEET EAST OF PUMPING STATION, 7/8 MILE EAST OF INTERSTATE 5."						
Ecological:	POOL DEPTH OF 0.07 METERS.						
General:	3 COLLECTED ON 31 JAN 1995 (CASIZ #104242).						
Owner/Manager:	SRCSD-STONE LAKES NWP						
Occurrence No.	408	Map Index:	93293	EO Index:	94427	Element Last Seen:	2007-10-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-10-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-28
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47035 / -121.38620				Accuracy:	specific area	
UTM:	Zone-10 N4259237 E640781				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 12, SW (M)				Acres:	28.0	
Location:	EAST SIDE OF THE SOUTHERN PACIFIC RAILROAD TRACKS FROM CASELMAN ROAD TO CORD WAY, SACRAMENTO.						
Detailed Location:	MAPPED TO LOCATIONS GIVEN FOR OCCUPIED SITES (P1, P2, & P3; BASIN 3; DITCH 1 & DITCH 2; HBC 13 & 21) ON DEANE-VINTAGE I / CARLISLE VILLAGE PROPERTY.						
Ecological:	34 BASINS INCLUDING PONDS AND DITCHES SURVEYED ON PROPERTY.						
General:	UNKNOWN # DETECTED IN 4 BASINS IN JAN 2006. CYSTS DETECTED IN 5 OF 34 BASINS DRY-SAMPLED 15 OCT 2005, 1 AUG 2006, & 3 OCT 2007.						
Owner/Manager:	PVT						
Occurrence No.	409	Map Index:	93294	EO Index:	94428	Element Last Seen:	2006-05-01
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2006-05-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38001 / -121.40858				Accuracy:	1/10 mile	
UTM:	Zone-10 N4249178 E639001				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 10, SE (M)				Acres:	0.0	
Location:	NORTH SIDE OF BILBY ROAD ABOUT 0.5 MILE EAST OF THE INTERSECTION WITH BRUCEVILLE ROAD, ELK GROVE.						
Detailed Location:	MAPPED TO LOCATION GIVEN FOR OCCUPIED POOL SW-2; MAPPED NON-SPECIFICALLY SINCE COORDINATES AND MAP DO NOT APPEAR TO BE HIGHLY ACCURATE.						
Ecological:	LARGE, EXCAVATED SEASONAL WETLAND IN DISTURBED ANNUAL GRASSLAND.						
General:	DETECTED AT A DENSITY OF 50/25L ON 22 JAN 2006; OVER 100 OBSERVED BETWEEN 22 JAN & 1 MAY 2006.						
Owner/Manager:	PVT						



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Occurrence No.	410	Map Index:	48248	EO Index:	94430	Element Last Seen:	1991-03-13
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1991-03-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-08-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40934 / -121.44630				Accuracy:	1/10 mile	
UTM:	Zone-10 N4252377 E635652				Elevation (ft):	10	
PLSS:	T07N, R05E, Sec. 32, SW (M)				Acres:	0.0	
Location:	ABOUT 4 MILES SOUTH OF SACRAMENTO AND 2 MILES EAST OF I-5.						
Detailed Location:	MAPPED TO SPECIMEN LOCALITY, "4.0 MILES SOUTH OF SACRAMENTO, 2 MILES EAST OF INTERSTATE 5."						
Ecological:	VERNAL POOL. 2008 AERIAL PHOTO SHOWS THAT THIS AREA HAS BEEN COMPLETELY DEVELOPED. BRANCHINECTA MESOVALLENSIS COLLECTED AT THIS LOCALITY ON SAME DATE.						
General:	19 COLLECTED ON 13 MAR 1991 (BELK #1019 & 1022; USNM #1144059 & 1144063).						
Owner/Manager:	UNKNOWN						
Occurrence No.	411	Map Index:	93299	EO Index:	94434	Element Last Seen:	2008-03-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-03-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48359 / -121.39129				Accuracy:	specific area	
UTM:	Zone-10 N4260698 E640311				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 02, SE (M)				Acres:	27.0	
Location:	NORTHWEST CORNER OF INTERSECTION OF FRENCH ROAD AND GERBER ROAD, EAST OF SOUTHERN PACIFIC RAILROAD TRACKS, SACRAMENTO.						
Detailed Location:	MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS SW1, SW2, SW3, RD1, DD1A, DD1B, DD1C, AND RD1 (2008). "FEENSTRA UNIT 6A" PROPERTY.						
Ecological:	OBSERVED WITHIN MOST OF THE SURVEYED FEATURES, WHICH INCLUDED SEASONAL WETLANDS, DRAINAGE AND ROADSIDE DITCHES, AND DISTURBANCE-CREATED POOLS. IN MOSTLY NON-NATIVE, ANNUAL GRASSLAND. LEPIDURUS PACKARDI ALSO FOUND.						
General:	DETECTED AT LOW TO HIGH ABUNDANCE IN 7 OUT OF 9 BASINS SAMPLED, FROM 6 FEB TO 18 MAR 2008.						
Owner/Manager:	PVT						



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Occurrence No.	420	Map Index:	93324	EO Index:	94470	Element Last Seen:	2010-02-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-02-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-30
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49228 / -121.67894				Accuracy:	specific area	
UTM:	Zone-10 N4261264 E615208				Elevation (ft):	25	
PLSS:	T08N, R03E, Sec. 31, SE (M)				Acres:	8.0	
Location:	MCCLELLAN AFB DAVIS COMMUNICATIONS FACILITY SITE, 0.3 MILE NNW OF ROAD 105 AT ROAD 36, 5 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO LOCATION OF POOL R-A3 FROM 2004 FIELD SURVEY FORM AND POOLS 125, 126, 127, AND 128 FROM 2010 REPORT.						
Ecological:	DEEP, TURBID VERNAL POOLS IN AREA HIGHLY DISTURBED FROM HISTORICAL MILITARY USE. LEPIDURUS PACKARDI AND BRANCHINECTA LYNCHI ALSO FOUND IN AREA. SITE WAS BURNED IN 2003. ANNEXED TO YOLO COUNTY GRASSLANDS REGIONAL PARK SINCE TIME OF SURVEY.						
General:	DETECTED IN 1 POOL DURING SURVEYS BETWEEN 30 DEC 2003 AND 23 MAR 2004. DETECTED IN 4 ADJACENT BASINS DURING SURVEYS 14 AND 25 FEB 2010.						
Owner/Manager:	DOD, YOL COUNTY						
Occurrence No.	421	Map Index:	93068	EO Index:	94471	Element Last Seen:	2008-03-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-30
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45708 / -121.67208				Accuracy:	80 meters	
UTM:	Zone-10 N4257367 E615862				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	0.0	
Location:	TULE RANCH, YOLO BYPASS WILDLIFE AREA, 0.2 MILE SE OF INTERSECTION OF ROAD 38 AND ROAD 105, 8 MILES EAST OF DIXON.						
Detailed Location:	MAPPED TO LOCATION GIVEN IN 2008 REPORT.						
Ecological:	CLEAR-WATER POOL IN A PASTURE.						
General:	DETECTED DURING FIELD TRAINING EXERCISES ON 14 MAR 2008; NO SPECIMENS COLLECTED.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	423	Map Index:	93328	EO Index:	94474	Element Last Seen:	2003-02-17
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2003-02-17		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2014-07-30		
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38649 / -121.45508				Accuracy:	80 meters	
UTM:	Zone-10 N4249829 E634927				Elevation (ft):	17	
PLSS:	T06N, R05E, Sec. 08, W (M)				Acres:	0.0	
Location:	LAGUNA STONELAKE PRESERVE, ON WEST SIDE OF FRANKLIN BLVD ABOUT 0.5 MILE SSW OF THE WHITELOCK PKWY JUNCTION, ELK GROVE.						
Detailed Location:	MAPPED TO LOCATION GIVEN FOR POOL 21 ON 2003 FIELD SURVEY FORM.						
Ecological:	PRESERVE WITH 49 VERNAL POOLS CONSTRUCTED IN 1999. SOME EVIDENCE OF ORV USE WAS NOTED IN 2003, BUT THERE WAS NO EVIDENCE OF EFFECT TO THE POOLS. LEPIDURUS PACKARDI ALSO FOUND.						
General:	DETECTED IN ONE POOL ON 17 FEB 2003.						
Owner/Manager:	PVT						

<i>Lepidurus packardii</i>				Element Code: ICBRA10010			
vernal pool tadpole shrimp							
Listing Status:	Federal:	Endangered		CNDDB Element Ranks:	Global:	G4	
	State:	None			State:	S3S4	
	Other:	IUCN_EN-Endangered					
Habitat:	General:	INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.					
	Micro:	POOLS COMMONLY FOUND IN GRASS-BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED AND HIGHLY TURBID.					

Occurrence No.	29	Map Index:	32514	EO Index:	1994	Element Last Seen:	2010-02-14
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:	2010-02-14		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2014-07-22		
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49502 / -121.67774			Accuracy:	specific area		
UTM:	Zone-10 N4261569 E615308			Elevation (ft):	25		
PLSS:	T08N, R03E, Sec. 31, E (M)			Acres:	100.0		
Location:	FORMER AIR FORCE COMMUNICATION FACILITY, 0.5-1.0 MI EAST OF INTERSECTION OF TREMONT ROAD AND ROAD 104, 5 MI SE OF DAVIS.						
Detailed Location:	ADJACENT TO YOLO COUNTY GRASSLANDS REGIONAL PARK; ANNEXED TO PARK PRIOR TO 2010. POOL #3 ESTIMATED TO BE 200' X 50' X 12"D; POOL #9, 300' X 75' X 36"D (IN 1995). MAPPED TO LOCATIONS OF OCCUPIED POOLS.						
Ecological:	ANNUAL GRASSLAND WITH 10-13 DEEP VERNAL POOLS (WET INTO MAY/JUN) & MUD-BOTTOMED BORROW PIT. SITE BURNED IN 2003. TREE FROGS, AQUATIC INVERTS INCL CYZICUS PRESENT. POOLS HIGHLY DISTURBED FROM HISTORIC MILITARY USE. SURROUNDED BY AGRICULTURE.						
General:	PRESENT IN 1993 & 1994. FOUND IN 3 OF 5 POOLS (ABUNDANT IN #3 & #9) SAMPLED 10 FEB-16 MAR 1995; VOUCHERS SENT TO CAS. 100S FOUND IN 1997 & 1998. FOUND IN 8 POOLS, 2004. FOUND IN 8 OF 13 POOLS, 2010.						
Owner/Manager:	YOL COUNTY						



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Occurrence No.	32	Map Index:	93185	EO Index:	1787	Element Last Seen:	2013-01-29
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2013-01-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-01-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44619 / -121.45225				Accuracy:	nonspecific area	
UTM:	Zone-10 N4256457 E635064				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 20 (M)				Acres:	1120.0	
Location:	SRWTP BUFFERLANDS, FROM BEACON CREEK SOUTH TO DWIGHT RD AND FROM FRANKLIN BLVD WEST TO RAILROAD TRACKS, SACRAMENTO.						
Detailed Location:	1992-93 & 2012-13 DETECTIONS MAINLY ALONG RR TRACKS NEAR WATER TREATMENT PLANT. MAPPED TO INCLUDE ENTIRE BUFFERLANDS PRESERVE AS DESCRIBED IN 2000 FIELD SURVEY FORM; SPECIFIC LOCATIONS NOT GIVEN FOR DETECTIONS IN POOLS THROUGHOUT PRESERVE.						
Ecological:	1992-93: SLIGHTLY TURBID PONDED DEPRESSIONS IN RR ROW & ROADSIDE DITCHES. BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS ALSO FOUND. 2012-13: 2-20" DEEP DEPRESSIONS ON BOTH SIDES OF RR TRACKS.						
General:	DETECTED, 2 APR 1992. OVER 100 ADULTS OBSERVED, 23 FEB 1993; 1 COLLECTED. DETECTED IN SEC 29, 12 MAR 1993 (SUGNET #134). COLLECTED IN 1995. FOUND IN 19 AC OF POOLS OVER 732 AC IN 2000. 100S DETECTED IN MULTIPLE BASINS, DEC 2012 & JAN 2013.						
Owner/Manager:	SRCSD, PVT-WESTERN PACIFIC RR						
Occurrence No.	68	Map Index:	93180	EO Index:	12533	Element Last Seen:	1995-01-25
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	1995-01-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-01-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49580 / -121.47079				Accuracy:	nonspecific area	
UTM:	Zone-10 N4261935 E633354				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 06 (M)				Acres:	16.0	
Location:	ALONG WESTERN PACIFIC RAILROAD, FROM FLORIN RD TO ABOUT 0.4 MILE SOUTH, WEST OF FRANKLIN BLVD, SACRAMENTO.						
Detailed Location:	N POLYGON MAPPED TO 1992 DETECTION; 1995 SPECIMEN FROM EAST OF RAILROAD, WEST OF HIGH SCHOOL MAPPED HERE. S POLY MAPPED TO 1995 SPECIMEN LOCALITY "S OF FLORIN RD, W OF [RR], NE OF POCKET SUBSTATION." 1993 LOC GIVEN ONLY TO TRS (SEC 6).						
Ecological:	1992: ROADSIDE DITCHES. 1993: MANMADE VERNAL POOL & DITCHES; CALIF & VERNAL POOL FAIRY SHRIMP ALSO FOUND. 2015: RE-SURVEY OF AREA INDICATED OCCURRENCE MAY STILL PERSIST, THOUGH HABITAT WAS FILLED/DEVELOPED IN 1990S & MITIGATED OFFSITE.						
General:	DETECTED 2 APR 1992. DETECTED ON 3 & 12 MAR 1993. COLLECTED 25 JAN 1995 (CASIZ #94830, 94831).						
Owner/Manager:	PVT-UNION PACIFIC RR, SMUD						



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Occurrence No.	69	Map Index:	34795	EO Index:	12473	Element Last Seen:	1992-04-02
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	1992-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-05-05
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49587 / -121.39662				Accuracy:	1/10 mile	
UTM:	Zone-10 N4262053 E639822				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 02, SE (M)				Acres:	0.0	
Location:	CORNER OF FLORIN ROAD AND SOUTHERN PACIFIC TRACTION RAILROAD, IN FLORIN.						
Detailed Location:	MAPPED TO LOCATION DESCRIBED BY KOFORD. SUGNET LOCATION GIVEN ONLY AS TRS SECTION 35, ATTRIBUTED HERE.						
Ecological:	RAILROAD DITCH ("ROADSIDE DITCH" IN SUGNET RECORDS). SURROUNDING AREA IS HIGHLY URBANIZED.						
General:	TADPOLE SHRIMP OBSERVED BY KOFORD DURING SURVEY IN SPRING OF 1992 (SUGNET ID #143, FROM SAME DATE, IS PROBABLY ANOTHER RECORD OF THIS DETECTION).						
Owner/Manager:	PVT-SPRR						

Occurrence No.	70	Map Index:	34796	EO Index:	12535	Element Last Seen:	1992-04-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1992-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-06-20
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48145 / -121.46642				Accuracy:	80 meters	
UTM:	Zone-10 N4260349 E633762				Elevation (ft):	21	
PLSS:	T07N, R05E, Sec. 06, SE (M)				Acres:	0.0	
Location:	ALONG UNION PACIFIC RAILROAD AND MEADOWVIEW ROAD, WEST OF HIGHWAY 99.						
Detailed Location:							
Ecological:	TURBID POOL.						
General:	KOFORD OBSERVED TADPOLE SHRIMP DURING SURVEY IN SPRING OF 1992.						
Owner/Manager:	PVT-UNION PACIFIC RR						



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Occurrence No.	76	Map Index:	34812	EO Index:	29269	Element Last Seen:	2003-02-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-02-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-16
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39538 / -121.46627				Accuracy:	specific area	
UTM:	Zone-10 N4250798 E633934				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 06 (M)				Acres:	570.1	
Location:	BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF BILBY ROAD, ELK GROVE.						
Detailed Location:	ELLIOTT RANCH, ELK GROVE BLVD EXTENSION / I-5 INTERCHANGE MITIGATION SITES. 1995: 23 WETLANDS SAMPLED. 1996: 74 WETLANDS SAMPLED. 1997: 52 WETLANDS SAMPLED. LINDERIELLA OCCIDENTALIS AND/OR MIDVALLEY FAIRY SHRIMP (BRANCHINECTA SP) ALSO OBS.						
Ecological:	NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS IN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.						
General:	1993: 3 OBS. 1995: <50 TO 50+ OBS IN 4 POOLS; SPECIMENS IN CAS (#103131 & 103136). 1996: 50+ OBS IN 25 POOLS, <50 IN 1 POOL. 1997: 10S TO 100S OBS IN 17 POOLS. 1998: 10S OBS IN 9 POOLS, 100S OBS IN 1 POOL. 2002: 1 OBS. 2003: 1000S OBS.						
Owner/Manager:	PVT-GRUPE DEVELOPMENT CO						

Occurrence No.	82	Map Index:	33677	EO Index:	30425	Element Last Seen:	1993-03-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1993-03-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1997-03-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.29764 / -121.43832				Accuracy:	3/5 mile	
UTM:	Zone-10 N4239993 E636559				Elevation (ft):	15	
PLSS:	T05N, R05E, Sec. 09 (M)				Acres:	0.0	
Location:	WEST OF BRUCEVILLE ROAD, NORTH OF TWIN CITIES ROAD, IN THE VICINITY OF FRANKLIN FIELD.						
Detailed Location:	ROADSIDE DITCHES LOCATED SOMEWHERE IN SECTION 9.						
Ecological:	MANMADE ROADSIDE DITCHES.						
General:	LEPIDURUS PACKARDI OBSERVED IN 1 OF 3 FEATURES INSPECTED. NO B. LYNCHI OBSERVED. SUGNET RECORD #117.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	84	Map Index:	33678	EO Index:	30424	Element Last Seen:	1993-03-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1993-03-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1997-03-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35742 / -121.45452				Accuracy:	3/5 mile	
UTM:	Zone-10 N4246603 E635031				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 20 (M)				Acres:	0.0	
Location:	BOTH SIDES OF FRANKLIN BLVD, ABOUT 1.5 MILES SOUTH OF FRANKLIN.						
Detailed Location:	ROADSIDE DITCHES LOCATED SOMEWHERE IN SECTION 20.						
Ecological:	MANMADE ROADSIDE DITCHES.						
General:	LEPIDURUS PACKARDI OBSERVED IN THE 1 FEATURE INSPECTED. NO B. LYNCHI OBSERVED. SUGNET RECORD #128.						
Owner/Manager:	UNKNOWN						

Occurrence No.	88	Map Index:	33681	EO Index:	30428	Element Last Seen:	1992-04-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1992-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47379 / -121.45529				Accuracy:	nonspecific area	
UTM:	Zone-10 N4259515 E634747				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 08 (M)				Acres:	639.0	
Location:	SOUTHWEST OF THE INTERSECTION OF MACK RD AND THE WESTERN PACIFIC (=UNION PACIFIC) RAILROAD IN SOUTH SACRAMENTO.						
Detailed Location:	1992 DETECTIONS IN TRS SECTION 8; EXACT LOCATION UNKNOWN. 2007 SURVEY ON "FRANKLIN POINT PROJECT" PROPERTY, 5.5 ACRES AT THE SW CORNER OF FRANKLIN BLVD AND MACK RD.						
Ecological:	DETECTED IN MANMADE ROADSIDE DITCHES IN URBANIZED AREA. WET SEASON SURVEYS IN 2007 AT FRANKLIN POINT PROJECT PROPERTY FOUND NO BRANCHIOPODS; BUT POOLS DID NOT POND LONG ENOUGH FOR A SUCCESSFUL HATCH THAT SEASON.						
General:	OBSERVED IN 2 OF 3 ROADSIDE DITCHES SAMPLED IN TRS SECTION 8, 2 APR 1992 (SUGNET RECORD #131).						
Owner/Manager:	UNKNOWN						



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Occurrence No.	89	Map Index:	33683	EO Index:	30429	Element Last Seen:	2008-07-14
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2008-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48338 / -121.39184				Accuracy:	specific area	
UTM:	Zone-10 N4260675 E640264				Elevation (ft):	40	
PLSS:	T07N, R05E, Sec. 02 (M)				Acres:	18.0	
Location:	EAST SIDE OF SOUTHERN PACIFIC RAILROAD, AT THE NW CORNER OF FRENCH ROAD AND GERBER ROAD, SACRAMENTO.						
Detailed Location:	1992 DETECTION IN MANMADE ROADSIDE DITCH SOMEWHERE IN SECTION 2; EXACT LOCATION UNKNOWN. MAPPED TO LOCATIONS OF OCCUPIED BASINS SAMPLED IN 2008 ON "FEENSTRA UNIT 6A" PROPERTY.						
Ecological:	MOST OF THIS SECTION URBANIZED. DETECTIONS FROM DITCHES ALONGSIDE ROAD, RAILROAD TRACKS. SURROUNDING LAND AGRICULTURAL, FALLOW, AND URBANIZED.						
General:	DETECTED IN 1992 (SUGNET RECORD #130). ABUNDANCE HIGH IN DITCH DD1B, MEDIUM IN DD1C, FEB-MAR 2008. CYSTS FOUND IN 3 OF 9 BASINS (DD1A, DD1B, DD1C), 14 JUL 2008.						
Owner/Manager:	UNKNOWN						

Occurrence No.	114	Map Index:	37071	EO Index:	32068	Element Last Seen:	1998-04-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1998-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-03-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45613 / -121.41327				Accuracy:	nonspecific area	
UTM:	Zone-10 N4257618 E638447				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 15 (M)				Acres:	161.6	
Location:	INTERSECTION OF COSUMNES RIVER COLLEGE BOULEVARD AND HIGHWAY 99, SOUTH OF SACRAMENTO.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF BOTH NATURAL AND MAN-MADE VERNAL POOLS.						
General:	ONE POND SURVEYED. LEPIDURUS PACKARDI DETECTED ON 10 FEB 1993. DRY/WET SEASON SAMPLING CONDUCTED JAN-APR 1998 OF A CREATED VERNAL POOL AND A CONTROL SITE; 4 INDIVIDUALS FOUND.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	170	Map Index:	48478	EO Index:	48494	Element Last Seen:	2002-04-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.44536 / -121.67336				Accuracy:	specific area	
UTM:	Zone-10 N4256063 E615769				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, SW (M)				Acres:	20.9	
Location:	3 MILES NE OF YOLANO, ABOUT 1 TO 1.2 MILES SW ALONG THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE FROM ROAD 38.						
Detailed Location:	SITE NUMBERS 52-10D, 52-10F, 52-25, 52-10E, 52-10, 52-10A, 52-10B AND 52-10C.						
Ecological:	HABITAT CONSISTS OF 8 POOLS IN A VERNAL POOL COMPLEX LOCATED PRIMARILY AROUND DITCHES AND THE EDGES OF BERMS. NATURAL TOPOGRAPHY IS MOSTLY ABSENT. BRANCHINECTA LYNCHI, BRANCHINECTA MESOVALLENSIS & LINDERIELLA OCCIDENTALIS ALSO IN VICINITY.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 11 & 23 JAN 2002; 5, 6 & 20 FEB 2002; 4 & 19 MAR 2002 AND 2 APR 2002. ON 4 MAR 2002 AND 20 FEB 2002 INDIVIDUALS OBSERVED DEAD. CARAPACE OBSERVED ON 4 MAR 2002.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	171	Map Index:	48495	EO Index:	48495	Element Last Seen:	2003-04-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-04-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-11-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45729 / -121.66652				Accuracy:	specific area	
UTM:	Zone-10 N4257396 E616347				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NE (M)				Acres:	66.8	
Location:	0.5 MI SW OF SAXON; 100 TO 400' SW ALONG SACRAMENTO NORTHERN ELECTRIC RR GRADE FROM RD 38, & IN POOLS TO WEST OF TRACKS.						
Detailed Location:	SITE NUMBERS 53-01A AND 53-07. 1 POOL ON EACH SIDE OF RAILROAD GRADE, AND SEVERAL POOLS ON WEST SIDE OF TRACKS.						
Ecological:	POOLS ALONG RR-2 ARTIFICIALLY CREATED POOLS (BORROW PITS) THAT SEASONALLY POND RAINWATER. POOL ON W SIDE IS DEEP, TURBID & LONG-LASTING, TADPOLE SHRIMP ARE EXTREMELY ABUNDANT. LINDERIELLA OCCIDENTALIS & CYZICUS CALIFORNICUS ALSO PRESENT.						
General:	UNKNOWN NUMBER OBS ON 5, 20 FEB 2002; 4, 19 MAR 2002 & 2 APR 2002. >50 OBS JAN/FEB 2003, AND "LOTS" ON 7 APR 2003. INDIVIDUALS COLLECTED FOR CAS NOT YET ACCESSIONED. SURROUNDING AREA USED FOR GRAZING CATTLE.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	182	Map Index:	93165	EO Index:	54521	Element Last Seen:	2008-03-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-15
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43638 / -121.67017				Accuracy:	specific area	
UTM:	Zone-10 N4255071 E616062				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20, SW (M)				Acres:	28.0	
Location:	GLIDE TULE ELK RESERVE, YOLO BYPASS, 1.3 MILES EAST OF INTERSECTION OF THOMSEN ROAD AND ROAD 104, 8 MILES EAST OF DIXON.						
Detailed Location:	MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS.						
Ecological:	TURBID PLAYA POOL (NORTH POLYGON); SURROUNDING AREA GRAZED BY CATTLE. BRANCHINECTA CONSERVATIO AND CYZICUS CALIFORNICUS ALSO FOUND AT THIS SITE.						
General:	ABUNDANT IN 3 POOLS, 7 APR 2003. ABUNDANT IN PLAYA POOL ON 14 MAR 2008.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	272	Map Index:	82005	EO Index:	82981	Element Last Seen:	2009-03-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-03-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-22
Quad Summary:	Bruceville (3812134), Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.37933 / -121.49717				Accuracy:	specific area	
UTM:	Zone-10 N4248973 E631264				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 12, SW (M)				Acres:	63.0	
Location:	1.25 MI WNW HOOD FRANKLIN RD AT I-5, 1.3 MI NE HOOD PO.						
Detailed Location:	BY STONE LAKES NATIONAL WILDLIFE REFUGE. LAND USED FOR CATTLE GRAZING. POOL ID: 30, 32, 37 & 65. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	VERNAL POOL GRASSLAND DOMINATED BY HORDEUM MARINUM SSP. GUSSONEANUM, LOLIUM MULTIFLORUM, PLAGIOBOTHRYIS STIPITATUS & LASTHENIA GLABERRIMA. HISTORICAL GRADING CAUSED POOLS TO BE POORLY DEFINED & SHALLOW. DEEPEST POOLS OCCUR BY BERMS & ROADS.						
General:	10S OF BREEDING ADULTS OBSERVED AT 4 POOLS ON 6 AND 10 MAR 2009; 1 SPECIMEN COLLECTED BY E. PIMENTEL ET AL. (CAS-IZ #184098) ON 10 MAR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	273	Map Index:	82006	EO Index:	82983	Element Last Seen:	2009-03-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-03-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39768 / -121.48731				Accuracy:	specific area	
UTM:	Zone-10 N4251023 E632092				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 01, SE (M)				Acres:	14.0	
Location:	0.75 MI SSW ELK GROVE BLVD AT I-5, 2.7 MI NE HOOD PO.						
Detailed Location:	BY STONE LAKES NATIONAL WILDLIFE REFUGE. LAND USED FOR CATTLE GRAZING. POOL ID: 33 & 75. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	VERNAL POOL GRASSLAND DOMINATED BY HORDEUM MARINUM SSP. GUSSONEANUM, LOLIUM MULTIFLORUM, PLAGIOBOTHRYIS STIPITATUS & LASTHENIA GLABERRIMA. HISTORICAL GRADING CAUSED POOLS TO BE POORLY DEFINED & SHALLOW. DEEPEST POOLS OCCUR BY BERMS & ROADS.						
General:	10S OF BREEDING ADULTS OBSERVED AT 2 POOLS; 1 SPECIMEN COLLECTED BY E. PIMENTEL ET AL. (CAS-IZ #180499) ON 11 MAR 2009.						
Owner/Manager:	DPR						

Occurrence No.	290	Map Index:	83344	EO Index:	84353	Element Last Seen:	2003-02-17
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-02-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-08
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38596 / -121.46416				Accuracy:	80 meters	
UTM:	Zone-10 N4249756 E634136				Elevation (ft):	17	
PLSS:	T06N, R05E, Sec. 07, SE (M)				Acres:	0.0	
Location:	LAGUNA STONELAKE PRESERVE, 1 MI NORTHEAST INTERSECTION OF I-5 AND HOOD-FRANKLIN RD, 0.7 MI NORTHWEST OF FRANKLIN (TOWN).						
Detailed Location:							
Ecological:	HABITAT AT PRESERVE CONSISTS OF SEASONAL WETLANDS AND CONSTRUCTED/EXISTING VERNAL POOLS. SITE IS A WETLAND PRESERVATION AND COMPENSATION AREA. DISTURBANCE DUE TO ATV USE THROUGHOUT PRESERVE, BUT NO EVIDENCE OF EFFECT TO VERNAL POOLS.						
General:	UNKNOWN NUMBER OBSERVED IN A COMPENSATION POOL ON 17 FEB 2003; 1000'S OBSERVED IN A TOTAL OF 6 POOLS AT ENTIRE PRESERVE SITE.						
Owner/Manager:	PVT						



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Occurrence No.	291	Map Index:	83345	EO Index:	84354	Element Last Seen:	2003-02-17
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-02-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-08
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38559 / -121.45617				Accuracy:	specific area	
UTM:	Zone-10 N4249727 E634834				Elevation (ft):	17	
PLSS:	T06N, R05E, Sec. 08, SW (M)				Acres:	21.0	
Location:	LAGUNA STONELAKE PRESERVE, JUST WEST OF FRANKLIN BLVD AND 0.4 MILE NORTH OF BILBY ROAD AND THE TOWN OF FRANKLIN.						
Detailed Location:							
Ecological:	HABITAT AT PRESERVE CONSISTS OF SEASONAL WETLANDS AND CONSTRUCTED/EXISTING VERNAL POOLS. SITE IS A WETLAND PRESERVATION AND COMPENSATION AREA. DISTURBANCE DUE TO ATV USE THROUGHOUT PRESERVE, BUT NO EVIDENCE OF EFFECT TO VERNAL POOLS.						
General:	UNKNOWN NUMBER OF SHRIMP OBSERVED IN 3 COMPENSATION POOLS ON 17 FEB 2003; 1000'S OBSERVED IN A TOTAL OF 6 POOLS AT ENTIRE PRESERVE SITE.						
Owner/Manager:	PVT						

Occurrence No.	299	Map Index:	93188	EO Index:	94328	Element Last Seen:	2002-02-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-02-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-08-06
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41169 / -121.45510				Accuracy:	80 meters	
UTM:	Zone-10 N4252625 E634880				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 32, SW (M)				Acres:	0.0	
Location:	WEST SIDE OF WESTERN PACIFIC (UNION PACIFIC) RAILROAD TRACKS, 0.3 MILE NW OF FRANKLIN BLVD AT ELK GROVE BLVD, ELK GROVE.						
Detailed Location:	1993 DETECTION LOCATION GIVEN ONLY AS TRS T7N R5E SEC 32. MAPPED TO POOL LOCATION GIVEN ON 2002 FIELD SURVEY FORM.						
Ecological:	2002: SHALLOW (5" DEEP), LINEAR, GRASS-BOTTOMED DEPRESSION ADJACENT TO RAILROAD TRACKS. COPEPODS AND WATER FLEAS PRESENT.						
General:	FOUND IN 1 OF 4 VERNAL POOLS SAMPLED 4 FEB 1993. 1 ADULT OBSERVED ON 1 FEB 2002; NO AQUATIC SAMPLING CONDUCTED.						
Owner/Manager:	PVT						



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Occurrence No.	300	Map Index:	93191	EO Index:	94331	Element Last Seen:	2007-10-03
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-10-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47256 / -121.38642				Accuracy:	specific area	
UTM:	Zone-10 N4259482 E640757				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 12, SW (M)				Acres:	17.0	
Location:	FROM THE WEST END OF CASELMAN RD, DUE WEST TO THE WESTERN PACIFIC (=UNION PACIFIC) RAILROAD TRACKS, SACRAMENTO.						
Detailed Location:	MAPPED TO BASINS "DITCH 1" AND "HBC 13" ON DEANE-VINTAGE CREEK I PROPERTY.						
Ecological:	BRANCHINECTA SP. & LINDERIELLA OCCIDENTALIS CYSTS ALSO FOUND HERE.						
General:	LEPIDURUS PACKARDI CYSTS FOUND IN DRY SAMPLES TAKEN 3 OCT 2007.						
Owner/Manager:	PVT						

Occurrence No.	301	Map Index:	93192	EO Index:	94332	Element Last Seen:	2005-10-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-10-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-16
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.46719 / -121.38549				Accuracy:	80 meters	
UTM:	Zone-10 N4258887 E640849				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 12, SW (M)				Acres:	0.0	
Location:	EAST SIDE OF WESTERN PACIFIC (UNION PACIFIC) RAILROAD TRACKS, 0.25 MILE SW OF CARLISLE AVE AT SUNNYSIDE WAY, SACRAMENTO.						
Detailed Location:	MAPPED TO BASIN "POND 1,2,3" ON DEANE-VINTAGE CREEK I PROPERTY.						
Ecological:	BRANCHINECTA SP. CYSTS ALSO FOUND.						
General:	LEPIDURUS PACKARDI CYSTS FOUND IN DRY SAMPLE TAKEN 15 OCT 2005.						
Owner/Manager:	PVT						



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Desmocerus californicus dimorphus

Element Code: IICOL48011

valley elderberry longhorn beetle

Listing Status: **Federal:** Threatened

CNDDDB Element Ranks: **Global:** G3T2

State: None

State: S2

Other:

Habitat: **General:** OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

Micro: PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Occurrence No. 53 **Map Index:** 11480 **EO Index:** 22715 **Element Last Seen:** 1987-04-23
Occ. Rank: Poor **Presence:** Presumed Extant **Site Last Seen:** 1987-04-23
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 1998-07-15

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long: 38.30601 / -121.38690 **Accuracy:** 1/5 mile
UTM: Zone-10 N4240999 E641039 **Elevation (ft):** 20
PLSS: T05N, R05E, Sec. 01, SW (M) **Acres:** 0.0

Location: ONETO TRACT, 2.25 MI E OF FRANKLIN FIELD, ALONG COSUMNES RIVER.

Detailed Location: FIVE STANDS SURVEYED: THREE ALONG THE MAIN CHANNEL OF THE RIVER AND TWO ALONG AN UNNAMED SLOUGH.

Ecological:

General: STAND #2301 WITH 2 YEAR OLD EXIT HOLES.

Owner/Manager: PVT

Anthicus sacramento

Element Code: IICOL49010

Sacramento anthicid beetle

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G1

State: None

State: S1

Other: IUCN_EN-Endangered

Habitat: **General:** RESTRICTED TO SAND DUNE AREAS.

Micro: INHABIT SAND SLIPFACES AMONG BAMBOO AND WILLOW BUT MAY NOT DEPEND ON PRESENCE OF THESE PLANT SPECIES.



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Occurrence No.	1	Map Index:	10897	EO Index:	12141	Element Last Seen:	1977-06-27
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1977-06-27		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2004-10-05		
Quad Summary:	Isleton (3812125), Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17458 / -121.63030			Accuracy:	1 mile		
UTM:	Zone-10 N4226072 E619972			Elevation (ft):	15		
PLSS:	T04N, R03E, Sec. 22 (M)			Acres:	0.0		
Location:	WEST END OF GRAND ISLAND, 1 MI W OF ISLETON.						
Detailed Location:							
Ecological:							
General:	TYPE LOCALITY; TYPE SPECIMEN DEPOSITED AT CAS. 2 PARATYPES AND ONE NON-TYPE SPECIMEN DEPOSITED IN THE CALIFORNIA STATE COLLECTION OF ARTHROPODS (CDFA).						
Owner/Manager:	UNKNOWN						

Occurrence No.	2	Map Index:	10835	EO Index:	14460	Element Last Seen:	1974-08-21
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1979-09-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1989-08-11		
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.13510 / -121.69802			Accuracy:	specific area		
UTM:	Zone-10 N4221605 E614102			Elevation (ft):	30		
PLSS:	T03N, R02E, Sec. 01 (M)			Acres:	164.9		
Location:	SAND DUNE AREA IMMEDIATELY S OF RIO VISTA.						
Detailed Location:							
Ecological:	SAND IS DREDGE SPOIL.						
General:	21 PARATYPES COLLECTED IN SAND DUNE AREA.						
Owner/Manager:	UNKNOWN						

Occurrence No.	3	Map Index:	57250	EO Index:	57325	Element Last Seen:	2004-05-30
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2004-06-13		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2004-10-08		
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.18273 / -121.68784			Accuracy:	3/5 mile		
UTM:	Zone-10 N4226904 E614919			Elevation (ft):	20		
PLSS:	T04N, R03E, Sec. 19 (M)			Acres:	0.0		
Location:	DREDGE DISPOSAL SITE ABOUT 0.5 MI INLAND FROM THE SACRAMENTO RIVER AT RM 13.8. JUST NORTH OF RIO VISTA AIRPORT.						
Detailed Location:							
Ecological:	DREDGED MATERIAL DISPOSAL SITE.						
General:	3 ADULTS COLLECTED IN 12 PITFALL TRAPS ON 30 MAY 1987, NONE COLLECTED IN 9 TRAPS ON 13 JUN 1987.						
Owner/Manager:	STATE (RECLAMATION BOARD)						



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Anthicus antiochensis

Element Code: IICOL49020

Antioch Dunes anthicid beetle

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G1

State: None

State: S1

Other:

Habitat: **General:** EXTIRPATED FROM ANTIOCH DUNES BUT PRESENT IN SEVERAL LOCALITIES ALONG THE SACRAMENTO AND FEATHER RIVERS.

Micro: ☐

Occurrence No.	2	Map Index:	57250	EO Index:	57266	Element Last Seen:	1987-06-13
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1987-06-13	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2004-10-08	

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long: 38.18273 / -121.68784 **Accuracy:** 3/5 mile

UTM: Zone-10 N4226904 E614919 **Elevation (ft):** 20

PLSS: T04N, R03E, Sec. 19 (M) **Acres:** 0.0

Location: DREDGE DISPOSAL SITE ABOUT 0.5 MI INLAND FROM THE SACRAMENTO RIVER AT RM 13.8. JUST NORTH OF RIO VISTA AIRPORT.

Detailed Location:

Ecological: DREDGED MATERIAL DISPOSAL SITE.

General: COLLECTED IN PITFALL TRAPS. 23 ADULTS COLLECTED 30 MAY 1987 IN 12 TRAPS, 83 COLLECTED 13 JUN 1987 IN 9 TRAPS.

Owner/Manager: STATE (RECLAMATION BOARD)



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Hydrochara rickseckeri

Element Code: IICOL5V010

Ricksecker's water scavenger beetle

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2?

State: None

State: S2?

Other:

Habitat: **General:** AQUATIC.

Micro: ☐

Occurrence No.	7	Map Index:	60710	EO Index:	60746	Element Last Seen:	2005-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2005-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-03-29	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento, San Joaquin

Lat/Long:	38.26352 / -121.43266	Accuracy:	3/5 mile
UTM:	Zone-10 N4236215 E637117	Elevation (ft):	10
PLSS:	T05N, R05E, Sec. 21 (M)	Acres:	0.0

Location: COSUMNES RIVER PRESERVE.

Detailed Location: SPECIES HAS BEEN TAKEN IN VARIOUS AREAS OF THE PRESERVE.

Ecological:

General: AN UNKNOWN NUMBER OF LARVA(E) COLLECTED BY BUREAU OF RECLAMATION STAFF; PHOTO OF LARVA SENT TO UC DAVIS ENTOMOLOGY MUSEUM AND IDENTIFIED BY D. CHRISTOPHER ROGERS DURING A VISIT THERE.

Owner/Manager: TNC-COSUMNES RIVER PRESERVE



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Bombus crotchii

Element Code: IIHYM24480

Crotch bumble bee

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G3G4

State: Candidate Endangered

State: S1S2

Other:

Habitat: **General:** COASTAL CALIFORNIA EAST TO THE SIERRA-CASCADE CREST AND SOUTH INTO MEXICO.

Micro: FOOD PLANT GENERA INCLUDE ANTIRRHINUM, PHACELIA, CLARKIA, DENDROMECON, ESCHSCHOLZIA, AND ERIOGONUM.

Occurrence No.	274	Map Index:	B5208	EO Index:	118155	Element Last Seen:	2007-05-26
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:			2007-05-26
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2020-03-02

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.30078 / -121.38005	Accuracy:	1/5 mile
UTM:	Zone-10 N4240430 E641649	Elevation (ft):	21
PLSS:	T05N, R05E, Sec. 12, NE (M)	Acres:	70.0

Location: E SIDE COSUMNES RIVER NEAR RIVER MILE 6, ABOUT 0.6 MILES N OF WHERE TWIN CITIES RD CROSSES THE RIVER, 5 MILES NW OF GALT

Detailed Location: APPEARS TO BE AT THE TNC COSUMNES RIVER PRESERVE. DETECTED AT STUDY SITE COSUMNES/TWIN CITIES RD (CRTC). MAPPED WITH RESPECT TO STUDY DESIGN AND PROVIDED COORDINATES FOR STUDY PLOT.

Ecological: SAMPLING SITE WAS A MIX OF RIPARIAN, SEMI-NATURAL LANDSCAPE, AND AGRICULTURE. NETTED ON NON-NATIVE CICHORIUM INTYBUS (COMMON CHICORY).

General: ONE NETTED ON 26 MAY 2007 AND DEPOSITED IN THE PRIVATE COLLECTION OF B. LOVE AT THE USDA BEE LAB IN LOGAN, UT.

Owner/Manager: TNC-COSUMNES RIVER PRESERVE



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Query Criteria: Quad> IS < Saxon (3812146)> OR < Courtland (3812135)> OR < Clarksburg (3812145)> OR < Florin (3812144)> OR < Liberty Island (3812136)> OR < Bruceville (3812134)> OR < Rio Vista (3812126)> OR < Thornton (3812124)> OR < Isleton (3812125)

Phalacrocorax auritus				Element Code: ABNFD01020			
double-crested cormorant							
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G5		
	State:	None		State:	S4		
	Other:	CDFW_WL-Watch List, IUCN_LC-Least Concern					
Habitat:	General:	COLONIAL NESTER ON COASTAL CLIFFS, OFFSHORE ISLANDS, AND ALONG LAKE MARGINS IN THE INTERIOR OF THE STATE.					
	Micro:	NESTS ALONG COAST ON SEQUESTERED ISLETS, USUALLY ON GROUND WITH SLOPING SURFACE, OR IN TALL TREES ALONG LAKE MARGINS.					
Occurrence No.	22	Map Index:	11286	EO Index:	13106	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-12-07
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38685 / -121.49190			Accuracy:	1/5 mile		
UTM:	Zone-10 N4249814 E631712			Elevation (ft):	5		
PLSS:	T06N, R04E, Sec. 12, SW (M)			Acres:	0.0		
Location:	SE ARM OF NORTH STONE LAKE, APPROX 6 MI S OF SACRAMENTO.						
Detailed Location:	8 NESTS WITH APPROXIMATELY 20 ADULT BIRDS IN THE AREA; 2 NESTS CONTAINING YOUNG OBSERVED.						
Ecological:	HABITAT CONSISTS OF A LARGE COTTONWOOD GROVE SURROUNDED BY A FRESHWATER MARSH BELOW.						
General:	GREAT BLUE HERON AND GREAT EGRET ALSO NEST HERE. COUNTY OF SACRAMENTO LEASES THIS PROPERTY TO A PRIVATE PARTY.						
Owner/Manager:	SAC COUNTY, PVT						
Occurrence No.	38	Map Index:	66450	EO Index:	66554	Element Last Seen:	2005-03-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-03-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-09-27
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44164 / -121.48454			Accuracy:	80 meters		
UTM:	Zone-10 N4255905 E632254			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 24 (M)			Acres:	0.0		
Location:	NORTHERN ISLAND ON BLACK CROWN LAKE, JUST UPSTREAM (EAST) OF I-5, 6.5 MILES NW OF ELK GROVE.						
Detailed Location:							
Ecological:	NEST TREES WERE POPULUS FREMONTII GROWING ON THE ISLAND. SURROUNDING AREA IS MANAGED SEASONAL WETLANDS AND RIPARIAN/GRASSLAND RESTORATION SITES.						
General:	2 ACTIVE DCCO NESTS PRESENT DURING 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	39	Map Index:	66452	EO Index:	66556	Element Last Seen:	2005-03-25
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-03-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-09-27
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44723 / -121.48163				Accuracy:	80 meters	
UTM:	Zone-10 N4256530 E632498				Elevation (ft):	5	
PLSS:	T07N, R05E, Sec. 19, NW (M)				Acres:	0.0	
Location:	ALONG MORRISON CREEK, 0.7 MILE UPSTREAM (EAST) OF I-5, 6.5 MILES NW OF ELK GROVE.						
Detailed Location:							
Ecological:	HABITAT IS MATURE MIXED RIPARIAN, DOMINATED BY POPULUS FREMONTII, QUERCUS LOBATA, SALIX GOODDINGII. ROOKERY INCLUDES GREAT BLUE HERON & GREAT EGRET NESTS. SURROUNDING AREA IS MANAGED SEASONAL WETLANDS & RIPARIAN/GRASSLAND RESTORATION SITE.						
General:	28 ACTIVE DCCO NESTS PRESENT DURING 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Ardea herodias

Element Code: ABNGA04010

great blue heron

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G5
State: None **State:** S4
Other: CDF_S-Sensitive, IUCN_LC-Least Concern
Habitat: **General:** COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.
Micro: ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

Occurrence No. 1 **Map Index:** 11286 **EO Index:** 13052 **Element Last Seen:** 1988-05-02
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1988-05-02
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 1995-11-02

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.38685 / -121.49190 **Accuracy:** 1/5 mile
UTM: Zone-10 N4249814 E631712 **Elevation (ft):** 5
PLSS: T06N, R04E, Sec. 12, SW (M) **Acres:** 0.0

Location: NORTH STONE LAKE, NEAR JUNCTION OF SE ARM AND MAIN LAKE BODY, APPROXIMATELY 6 MI S OF SACRAMENTO.

Detailed Location: 16 NESTS WITH ADULTS IN THEM ON 1 FEB 88; 54 NESTS WITH ADULTS COUNTED ON 2 MAY 88.

Ecological: HABITAT CONSISTS OF A LARGE COTTONWOOD GROVE SURROUNDED BY FRESHWATER MARSH.

General: COUNTY OF SACRAMENTO LEASES THE AREA TO A PRIVATE PARTY.

Owner/Manager: SAC COUNTY, PVT

Occurrence No. 85 **Map Index:** 66449 **EO Index:** 66552 **Element Last Seen:** 2005-03-25
Occ. Rank: Excellent **Presence:** Presumed Extant **Site Last Seen:** 2005-03-25
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2006-10-04

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.44405 / -121.48516 **Accuracy:** 1/10 mile
UTM: Zone-10 N4256172 E632196 **Elevation (ft):** 10
PLSS: T07N, R04E, Sec. 24 (M) **Acres:** 0.0

Location: ALONG LOWER MORRISON CREEK, JUST UPSTREAM OF I-5, 6.5 MILES NW OF ELK GROVE.

Detailed Location:

Ecological: HABITAT CONSISTS OF MATURE MIXED RIPARIAN; DOMINATED BY POPULUS FREMONTII, QUERCUS LOBATA, AND SALIX GOODINGII. ROOKERY SITE INCLUDES NESTING GREAT BLUE HERONS, GREAT EGRETS, AND DOUBLE-CRESTED CORMORANTS.

General: 46 ACTIVE GBHE NESTS PRESENT DURING 2005.

Owner/Manager: SRCSD-BUFFERLANDS



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Ardea alba

great egret

Element Code: ABNGA04040

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G5
State: None **State:** S4
Other: CDF_S-Sensitive, IUCN_LC-Least Concern
Habitat: **General:** COLONIAL NESTER IN LARGE TREES.
Micro: ROOKERY SITES LOCATED NEAR MARSHES, TIDE-FLATS, IRRIGATED PASTURES, AND MARGINS OF RIVERS AND LAKES.

Occurrence No. 1 **Map Index:** 11286 **EO Index:** 25947 **Element Last Seen:** 1988-05-02
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1988-05-02
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 1995-11-02

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.38685 / -121.49190 **Accuracy:** 1/5 mile
UTM: Zone-10 N4249814 E631712 **Elevation (ft):** 5
PLSS: T06N, R04E, Sec. 12, SW (M) **Acres:** 0.0

Location: SE ARM OF NORTH STONE LAKE, NEAR JCT OF MAIN BODY OF LAKE, APPROX 6 MILES SOUTH OF SACRAMENTO.

Detailed Location:

Ecological: GREAT BLUE HERONS AND DOUBLE-CRESTED CORMORANTS ALSO NEST AT THIS ROOKERY SITE.

General: ONE GREAT EGRET NEST FOUND ON 1 FEB 88; 11 ACTIVE NESTS COUNTED ON 2 MAY 88. PROPERTY IS OWNED BY SACRAMENTO COUNTY, BUT LEASED TO A PRIVATE PARTY.

Owner/Manager: SAC COUNTY, PVT

Occurrence No. 33 **Map Index:** 66449 **EO Index:** 66553 **Element Last Seen:** 2005-03-25
Occ. Rank: Excellent **Presence:** Presumed Extant **Site Last Seen:** 2005-03-25
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2006-09-28

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.44405 / -121.48516 **Accuracy:** 1/10 mile
UTM: Zone-10 N4256172 E632196 **Elevation (ft):** 10
PLSS: T07N, R04E, Sec. 24 (M) **Acres:** 0.0

Location: ALONG LOWER MORRISON CREEK, JUST UPSTREAM (EAST) OF I-5, 6.5 MILES NW OF ELK GROVE.

Detailed Location:

Ecological: HABITAT CONSISTS OF MATURE MIXED RIPARIAN; DOMINATED BY POPULUS FREMONTII, QUERCUS LOBATA, AND SALIX GOODINGII. ROOKERY SITE INCLUDES NESTING GREAT BLUE HERONS, GREAT EGRETS, AND DOUBLE-CRESTED CORMORANTS.

General: 44 ACTIVE GBEG NESTS PRESENT DURING 2005.

Owner/Manager: SRCSD-BUFFERLANDS

Nycticorax nycticorax

black-crowned night heron

Element Code: ABNGA11010

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G5
State: None **State:** S4
Other: IUCN_LC-Least Concern
Habitat: **General:** COLONIAL NESTER, USUALLY IN TREES, OCCASIONALLY IN TULE PATCHES.
Micro:



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ROOKERY SITES LOCATED ADJACENT TO FORAGING AREAS: LAKE MARGINS, MUD-BORDERED BAYS, MARSHY SPOTS.

Occurrence No.	15	Map Index:	64809	EO Index:	64888	Element Last Seen:	2005-02-01
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-02-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-06-05
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43208 / -121.48017				Accuracy:	80 meters	
UTM:	Zone-10 N4254851 E632653				Elevation (ft):	7	
PLSS:	T07N, R05E, Sec. 30, NW (M)				Acres:	0.0	
Location:	NICHOLAS POND, 0.3 MILE NORTH OF LAGUNA BOULEVARD AND 0.4 MILE EAST OF I-5, ELK GROVE.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF AN OPEN-WATER POND WITH AN ISLAND IN THE MIDDLE; THE HERON ROOKERY IS FOUND ON THE ISLAND, WHICH IS VEGETATED BY SALIX GOODINGII.						
General:	42 INDIVIDUALS OBSERVED AT THIS ROOKERY ON 1 FEB 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	16	Map Index:	64810	EO Index:	64889	Element Last Seen:	2005-03-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-03-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-06-05
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44527 / -121.44861				Accuracy:	80 meters	
UTM:	Zone-10 N4256360 E635383				Elevation (ft):	7	
PLSS:	T07N, R05E, Sec. 20, E (M)				Acres:	0.0	
Location:	FISHHEAD LAKE, 0.2 MILE WEST OF FRANKLIN BOULEVARD & 0.5 MILE NORTH OF SIMS ROAD, ELK GROVE.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF A MANAGED MITIGATION WETLAND. VEGETATION INCLUDES EMERGENT MARSH PLANTS (TULE AND CATTAILS) ALONG CHANNEL EDGES, WITH ASSOCIATED RIPARIAN (WILLOWS AND COTTONWOODS).						
General:	12 INDIVIDUALS OBSERVED AT THIS ROOKERY ON 16 MAR 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	17	Map Index:	64811	EO Index:	64890	Element Last Seen:	2005-03-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-03-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-06-05
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44833 / -121.45610				Accuracy:	80 meters	
UTM:	Zone-10 N4256689 E634724				Elevation (ft):	7	
PLSS:	T07N, R05E, Sec. 20, NW (M)				Acres:	0.0	
Location:	FISHHEAD LAKE, 0.3 MILE NE OF THE INTERSECTION OF SIMS ROAD & LAGUNA STATION ROAD, ELK GROVE.						
Detailed Location:							
Ecological:	HABITAT SURROUNDING ROOKERY CONSISTS OF A MANAGED MITIGATION WETLAND. VEGETATION INCLUDES EMERGENT MARSH PLANTS (TULE AND CATTAILS) ALONG CHANNEL EDGES, WITH ASSOCIATED RIPARIAN (WILLOWS AND COTTONWOODS).						
General:	13 INDIVIDUALS OBSERVED AT THIS ROOKERY ON 16 MAR 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						

<i>Elanus leucurus</i>	Element Code: ABNKC06010		
white-tailed kite			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S3S4
	Other: BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern		
Habitat:	General: ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.		
	Micro: OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.		

Occurrence No.	19	Map Index:	24809	EO Index:	22270	Element Last Seen:	1992-05-30
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1992-05-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-02-15
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32638 / -121.56253				Accuracy:	80 meters	
UTM:	Zone-10 N4243006 E625647				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 32, SE (M)				Acres:	0.0	
Location:	0.3 MILE WSW OF WILSON ROAD AND 0.3 MILE SE OF COURTLAND.						
Detailed Location:							
Ecological:	NEST WAS LOCATED IN VEGETATION LINING AN AGRICULTURAL DRAINAGE DITCH; SURROUNDING HABITAT CONSISTS OF FARMLAND.						
General:	ONE OR BOTH ADULTS WERE OBSERVED FOR ABOUT 2 MONTHS IN THIS AREA. ON 30 MAY 1992, BOTH ADULTS WERE OBSERVED, ONE CARRYING A SNAKE TOWARD VEGETATION WHERE NEST WAS PRESUMED TO BE LOCATED.						
Owner/Manager:	PVT						



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Occurrence No.	48	Map Index:	25472	EO Index:	27031	Element Last Seen:	1993-05-15
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1993-05-15	Record Last Updated:	1994-01-31
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.41486 / -121.72216	Accuracy:	80 meters				
UTM:	Zone-10 N4252619 E611558	Elevation (ft):	30				
PLSS:	T07N, R02E, Sec. 35, NW (M)	Acres:	0.0				
Location:	SW CORNER OF THE INTERSECTION OF MIDWAY AND BULKLEY ROADS, 10.5 MILES EAST OF DIXON.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF VARIOUS EUCALYPTUS, PINE, AND POPLARS, BORDERED BY FALLOW PASTURE THAT IS PART OF A HOUSING COMPOUND FOR FARM WORKERS.						
General:	2 ADULTS FLEDGED 4 YOUNG IN 1993; 2ND, 3RD, 4TH, AND 5TH KITE NESTS TO THE EAST AND WEST OF THIS NEST FAILED DUE TO SWAINSON'S HAWK DOMINATION OF THE TERRITORY.						
Owner/Manager:	PVT						
Occurrence No.	49	Map Index:	25470	EO Index:	11806	Element Last Seen:	1993-04-25
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1993-04-25	Record Last Updated:	1995-11-02
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.49283 / -121.69287	Accuracy:	1/5 mile				
UTM:	Zone-10 N4261307 E613992	Elevation (ft):	30				
PLSS:	T08N, R03E, Sec. 31, SW (M)	Acres:	0.0				
Location:	EAST SIDE OF ROAD 104, SOUTH OF THE INTERSECTION OF TREMONT ROAD, YOLO COUNTY PARK.						
Detailed Location:							
Ecological:	NEST TREE IS A EUCALYPTUS WITHIN A HEDGEROW; FORAGING HABITAT CONSISTS OF "MANAGED" NATIVE VEGETATION, BORDERED BY AGRICULTURAL FIELDS TO THE NORTH, WEST, AND SOUTH.						
General:	2 ADULTS FLEDGED 3 YOUNG IN 1993; NESTING SWAINSON'S HAWK NEARBY SOMETIMES OBSERVED IN CONFLICT WITH THE KITES (ALWAYS THE KITES PURSUING THE HAWKS).						
Owner/Manager:	YOL COUNTY						



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Occurrence No.	151	Map Index:	78441	EO Index:	79362	Element Last Seen:	2008-04-23
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2008-04-23	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-03-25	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.46494 / -121.45206			Accuracy:	80 meters		
UTM:	Zone-10 N4258538 E635045			Elevation (ft):	12		
PLSS:	T07N, R05E, Sec. 17, NE (M)			Acres:	0.0		
Location:	BACKYARD OF RESIDENCE ON CHINQUAPIN WAY, ADJACENT TO NORTH SIDE OF SACRAMENTO COUNTY SANITATION DISTRICT BUFFERLANDS.						
Detailed Location:	"NEST IS LOCATED IN A TALL PINE TREE IN THE BACKYARD OF A RESIDENCE THAT ABUTS THE NORTH LEVEE OF UNIONHOUSE CREEK." MAPPED TO LIKELY NEST TREE VISIBLE IN 2009 AERIAL THAT IS ABOUT 28 M NORTH OF PROVIDED COORDINATES ON LEVEE.						
Ecological:	DENSE RESIDENTIAL DEVELOPMENTS BORDERED BY UNDEVELOPED, ANNUAL GRASSLANDS OF THE BUFFERLANDS.						
General:	2 ADULTS OBSERVED AT NEST ON 23 APR 2008. THE NEST HAS BEEN REPORTED AS ACTIVE THE PAST 2-3 YEARS (2005-2006-2007?).						
Owner/Manager:	PVT, SRCSD-BUFFERLANDS						

Accipiter cooperii

Element Code: ABNKC12040

Cooper's hawk

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G5
	State:	None		State:	S4
	Other:	CDFW_WL-Watch List, IUCN_LC-Least Concern			
Habitat:	General:	WOODLAND, CHIEFLY OF OPEN, INTERRUPTED OR MARGINAL TYPE.			
	Micro:	NEST SITES MAINLY IN RIPARIAN GROWTHS OF DECIDUOUS TREES, AS IN CANYON BOTTOMS ON RIVER FLOOD-PLAINS; ALSO, LIVE OAKS.			

Occurrence No.	99	Map Index:	62278	EO Index:	62315	Element Last Seen:	2005-08-XX
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2005-08-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-08-11	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44027 / -121.44555			Accuracy:	80 meters		
UTM:	Zone-10 N4255810 E635660			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 21, SE (M)			Acres:	0.0		
Location:	WEST SIDE OF FRANKLIN BOULEVARD, 0.2 MILE NORTH OF SIMS ROAD, BETWEEN ELK GROVE AND SACRAMENTO.						
Detailed Location:	NEST TREE IS LOCATED ALONG THE DRIVEWAY OF A RESIDENCE ON THE EASTERN BORDER OF THE SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	NEST TREE WAS AN OLIVE; NEST WAS ONLY 30' FROM FRANKLIN BOULEVARD. SITE IS BORDERED BY THE BUFFERLANDS TO THE WEST AND RESIDENTIAL TO THE EAST.						
General:	ACTIVE NEST PRESENT ON 15 JUN 2005; 2 JUVENILES WERE OBSERVED AT THE SITE INTO EARLY AUG 2005 (2 FLEDGED).						
Owner/Manager:	SRCSD-BUFFERLANDS						

Buteo swainsoni

Element Code: ABNKC19070

Swainson's hawk

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G5
	State:	Threatened		State:	S3
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern			



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Habitat:	General:	BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.					
	Micro:	REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.					
Occurrence No.	10	Map Index:	11187	EO Index:	27299	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-06-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-07
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.34296 / -121.53413			Accuracy:	1/5 mile		
UTM:	Zone-10 N4244885 E628101			Elevation (ft):	5		
PLSS:	T06N, R04E, Sec. 27, NW (M)			Acres:	0.0		
Location:	SOUTH SIDE OF SNODGRASS SLOUGH, ABOUT 0.25 MI E OF HWY 160 CROSSING; SE SIDE SACRAMENTO RIVER 2 MI ENE OF COURTLAND.						
Detailed Location:	LOCATIONS FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS: "SNODGRASS SLOUGH & 160, 0.25 MI E JCT ON S SIDE SLOUGH" (1979-1982); 1994 FLYOVER OBSERVATION WAS "300 YDS NORTH LAMBERT RD, 0.4 MI EAST OF HWY 160."						
Ecological:	1979, 1980, & 1988 NESTS WERE IN 50-60' COTTONWOOD SURROUNDED BY RIPARIAN/AGRICULTURAL LAND USE.						
General:	DFG SWHA TERRITORY #SA004. ACTIVE NEST OBSERVED IN 1979 (2 YOUNG) AND 1980 (1 YOUNG). TWO ADULTS OBSERVED IN JULY 1982 BUT NO NEST FOUND. ACTIVE NEST OBS IN 1988 (3 YOUNG). 1 ADULT OBS SOARING 16 JUN 1994, NO NEST FOUND.						
Owner/Manager:	PVT						
Occurrence No.	11	Map Index:	11441	EO Index:	27298	Element Last Seen:	1994-07-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-04
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23419 / -121.40699			Accuracy:	3/5 mile		
UTM:	Zone-10 N4232999 E639419			Elevation (ft):	15		
PLSS:	T05N, R05E, Sec. 35, SW (M)			Acres:	0.0		
Location:	ALONG GRIZZLY SLOUGH, FROM NEW HOPE ROAD CROSSING TO VICINITY OF CONFLUENCE WITH DRY CREEK.						
Detailed Location:	TERRITORIES #SA008, SA081, & SA061 FROM CDFW SWHA DATABASE, MAPPED TO UTMS & "GRIZZLY SLOUGH-NEW HOPE" & "DRY CRK, 1 MI E MOKELUMNE R." #SJ022: 1984 FLYOVER 1 MI E THORNTON ON MOKELUMNE R. SITE "NH1" OF 2004 THESIS NEAR NEW HOPE RD BRIDGE.						
Ecological:	1979, 1985 NESTS IN OAK TREES. 1986 NEST 40' UP IN 50' OAK. TWO ACTIVE NESTS IN 1987: SA061 AT NEW HOPE CROSSING, IN OAK; SA008 AT DRY CREEK, 40' UP 53' OAK. LAND USE RIPARIAN/AGRICULTURE/PASTURE.						
General:	1979: 2 ADULTS(A) ON NEST OBSERVED. 1982, '84: SWHA OBS BUT NO ACTIVE NEST. 1985, '86: 2A & 1 YOUNG(Y) OBS IN NEST. 1987: 2A, 0Y AT SA061; 2A, 1Y AT SA008. 1994: 2A & 1 FLEDGLING OBS. 2002, '03: TERRITORIAL SWHA OBS, BUT NO NEST FOUND.						
Owner/Manager:	PVT, UNKNOWN						



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Occurrence No.	22	Map Index:	10992	EO Index:	27282	Element Last Seen:	2000-07-27
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-06
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.23316 / -121.60184			Accuracy:	nonspecific area		
UTM:	Zone-10 N4232610 E622367			Elevation (ft):	15		
PLSS:	T05N, R03E, Sec. 36 (M)			Acres:	213.0		
Location:	VICINITY OF THE HOWARD LANDING FERRY CROSSING ON STEAMBOAT SLOUGH, NORTH OF HOWARD LANDING, 5 MILES NORTH OF ISLETON.						
Detailed Location:	1994: ABOUT 1/4 MI S OF FERRY ON GRAND ISLAND (E) SIDE; COORDINATES FROM CDFW SWAINSON'S HAWK DATABASE. 1999: AT FERRY STATION ON RYER ISLAND (W) SIDE; FROM MAP ATTACHED TO SURVEY FORM. 2000: SURVEYORS ATTEMPTED TO REVISIT 1994 SITE.						
Ecological:	1979-88: NEST IN COTTONWOOD; LAND USE RIPARIAN/AGRICULTURAL. 1999: COPULATION & FORAGING PERCH IN OAK (DETERMINED FROM PHOTOS) ON VEGETATED LEVEE, ADJACENT TO RIPARIAN FOREST & AGRICULTURAL FIELDS. 2000: NEST TREE NOT FOUND.						
General:	DFG TERRITORY #SA012. ACTIVE NEST 1979, '81, '82, '85-88 W/YOUNG OBS '81, '82, '85, '86, '87. 1994: PAIR OBS NEAR NEST 28 APR, 1 JUV NEAR NEST TREE 7 JUN. 1999: PAIR OBS COPULATING 21 APR. 2000: 2 ADULTS FLUSHED BUT NO NEST FOUND 27 JUL.						
Owner/Manager:	PVT						

Occurrence No.	80	Map Index:	11386	EO Index:	27211	Element Last Seen:	2003-04-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25301 / -121.42824			Accuracy:	nonspecific area		
UTM:	Zone-10 N4235056 E637524			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 28, NE (M)			Acres:	10.0		
Location:	ALONG THE MOKELUMNE RIVER, FROM 0.75 TO 1 MI E OF I-5 CROSSING & 0.6 MI NE OF BARBER RD AT CAMERON RD.						
Detailed Location:	NEAR TERRITORY #SJ002 FROM 1994 CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. MAPPED TO UTMS GIVEN IN 2004 THESIS FOR NEST SITES MR7 AND MR9.						
Ecological:	1988: NEST TREE SPECIES NOT GIVEN. SURROUNDING HABITAT RIPARIAN/AGRICULTURAL. 2003: MR7 NEST IN COTTONWOOD. MR9 NEST IN VALLEY OAK. SURROUNDING HABITAT DESCRIBED AS VALLEY RIPARIAN.						
General:	1979, '84, '87: SWHA OBS, NO NESTS FOUND. 1988: 2 ADULTS OBS AT NEST, SUCCESS NOT RECORDED. 2003: MR7 NESTING PAIR OBS REPEATEDLY, INCUBATION OBS BUT 0 YOUNG PRODUCED. MR9 BREEDING PAIR AT NEST, INCUBATION OBS APR 30, NEST SUCCESS UNKNOWN.						
Owner/Manager:	PVT						



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Occurrence No.	82	Map Index:	11355	EO Index:	27212	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-04-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-10	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20402 / -121.45029			Accuracy:	1/5 mile		
UTM:	Zone-10 N4229587 E635686			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 08, SE (M)			Acres:	0.0		
Location:	ALONG BEAVER SLOUGH JUST WEST OF BLOSSOM ROAD, BETWEEN I-5 AND MOKELUMNE RIVER ABOUT 2 MILES SW OF THORNTON.						
Detailed Location:	1979-1983: LOCATION FROM 1994 CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS STATED AS "BEAVER SLOUGH-BLOSSOM RD." MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	1979-1983: SURROUNDING LAND USE WAS AGRICULTURE. 2009: NEST IN RIPARIAN TREE.						
General:	DFG SWHA TERRITORY #SJ005. 1 ADULT OBSERVED IN 1979 AND 1983, BUT NO NESTS FOUND. NO BIRDS OR NESTS FOUND IN 1980 OR 1982. 1 SWAINSON'S HAWK OBSERVED FLYING INTO A NEST ON 22 APR 2009; NEST SUCCESS UNKNOWN.						
Owner/Manager:	PVT						

Occurrence No.	114	Map Index:	11221	EO Index:	7546	Element Last Seen:	1993-07-15
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1993-07-15	
Occ. Type:	Natural/Native occurrence	Trend:	Stable	Record Last Updated:		2013-01-23	
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.47324 / -121.52077			Accuracy:	1/5 mile		
UTM:	Zone-10 N4259361 E629036			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 10, SE (M)			Acres:	0.0		
Location:	SOUTHWEST BANK OF THE SACRAMENTO RIVER, FROM RM-47.8 TO 48.55, ABOUT 1 MILE UPSTREAM OF FREEPORT BEND, SACRAMENTO.						
Detailed Location:	TERRITORY #YO025 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED APPROXIMATELY TO PROVIDED TRS AND "1 MI W OF FREEPORT BEND."						
Ecological:	1984-1990: NEST(S) IN COTTONWOODS WITHIN RIPARIAN HABITAT; SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURAL FIELDS INCLUDING ALFALFA AND CORN.						
General:	1981: 2 SWHA OBSERVED SOARING. NEST FIRST FOUND IN 1984, ACTIVE EVERY YEAR WITH YOUNG FLEDGED IN 1984 (1 YOUNG), 1985 (1), 1986 (1), 1988 (2), & 1990 (1). ACTIVE NEST OBS IN 1993, SUCCESS UNKNOWN.						
Owner/Manager:	PVT						



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Occurrence No.	120	Map Index:	10952	EO Index:	27187	Element Last Seen:	1981-07-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1984-06-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.16296 / -121.62134			Accuracy:	1/5 mile		
UTM:	Zone-10 N4224794 E620777			Elevation (ft):			
PLSS:	T04N, R03E, Sec. 26 (M)			Acres:	0.0		
Location:	1 MILE SW OF ISLETON, ON THE SACRAMENTO RIVER.						
Detailed Location:							
Ecological:							
General:	DFG SWHA #SA021. TWO ADULTS OBSERVED ON 17 JUL 1981. SITE INACTIVE 1980-1984.						
Owner/Manager:	UNKNOWN						
Occurrence No.	121	Map Index:	10966	EO Index:	27185	Element Last Seen:	1984-06-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1984-06-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Isleton (3812125), Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.19463 / -121.61468			Accuracy:	1 mile		
UTM:	Zone-10 N4228317 E621308			Elevation (ft):	5		
PLSS:	T04N, R03E, Sec. 14 (M)			Acres:	0.0		
Location:	1 MILE SOUTH OF WALKER LANDING, ON GRAND ISLAND ROAD, EAST OF STEAMBOAT SLOUGH.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF GOOD RIPARIAN.						
General:	DFG SWHA #SA020. OBSERVED FROM 2 DIFFERENT LOCATIONS W/IN THIS AREA. NEST FOUND IN 1983. 1 ADULT OBS PERCHING 1984.						
Owner/Manager:	PVT						
Occurrence No.	135	Map Index:	11303	EO Index:	27174	Element Last Seen:	2004-06-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-06-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-11-03
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.37032 / -121.47524			Accuracy:	80 meters		
UTM:	Zone-10 N4248004 E633197			Elevation (ft):	10		
PLSS:	T06N, R05E, Sec. 18, SW (M)			Acres:	0.0		
Location:	EAST SIDE OF I-5, 0.35 MILE SOUTH OF THE HOOD/FRANKLIN EXIT, 1.25 MILE SW OF FRANKLIN.						
Detailed Location:							
Ecological:	2004 NEST TREE WAS A LEAFLESS (DEAD) WILLOW; SURROUNDED BY GRAZING LAND IN ALL DIRECTIONS.						
General:	DFG SWHA #SA018. 1 ADULT SOARING ABOVE FIELD IN 1981. ACTIVE NEST OBSERVED ON 8 JUN 2004; AT LEAST 1 PARTIALLY-FEATHERED YOUNG OBSERVED ON 24 JUN 2004.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	167	Map Index:	11458	EO Index:	27132	Element Last Seen:	1987-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-12
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21685 / -121.39189				Accuracy:	1/5 mile	
UTM:	Zone-10 N4231098 E640775				Elevation (ft):	10	
PLSS:	T04N, R05E, Sec. 11, NE (M)				Acres:	0.0	
Location:	ALONG THE MOKELUMNE RIVER NEAR THE W END OF FOREST LK RD; ABOUT 1 MI NW OF RAY RD AT KILE RD & 1.7 MI SE OF THORNTON.						
Detailed Location:	TERRITORY #SJ023 IN CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS; MAPPED TO GIVEN TRS AND COMMENTS: "ACCESS FROM...WEST END OF FOREST LAKE (RD), LEVEE RD."						
Ecological:	1987 NEST TREE WAS AN OAK. SURROUNDING HABITAT DESCRIBED AS RIPARIAN, PASTURE, AND AGRICULTURE/CROPLANDS.						
General:	1984, 1985, 1986: ADULT SWAINSON'S HAWKS OBSERVED BUT NO NEST FOUND. 1987: 2 ADULTS OBSERVED AT NEST WITH TWO YOUNG. EXACT DATE NOT RECORDED.						
Owner/Manager:	PVT						
Occurrence No.	168	Map Index:	11464	EO Index:	27130	Element Last Seen:	2003-03-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-03-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20635 / -121.38239				Accuracy:	nonspecific area	
UTM:	Zone-10 N4229947 E641626				Elevation (ft):	15	
PLSS:	T04N, R05E, Sec. 12, S (M)				Acres:	32.0	
Location:	SOUTH OF THE MOKELUMNE RIVER, N SIDE OF KILE RD (WALNUT GROVE RD) ABOUT 0.5 MI W OF RAY RD & 2.4 MI SE OF THORNTON PO.						
Detailed Location:	1984-94: TERRITORY SJ024/SJ015 FROM CDFW DATABASE OF 1979-1994 SWHA OBSERVATIONS, PER GIVEN TRS. 2002-03: MAPPED TO COORDINATES GIVEN IN 2004 THESIS.						
Ecological:	1984: HABITAT AGRICULTURAL. 2002-03: HABITAT DESCRIBED AS VALLEY OAK WOODLAND. 2003 NEST IN GROVE OF VALLEY OAKS BEHIND RESIDENCE ON KILE RD; DESCRIBED AS "LAST YEAR'S TREE" THOUGH GIVEN LOCATIONS ARE ABOUT 185 M APART.						
General:	1984: 5 SWHA OBS SOARING WITH 3 RED-TAILED HAWKS. 2002: NESTING PAIR OBS THROUGH SEASON, 0 FLEDGED. 2003: PAIR OBS PERCHED NEAR NEST, SUCCESS UNKNOWN.						
Owner/Manager:	PVT						



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Occurrence No.	170	Map Index:	11031	EO Index:	27129	Element Last Seen:	2001-06-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2001-06-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29004 / -121.58287				Accuracy:	80 meters	
UTM:	Zone-10 N4238946 E623931				Elevation (ft):	20	
PLSS:	T05N, R04E, Sec. 07, SE (M)				Acres:	0.0	
Location:	STEAMBOAT SLOUGH, 0.3 MILE SOUTH OF SUTTER ISLAND CROSS ROAD AND 1 MILE WEST OF HIGHWAY 160 ALONG THE SACRAMENTO RIVER.						
Detailed Location:	1983: DETECTION AT T5N R2E S18, NE1/4 OF SW1/4. 1987: SW1/4 OF NE1/4 OF SAME SECTION, AT RM 25L. 1988: S1/2 OF SAME SECTION. 2000-2001: COORDINATES OF NEST SITE OR COORDS OF OBSERVATION POINT PLUS BEARING & DISTANCE FROM NEST GIVEN.						
Ecological:	1987-88: NEST 45' UP IN 55' COTTONWOOD (CW). LAND USE RIPARIAN/AG. 2000: NEST IN 55' CW, SURROUNDING LAND USE ORCHARD. 2001: NEST IN 80' CW, ADJACENT TO A LEVEE W/PAVED ROAD; OVERSTORY RIPARIAN COMPONENT; SURROUNDING LAND USE AGRICULTURAL.						
General:	DFG SWHA #SA034. 1983: 1 ADULT (A) OBS, NO NEST FOUND. '84: NO HAWKS. '87: 1A + 2 YOUNG (Y) OBS 15 JUN. '88: 2A AT NEST OBS. 2000: 2 FLEDGED Y OBS 14 JUL. 1 SWHA OBS ON W SIDE SLOUGH, 27 JUL. '01: 2A & 1Y OBS ON 22 JUN, YOUNG BANDED.						
Owner/Manager:	PVT						

Occurrence No.	171	Map Index:	11383	EO Index:	27127	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.29584 / -121.41947				Accuracy:	nonspecific area	
UTM:	Zone-10 N4239821 E638210				Elevation (ft):	15	
PLSS:	T05N, R05E, Sec. 10, S (M)				Acres:	9.0	
Location:	RANCH ON EAST SIDE OF BRUCEVILLE ROAD, ABOUT 0.3 MILE N OF TWIN CITIES ROAD INTERSECTION & 0.6 MILE S OF CAMP ROAD.						
Detailed Location:	1994: UTMS FOR TERRITORY "SA" FROM CDFW DATABASE OF SWHA OBSERVATIONS (1982 DETECTION AT SA027 NEARBY). 2003: COORDINATES FROM CDFW DATABASE OF SWHA NEST RECORDS, 2000-04. 2009: POINT IN CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2003: NEST IN 70' COTTONWOOD SURROUNDED BY CROPLAND. 2009: NEST IN 35' TREE CODED AS "OTHER EXOTIC;" FALLOW LAND TO EAST, ALFALFA TO WEST.						
General:	1982: 1 ADULT OBS S OF FRANKLIN FIELD; NO NEST FOUND. 1994: DEFENSIVE ADULT PAIR WITH PERCHED FLEDGLING OBS, NEST SUSPECTED. 2000: NO NEST, 0 SWHA OBS. 2003: NEST WITH 2 YOUNG OBS ON 2 JUL. 2009: NEST WITH YOUNG OBS ON 28 APR.						
Owner/Manager:	PVT						



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Occurrence No.	173	Map Index:	11421	EO Index:	27128	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-07
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28909 / -121.42224			Accuracy:	nonspecific area		
UTM:	Zone-10 N4239069 E637980			Elevation (ft):	15		
PLSS:	T05N, R05E, Sec. 15, NW (M)			Acres:	35.0		
Location:	SOUTH SIDE OF TWIN CITIES RD, JUST WEST OF BRUCEVILLE RD INTERSECTION & ABOUT 0.8 MILE EAST OF FRANKLIN BLVD.						
Detailed Location:	1981: TERRITORY SA022 FROM 1994 CDFW SWHA DATABASE. 1999: DETECTION MARKED ON TOPO MAP. MAPPED TO COORDINATES FROM 2001 FIELD SURVEY FORM, CDFW DATABASE OF SWHA NEST RECORDS FROM 2000-2004, & CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	1999, 2001: NEST TREE IS A WILLOW IN A RIPARIAN SWALE; SURROUNDING HABITAT RUDERAL/PASTURE. 2003: 2 ACTIVE NESTS OBSERVED, 1 AT 1999-2001 SITE, IN A WILLOW, & 1 IN 30' VALLEY OAK ABOUT 0.25 MI TO W. 2009: NEST AT/NEAR 1999-2003 WILLOW SITE.						
General:	1981: 1 ADULT IN FIELD WITH PREY; NEST NOT OBS. 1999: NEST WITH 2 JUV. 2000: 9 AD & 3 JUV FORAGING, NO NEST OBS. 2001: NEST WITH 2 JUV. 2002: 3 BIRDS, 1 INCUBATING NEST. 2003: MALE WITH FOOD FOR MATE, NEST NOT OBS. 2009: NEST WITH JUV.						
Owner/Manager:	PVT, UNKNOWN						

Occurrence No.	174	Map Index:	11327	EO Index:	27126	Element Last Seen:	2010-04-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-04-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-07
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26836 / -121.46395			Accuracy:	nonspecific area		
UTM:	Zone-10 N4236707 E634371			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 20, SW (M)			Acres:	145.0		
Location:	COSUMNES RIVER PRESERVE, S SIDE LOST SLOUGH; ABOUT 1 MI NW OF I-5 AT MOKELUMNE RIVER & 1 MI S OF I-5 AT TWIN CITIES RD.						
Detailed Location:	1982, '94: FROM CDFW DATABASE OF SWHA OBSERVATIONS: TERRITORIES #SA026 & "SA" (NO # ASSIGNED). 1999: POINT DRAWN ON MAP OF SWHA OBS. 2003: FROM CDFW DATABASE OF NEST RECORDS. 2009, '10: FROM CDFW AND DWR SHAPEFILES.						
Ecological:	AREA OF HIGH NESTING DENSITY. 2003: 2 NESTS IN 50' COTTONWOODS (CW). 2009: 5 NEST TREES DESCRIBED; 2 CW (30' & 50'), 2 VALLEY OAKS (30' & 35') & 1 "OTHER NATIVE" (30'). PREDOMINANT LAND USES: SEASONAL WETLAND, RIPARIAN, CROPS, FALLOW.						
General:	1982: SWHA OBS, NO NEST OBS. 1994: 2 ACTIVE NESTS. 1999: 1 NEST W/2 YOUNG (Y). 2000: TERRITORIAL PAIR, NO NEST OBS. 2003: 2 NESTS, 1 W/1 DOWNY Y 16 JUN. 2009: 8-14 NESTS RECORDED, Y OBS IN 2 NESTS; 8 APR-2 JUL. 2010: 2 W/NEST MATERIAL.						
Owner/Manager:	PVT						



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Occurrence No.	175	Map Index:	11455	EO Index:	27125	Element Last Seen:	1987-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26546 / -121.39607				Accuracy:	1/5 mile	
UTM:	Zone-10 N4236485 E640315				Elevation (ft):	10	
PLSS:	T05N, R05E, Sec. 23, SE (M)				Acres:	0.0	
Location:	COSUMNES RIVER, 2 MILES SOUTH OF TWIN CITIES ROAD.						
Detailed Location:	MAPPED TO TRS GIVEN FOR TERRITORY SA043 IN 1994 CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. STATED LOCATION "COSUMNES RIVER, TWIN CITIES RD" LIES ABOUT 2 MI NE, BUT WAS LIKELY GIVEN AS THE NEAREST MAJOR LANDMARK/ACCESS POINT.						
Ecological:	RIPARIAN AREA SUROUNDED BY CROPS AND GRASSLAND.						
General:	1984, 1985, 1986: SWAINSON'S HAWKS OBSERVED BUT NO NEST FOUND. 1987: 2 ADULTS AND 2 YOUNG OBSERVED AT NEST.						
Owner/Manager:	TNC						

Occurrence No.	179	Map Index:	11308	EO Index:	27120	Element Last Seen:	2003-05-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37432 / -121.48247				Accuracy:	80 meters	
UTM:	Zone-10 N4248438 E632558				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 13, NE (M)				Acres:	0.0	
Location:	SOUTH SIDE OF HOOD FRANKLIN RD, JUST WEST OF I-5 OFFRAMP, ABOUT 1.5 MILES W OF FRANKLIN.						
Detailed Location:	TERRITORIES #SA011 AND #SA072 FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS AT "I-5, HOOD FRANKLIN RD." MAPPED TO COORDINATES FROM CDFW DATABASE OF SWHA NEST RECORDS FROM 2000-2004.						
Ecological:	1980-84: HABITAT DESCRIBED AS GRASSLANDS, AGRICULTURAL LAND. 2003: NEST IN 45' TREE CODED AS "OTHER EXOTIC" (=NOT EUCALYPTUS OR WALNUT), SURROUNDED BY PASTURE.						
General:	1979, 1980, 1984, 1992: ADULTS OBSERVED IN GENERAL AREA, NESTS NOT FOUND. ACTIVE NEST OBS 15 MAY 2003, NO YOUNG RECORDED.						
Owner/Manager:	PVT, UNKNOWN						



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Occurrence No.	186	Map Index:	11157	EO Index:	7592	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.48051 / -121.54844				Accuracy:	nonspecific area	
UTM:	Zone-10 N4260129 E626609				Elevation (ft):	15	
PLSS:	T07N, R04E, Sec. 04 (M)				Acres:	89.0	
Location:	BABEL SLOUGH, FROM CONFLUENCE WITH SACRAMENTO RIVER SW ABOUT 0.9 MILE.						
Detailed Location:	1984-94: 3 TERRITORIES FROM CDFW DATABASE OF SWHA OBSERVATIONS: #YO061 AT RM49.5; #YO200 AT RM49.6, & YO201 (SEE ALSO OCC#633), AT RM49.8. 2005 OBS ON S SIDE BABEL SLOUGH.						
Ecological:	DENSELY ACTIVE NESTING/COMMUNAL ROOSTING AREA. 1984-94: NESTS IN MED TO TALL COTTONWOODS(CW), IN DENSE CW-DOMINATED RIPARIAN, 0-200' FROM RIVER'S EDGE. 2005: SUSPECTED NESTS IN SYCAMORES. '07: NESTS IN CWS. ALFALFA, WHEAT, ROW CROPS NEARBY.						
General:	YEAR/#ACTIVE NESTS/#FLEDGED: 1984/1/1, 1985/1/1, 1986-87/1/?, 1988/1/2, 1990/2/1, 1991/3/1, 1993/2/3, 1994/1/2. 159 SWHA ROOSTING 20 AUG 1991. 2005/3/2, 2006/1/?, 2007/4/4 YOUNG OBSERVED.						
Owner/Manager:	PVT, UNKNOWN						

Occurrence No.	188	Map Index:	11255	EO Index:	27112	Element Last Seen:	2003-06-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-08
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.43211 / -121.50266				Accuracy:	80 meters	
UTM:	Zone-10 N4254822 E630690				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 26, NE (M)				Acres:	0.0	
Location:	EAST SIDE OF SACRAMENTO RIVER, ABOUT 0.8 MI SW OF I-5 AT MORRISON CREEK & 1.7 MI NNE OF SCRIBNER RD AT HWY 160.						
Detailed Location:	TERRITORY #SA023 FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. MAPPED TO COORDINATES FROM CDFW NEST RECORDS DATABASE, 2000-2004.						
Ecological:	1982: GOOD HABITAT WITH LARGE COTTONWOODS IN SWAMPY AREA ON N SIDE OF LEVEE. 2003: NEST IN 60' COTTONWOOD WITH RIPARIAN TO THE EAST AND PASTURE TO THE WEST.						
General:	1982: 2 ADULTS OBSERVED CARRYING PREY. 1985: 2 ADULTS OBSERVED IN VICINITY, AT RM 45(L). 2003: ACTIVE NEST OBSERVED ON 10 JUN, NO YOUNG DOCUMENTED.						
Owner/Manager:	PVT						



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Occurrence No.	189	Map Index:	11369	EO Index:	27110	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2009-07-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2012-12-19		
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43603 / -121.45706			Accuracy:	80 meters		
UTM:	Zone-10 N4255323 E634663			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 29, NW (M)			Acres:	0.0		
Location:	BETWEEN DWIGHT RD & SIMS RD ON EAST SIDE OF RAILROAD TRACKS, SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Detailed Location:	1979 DETECTION TERRITORY #SA0005 AT "SHELDON & J8 RDS," FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. MAPPED TO COORDINATES FROM TABLE OF SWHA NEST SITES ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS, 2009.						
Ecological:	1979: SURROUNDING HABITAT WAS AGRICULTURAL LAND. 2009: NEST IN GOODDING'S WILLOW.						
General:	1979: 1 ADULT OBS JUL 26, NO NEST FOUND. NO ACTIVITY IN 1980 OR 1982. 2009: ACTIVE NEST MONITORED MAY-JUL FLEDGED 2 YOUNG.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	192	Map Index:	11143	EO Index:	27108	Element Last Seen:	2016-06-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2016-06-01		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2018-01-26		
Quad Summary:	Clarksburg (3812145), Sacramento West (3812155)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.49593 / -121.55941			Accuracy:	nonspecific area		
UTM:	Zone-10 N4261825 E625627			Elevation (ft):	14		
PLSS:	T08N, R04E, Sec. 32, SE (M)			Acres:	75.0		
Location:	ALONG THE SACRAMENTO RIVER AT GARCIA BEND, RM 50.7R.						
Detailed Location:	SOUTH POLYGON MAPPED GENERALLY TO TRS, UTMS, & DESCRIPTION FOR TERRITORY #SA033 IN CDFW DATABASE OF 1979-1994 SWHA OBSERVATIONS: "SACRAMENTO RIVER RM 50.7R - GARCIA BEND." NORTH POLYGON MAPPED TO COORDINATES GIVEN FOR 2016 DETECTION.						
Ecological:	1983-1994: NEST(S) IN COTTONWOODS; SURROUNDING HABITAT INCLUDED RIPARIAN, SPARSE RIPARIAN, RESIDENTIAL, & AGRICULTURAL. 2016: NEST IN OAK.						
General:	1983: 1 ADULT OBS ON NEST. 1986: 2 SWHA OBS IN AREA. 1987: ACTIVE NEST OBS. 1988: ACTIVE NEST FLEDGED 1 YOUNG. 1992, 1993: NO HAWKS OR NESTS OBSERVED. 1994: 2 ADULTS OBSERVED ON 14 JUN, NEST NOT CONFIRMED. 2016: NESTING PAIR OBSERVED.						
Owner/Manager:	PVT						



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Occurrence No.	212	Map Index:	11233	EO Index:	27089	Element Last Seen:	2009-05-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-25
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.39741 / -121.50806				Accuracy:	nonspecific area	
UTM:	Zone-10 N4250963 E630281				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 02, E (M)				Acres:	87.0	
Location:	CANAL FOLLOWING RR TRACKS ON E SIDE OF THE SACRAMENTO RIVER, ABOUT 0.9 MILE SSE OF SCRIBNER RD AT SOUTH RIVER ROAD.						
Detailed Location:	JUST NORTHWEST OF STONE LAKE. MAPPED TO 2003 SITE FROM CDFW NEST RECORDS AND FROM 2009 DWR NEST RECORD.						
Ecological:	1984: SURROUNDING HABITAT RIPARIAN/AGRICULTURAL. 1985: "LITTLE RIPARIAN LEFT IN THIS AREA." 2003: NEST IN 50' VALLEY OAK WITH PASTURE TO THE EAST AND RIPARIAN TO THE WEST (NORTH POLY). 2009: HABITAT DESCRIBED AS RIPARIAN TREE (SOUTH POLY).						
General:	1984: 2 ADULTS OBSERVED PERCHED TOGETHER; NO NEST FOUND. 1985, 1986: 1 ADULT OBS SOARING, NEST NOT FOUND. ADULT MALE OBS RETRIEVING FOOD TO UNSEEN NEST ON 10 JUN 2003; NEST SUCCESS UNKNOWN. 2009: 2 NESTING SWAINSON'S HAWKS OBS ON 19 MAY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	218	Map Index:	11192	EO Index:	27084	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.43549 / -121.53024				Accuracy:	nonspecific area	
UTM:	Zone-10 N4255158 E628277				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 27, NW (M)				Acres:	162.0	
Location:	SACRAMENTO RIVER AT RM 43.2(R), ON THE NORTH SIDE OF PUMPHOUSE RD (RD 39), 1 MILE NORTH OF CLARKSBURG.						
Detailed Location:	TERRITORIES #YO056 & "YO" (NO # ASSIGNED) FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. NEST SITE(S) FROM 1985-94 ABOUT 0.5 MILE N OF ORIGINAL NEST TREE. SITE YO-93 FROM ESTEP 2008 LOCATED ALONG RD 39.						
Ecological:	1984-94: NEST(S) IN COTTONWOOD IN CW-DOMINATED RIPARIAN WITHIN CROPLAND. 1985-86: HABITAT "POOR...RIP-RAP ACTIVITY ALL AROUND [NEST TREE]." 2007: NEST TREE NOT DIRECTLY OBS; TERRITORY IN RIPARIAN WITHIN ALFALFA/VINEYARDS/IRRIGATED CROPS.						
General:	1984: NEST WITH 1 YOUNG OBSERVED. 1985: NEST FLEDGED 1 YOUNG. 1986: NO SWHA OBS. 1987: 1 ADULT OBS SOARING. 1988: NEST FLEDGED 1. 1994: NEST FLEDGED 2. 2007: NESTING TERRITORY DETECTED, NESTING OUTCOME UNKNOWN/UNCONFIRMED.						
Owner/Manager:	PVT						



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Occurrence No.	220	Map Index:	11089	EO Index:	20039	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.33483 / -121.57076			Accuracy:	80 meters		
UTM:	Zone-10 N4243933 E624913			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 29, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF THE SACRAMENTO RIVER, RM 34.4(R), VICINITY OF COURTLAND ROAD AT SOUTH RIVER ROAD.						
Detailed Location:	VICINITY OF TERRITORY #YO082/#YO037 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO COORDINATES FOR SITE YO-100 FROM 2008 ESTEP REPORT.						
Ecological:	1982: NO NEST BUT SUITABLE HABITAT NEARBY; LAND USE RIPARIAN/AGRICULTURAL. 1985: "NO SUITABLE NESTING HABITAT;" DENUDED RIPARIAN & AG. 1988: NEST IN LONE VALLEY OAK IN MIDDLE OF CULTIVATED FIELD. 2007: NEST IN VALLEY OAK; RURAL RESIDENTIAL.						
General:	1982, 1985: 1 ADULT OBSERVED SOARING, BUT NO NEST FOUND (#YO037).1988: 2 ADULTS AND 1 JUVENILE OBSERVED AT NEST (#YO082). 1994: PAIR OBS FORAGING & PERCHING ON LONE OAK ON 13 JUL; NO NEST SEEN IN THIS TREE. 2007: NEST WITH 2 YOUNG OBSERVED.						
Owner/Manager:	PVT						

Occurrence No.	267	Map Index:	11134	EO Index:	27041	Element Last Seen:	2009-07-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-07-15
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.36306 / -121.55873			Accuracy:	nonspecific area		
UTM:	Zone-10 N4247082 E625915			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 17, SE (M)			Acres:	24.0		
Location:	ELK SLOUGH, ABOUT 0.4 MILE SSE OF NETHERLANDS ROAD AT WAUKEENA RD AND 2 MILES W OF HOOD.						
Detailed Location:	1983: VICINITY OF TERRITORY #YO083 FROM CDFW DATABASE. 1994: 2 DETECTIONS ON SAME DAY, PROB SAME NEST; MAPPED TO COORDS. 2000: COORDS FROM FSF, CDFW DATABASE. '07: ESTEP SITE YO-97, ON E SIDE SLOUGH. '09: 2 NEST SITES, 1 SAME AS 2000 LOC.						
Ecological:	1983: NEST IN LARGE COTTONWOOD. 1994: NEST IN COTTONWOOD SURROUNDED BY CROPLAND. 2000: NEST IN 100' VALLEY OAK IN CROPLAND. 2007: NEST IN COTTONWOOD. 2009: N NEST IN VALLEY OAK; S NEST POSS. IN SAME TREE AS 2000. SURROUNDED BY FALLOW LAND.						
General:	1983: 2 ADULTS & 2 EGGS IN THE NEST OBSERVED. 1994: NEST WITH 2 YOUNG OBS. 2000: NEST WITH 1 FEATHERED YOUNG OBS ON 30 JUN. 2007: ACTIVE NEST OBS; SUCCESS UNKNOWN. 2009: ADULT(S) & YOUNG OBS IN N NEST 7 JUL; & IN S NEST ON 23 JUL.						
Owner/Manager:	PVT						



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Occurrence No.	311	Map Index:	21029	EO Index:	9168	Element Last Seen:	2005-07-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-06-11
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.45660 / -121.74697				Accuracy:	specific area	
UTM:	Zone-10 N4257221 E609328				Elevation (ft):	40	
PLSS:	T07N, R02E, Sec. 15, NW (M)				Acres:	7.0	
Location:	2.75 MILES NORTH OF MIDWAY ROAD, 8 MILES EAST OF DIXON.						
Detailed Location:	TERRITORIES #SL006 AND "SL" (NO # ASSIGNED) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 6 SITE.						
Ecological:	1992, 1994, 2000, AND 2001 NEST WERE LOCATED IN A EUCALYPTUS TREE ADJACENT TO A RURAL FARM HOUSE. 2002, 2004, AND 2005 NEST LOCATED IN A LARGE LOCUST IN THE NE PART OF THE FARMSTEAD.						
General:	NEST-BUILDING 7 APR 1992. ADULTS & 1 YOUNG OBSERVED JUL 1994. PAIR FEEDING 2 DOWNY YOUNG 8 JUN 2000. 1 FLEDGED, 2001. INCUBATION ON MAY 2002. 2 DOWNY YOUNG ON APR (UNCLEAR 2002 OR 3). DEAD DOWNY CHICK UNDER NEST 13 JUL 2004. 2 FLEDGED 2005.						
Owner/Manager:	PVT						

Occurrence No.	312	Map Index:	21028	EO Index:	10033	Element Last Seen:	1990-07-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1990-07-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1992-04-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41306 / -121.39896				Accuracy:	1/5 mile	
UTM:	Zone-10 N4252860 E639779				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 35, SE (M)				Acres:	0.0	
Location:	ALONG BIGHORN ROAD, 0.3 MI NORTH OF ELK GROVE BLVD AND 0.5 MI WEST OF HWY 99, 1.5 MI WEST OF ELK GROVE.						
Detailed Location:	BIRDS WERE FIRST OBSERVED USING SNAGS ADJACENT TO BIGHORN ROAD, LATER NESTING IN VALLEY OAKS BEHIND SNAGS. AFTER YOUNG FLEDGED, THE BIRDS RANGED NORTH OVER FIELDS NEAR THE MARSH ON ELK GROVE CREEK.						
Ecological:	HABITAT SURROUNDING NEST TREE AND NEARBY SNAGS IS OPEN GRASSLAND.						
General:	THE PAIR OF HAWKS WAS OBSERVED FROM 20 APRIL THROUGH 2 JULY 1990, THROUGH THEIR BREEDING PERIOD. AT LEAST ONE YOUNG FLEDGED, AFTER WHICH THEY MOVED TO SOME TREES ON STOCKTON BLVD, NORTH OF DUNISCH ROAD.						
Owner/Manager:	PVT						



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Occurrence No.	395	Map Index:	21806	EO Index:	8363	Element Last Seen:	1992-07-16
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	1992-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1999-10-07
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44257 / -121.49948				Accuracy:	80 meters	
UTM:	Zone-10 N4255987 E630949				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 24 (M)				Acres:	0.0	
Location:	EAST BANK OF SACRAMENTO RIVER, 1 MILE SOUTH OF FREEPORT.						
Detailed Location:	NEST TREE IS LOCATED ON THE EAST SIDE OF THE LEVEE IN AN ISOLATED STAND OF TREES ALONG THE ACCESS ROAD TO BEACH LAKE.						
Ecological:	NEST TREE IS A VALLEY OAK (QUERCUS LOBATA); ADJACENT AGRICULTURAL FIELDS INCLUDE SAFFLOWER AND ALFALFA.						
General:	DFG SWHA #SA044. 1 ADULT/1 JUVENILE OBSERVED ON NEST ON 16 JUL 1992; 2 ADULTS PRESENT ON 20 JUL 1992.						
Owner/Manager:	PVT-BEACH LAKE PROPERTIES						

Occurrence No.	496	Map Index:	23016	EO Index:	20006	Element Last Seen:	2003-05-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.34640 / -121.55794				Accuracy:	1/5 mile	
UTM:	Zone-10 N4245234 E626014				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 29, NE (M)				Acres:	0.0	
Location:	N SIDE SACRAMENTO RIVER, ABOUT 0.1 MILE W OF RM-35.6(R) & 0.2 MILE NE OF THE JUNCTION OF ROAD 143 AND SOUTH RIVER ROAD.						
Detailed Location:	1988: TERRITORY #Y0084; LOCATION DESCRIBED IN CDFW 1992 SWAINSON'S HAWK DATABASE & ON FIELD SURVEY FORM. 2003: COORDINATES FROM CDFW 2000-2004 DATABASE OF SWAINSON'S HAWK NEST RECORDS.						
Ecological:	1988: NEST TREE IS A FARMHOUSE OAK TREE, SURROUNDED BY FARMLAND. 2003: NEST IN 75' VALLEY OAK ON RIVER ROAD, 100 YARDS SOUTH OF RESIDENCE ENTRANCE. ORCHARDS TO NE & SE AND CROPLAND TO NW & SW.						
General:	2 ADULTS AND 3 JUVENILES OBSERVED AT NEST IN 1988. UNKNOWN NUMBERS OF ADULTS & 1 FEATHERED YOUNG OBSERVED AT NEST ON 12 MAY 2003.						
Owner/Manager:	PVT						



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Occurrence No.	508	Map Index:	23234	EO Index:	7587	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2013-02-12		
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.47199 / -121.51119			Accuracy:	1/5 mile		
UTM:	Zone-10 N4259235 E629874			Elevation (ft):	20		
PLSS:	T07N, R04E, Sec. 11, SW (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, RM 47.5-47.2(R), VICINITY OF FREEPORT BEND, SACRAMENTO.						
Detailed Location:	1986-1990: TERRITORY #YO198 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. 2007: MAPPED TO SITE YO-88 FROM 2008 ESTEP REPORT.						
Ecological:	1986-90 NEST IN LARGE COTTONWOOD 15' FROM THE RIVER; SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURAL FIELDS (ALFALFA, SAFFLOWER, WHEAT). 2007: NEST IN COTTONWOOD; SURROUNDINGS INCLUDED ALFALFA, IRRIGATED CROPLAND, AND VINEYARDS.						
General:	NEST WITH ONE YOUNG OBSERVED IN 1986. NEST WITH ONE ADULT & TWO YOUNG OBS IN 1987. 3 FLEDGED IN 1988. PAIR OBSERVED NESTING, BUT NO YOUNG FLEDGED IN 1990. POSSIBLE BREEDING PAIR OBS IN 1991. NEST WITH TWO YOUNG OBS DURING 2007 SURVEY.						
Owner/Manager:	PVT						

Occurrence No.	509	Map Index:	23233	EO Index:	7588	Element Last Seen:	1994-06-30
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1994-06-30		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2013-01-08		
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.47267 / -121.53396			Accuracy:	1/5 mile		
UTM:	Zone-10 N4259279 E627886			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 10, SW (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, RM 48.55-48.8(R), ABOUT 1.5 MILES EAST OF FREEPORT BEND, SACRAMENTO.						
Detailed Location:	TERRITORY #YO199 FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. LOCATIONS GIVEN "RM 48.8R" (1990) & "RM 48.55R" (1991, '93, '94). FIELD SURVEY FORMS FOR 1990, 1991 DETECTIONS GIVE SIMILAR INFORMATION.						
Ecological:	1990: NEST IN SMALL LOCUST. 1991: NEST IN LARGE OAK TREE WITHIN A GROUP OF 3 ISOLATED TREES IN A FARMYARD. SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURAL FIELDS (TOMATOES AND WHEAT). SAME NEST TREE MAY HAVE BEEN USED IN 1993 & 1994.						
General:	ADULT SWHA, BUT NO NESTS OBSERVED 1981-82. 1990: ACTIVE NEST OBSERVED 8 AUG; NO YOUNG FLEDGED. 1991: NEST HATCHED 2 YOUNG, FLEDGED 1. 1993: ACTIVE NEST OBSERVED, NEST FAILED. 1994: ACTIVE NEST FAILED BEFORE HATCHING.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	566	Map Index:	23236	EO Index:	12768	Element Last Seen:	2006-08-03
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2006-08-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-06
Quad Summary:	Isleton (3812125), Courtland (3812135)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.24934 / -121.60362			Accuracy:	nonspecific area		
UTM:	Zone-10 N4234402 E622184			Elevation (ft):	5		
PLSS:	T05N, R03E, Sec. 25 (M)			Acres:	97.0		
Location:	STEAMBOAT SLOUGH, JUST S OF THE SUTTER SLOUGH CONFLUENCE & ABOUT 0.4 MI N OF HOWARD LANDING FERRY, 5 MILES W OF LOCKE.						
Detailed Location:	1988: TRS & DESCRIPTION "RM 21.6R" GIVEN ON FIELD SURVEY FORM & IN CDFW SWAINSON'S HAWK DATABASE. 2006: 2 NEST SITES; S SITE AT "E RYER ROAD 0.4 MILE N OF FERRY, 1.5 MILE S OF ELEVATOR ROAD," & N SITE AT "W BASE OF LEVEE, E RYER RD."						
Ecological:	1988: NEST TREE IS A FARMYARD WALNUT. 2006: 2 NEST SITES. SOUTH: PRESUMED NEST SITE IS SMALL TREE ON RIVER SIDE OF LEVEE. NORTH: NEST AT 95% HEIGHT OF NEARLY DEAD BLACK WALNUT; MIXED PASTURE AND ALFALFA TO WEST.						
General:	1988: DFG SWHA TERRITORY #YO154/SL017; 2 ADULTS FLEDGED 2 YOUNG. 2006, SOUTH SITE: 2 ADULTS OBSERVED CARRYING NESTING MATERIAL ON 5 MAY; ALSO OBS 22 MAY AND 29 JUN. SUCCESS OF NEST UNKNOWN. 2006, NORTH SITE: PAIR FLEDGED 2 YOUNG BY 3 AUG.						
Owner/Manager:	PVT, UNKNOWN						

Occurrence No.	598	Map Index:	23628	EO Index:	18421	Element Last Seen:	2005-08-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.49485 / -121.69739			Accuracy:	80 meters		
UTM:	Zone-10 N4261526 E613595			Elevation (ft):	30		
PLSS:	T08N, R02E, Sec. 36, E (M)			Acres:	0.0		
Location:	SOUTH SIDE OF TREMONT ROAD, 0.1 MILE WEST OF ROAD 104, 7 MILES SOUTH OF DAVIS.						
Detailed Location:	DFG SWHA SO019/SL019. MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 13 SITE. ALSO DOCUMENTED IN CDFW NEST RECORDS; UNCLEAR IF OBSERVATIONS WERE FROM 2002, 2003, OR BOTH YEARS.						
Ecological:	2004 NEST LOCATED AT THE 80% HEIGHT OF THE EASTMOST TREE IN A CONTINUOUS ROW OF BLACK WALNUTS; SURROUNDING FORAGING HABITAT CONSISTED OF CULTIVATED LAND TO THE SOUTH AND RUDERAL TO THE NORTH, ACROSS TREMONT ROAD.						
General:	2 FLEDGED IN 1988. NEST MONITORED APR-SEP 2001; 3 FLEDGED. MONITORED APR-JUL 2002; 2 FLEDGED. POSSIBLY ACTIVE IN 2003 (RECORDS UNCLEAR). MONITORED MAR-AUG 2004; 1 FLEDGED. MONITORED 3 MAR-26 AUG 2005; ADULTS PRESENT, BUT NO CHICKS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	631	Map Index:	23882	EO Index:	7543	Element Last Seen:	1994-08-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.46488 / -121.50493			Accuracy:	80 meters		
UTM:	Zone-10 N4258455 E630433			Elevation (ft):	15		
PLSS:	T07N, R04E, Sec. 14, NE (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, RM 46.70(R), JUST DOWNSTREAM FROM FREEPORT BEND, ABOUT 0.65 MILE NORTH OF FREEPORT BRIDGE.						
Detailed Location:	TERRITORIES #YO032 & #YO198 FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. 1982: INCIDENTAL OBS AT RM 46.2. 1993, 1994: UTMS GIVEN FOR NEST SITE AT RM 46.7, "0.5 MILES NORTH OF FREEPORT BRIDGE."						
Ecological:							
General:	1982: 1 ADULT OBSERVED, NEST NOT FOUND. 1984: NO SWHA OR NESTS OBS. 1993: 2 ADULTS AND 2 JUVENILES OBSERVED AT NEST ON 15 JUL. 1994: PAIR FLEDGED 2 YOUNG FROM NEST.						
Owner/Manager:	UNKNOWN						
Occurrence No.	633	Map Index:	23880	EO Index:	7545	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.49034 / -121.55551			Accuracy:	80 meters		
UTM:	Zone-10 N4261210 E625976			Elevation (ft):	15		
PLSS:	T07N, R04E, Sec. 04, NW (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, RM 50.25(R), 0.6 MILE UPSTREAM FROM BABEL SLOUGH JUNCTION, SW OF SACRAMENTO.						
Detailed Location:	1993 NEST ASSIGNED TO TERRITORY #YO201 FROM CDFW DATABASE OF 1979-1994 SWHA OBSERVATIONS (OBS ATTRIBUTED TO YO201 ALSO MAPPED AT OCCURRENCE #186). MAPPED TO COORDINATES GIVEN FOR SITE YO-80 IN 2008 ESTEP REPORT.						
Ecological:	2007 NEST IN COTTONWOOD IN RIPARIAN HABITAT, ADJACENT TO IRRIGATED CROPLAND AND ALFALFA.						
General:	2 ADULTS AND 2 JUVENILES OBSERVED AT NEST SITE ON 15 JUL 1993. NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	679	Map Index:	33359	EO Index:	29194	Element Last Seen:	2009-04-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34233 / -121.49442			Accuracy:	nonspecific area		
UTM:	Zone-10 N4244871 E631572			Elevation (ft):	5		
PLSS:	T06N, R04E, Sec. 25 (M)			Acres:	40.0		
Location:	STONE LAKES NWR; ON THE EAST SHORE OF S STONE LAKE 1 TO 1.4 MILES NORTH OF LAMBERT ROAD, 6 MILES EAST OF COURTLAND.						
Detailed Location:	1992: TERRITORY SA076 FROM CDFW SWHA DATABASE. 1995: NEST MARKED ON PROVIDED MAP. 2003: LAT/LONG FROM CDFW DATABASE OF NEST RECORDS, 2000-2004. 2009: NESTING SITES PER DWR FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 SURVEY DATA.						
Ecological:	1995: NEST TREE IN MARSH BORDERING STONE LAKE. 2003: NEST IN 40' WILLOW ABOUT 0.2 MI OUTSIDE REFUGE BOUNDARY. 2009: NESTING HABITAT DESCRIBED AS RIPARIAN TREE(S). SURROUNDING LAND USES INCLUDE WILDLIFE REFUGE, HUNTING, PASTURE, AGRICULTURE.						
General:	1992: BREEDING PAIR OBSERVED IN VICINITY BY CDFW SURVEYORS. 1995: 2 ADULTS & 1 JUVENILE OBS AT NEST ON 20 JUN. 2003: NEST WITH 1 FEATHERED YOUNG OBS ON 11 JUN. 2009: PAIR OBS BUILDING NEST ON 6 APR; NESTING SWHA OBS ON 16 APR.						
Owner/Manager:	USFWS-STONE LAKES NWR, PVT						

Occurrence No.	751	Map Index:	41756	EO Index:	41756	Element Last Seen:	1994-06-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento						
Lat/Long:	38.24428 / -121.39038			Accuracy:	80 meters		
UTM:	Zone-10 N4234144 E640854			Elevation (ft):	10		
PLSS:	T05N, R05E, Sec. 02, NW (M)			Acres:	0.0		
Location:	SW SIDE OF BEAR SLOUGH, 0.5 MILE NORTH OF NEW HOPE ROAD, 2 MILES NE OF THORNTON.						
Detailed Location:	MAPPED TO UTMS GIVEN FOR TERRITORY "SA" (NO # ASSIGNED) FROM 1994 CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. CDFW SURVEYOR REVISITED SITE ONCE IN 2000.						
Ecological:	1994 NEST TREE IS A COTTONWOOD, WITH THE NEST UP ABOUT 50 FEET; SURROUNDED BY AGRICULTURE. LIKELY NEST TREE LOCATED IN 2000 BUT NO NEST SEEN; WHITE-TAILED KITE & UNIDENTIFIED HAWK SEEN IN VICINITY.						
General:	LIGHT MORPH MALE AND FEMALE OBSERVED NESTING ON 2 JUN 1994. NO NESTS OR SWAINSON'S HAWKS POSITIVELY IDENTIFIED ON 24 JUL 2000, POSSIBLY DUE TO THE SURVEY BEING LATE IN THE SEASON.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	752	Map Index:	41757	EO Index:	41757	Element Last Seen:	1994-07-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-16
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.22606 / -121.52931			Accuracy:	80 meters		
UTM:	Zone-10 N4231919 E628728			Elevation (ft):	10		
PLSS:	T04N, R04E, Sec. 03, NE (M)			Acres:	0.0		
Location:	EAST SIDE OF GEORGIANA SLOUGH, 1 MILE SOUTHWEST OF THE BRIDGE CROSSING SOUTH OF WALNUT GROVE.						
Detailed Location:	1994: TERRITORY "SA" (NO # ASSIGNED) OF CDFW SWHA DATABASE AT "GEORGIANA SLOUGH, 1 MI S OF BRIDGE." 2000: OBS POINT AT "RACETRACK RD...JUST S OF ITS DEPARTURE FROM GEORGIANA SLOUGH." MAPPED TO 1994 PROVIDED COORDINATES.						
Ecological:	1994: NEST TREE WAS A COTTONWOOD ON EAST SIDE OF SLOUGH; SURROUNDING LAND USE WAS AGRICULTURE. 2000: AREA HAS SUITABLE TREES FOR NESTING.						
General:	1994: 1 FEMALE OBS PERCHED NEAR NEST, 2 JUVENILES OBS BRANCHING ON 7 JUL. 2 FLEDGED CHICKS OBS 21 JUL. 2000: NO NEST LOCATED, NO SWAINSON'S HAWKS SEEN ON 27 JUL, POSSIBLY DUE TO THE SURVEY BEING LATE IN THE SEASON.						
Owner/Manager:	UNKNOWN						

Occurrence No.	753	Map Index:	41766	EO Index:	41766	Element Last Seen:	1994-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31363 / -121.57472			Accuracy:	80 meters		
UTM:	Zone-10 N4241574 E624603			Elevation (ft):	10		
PLSS:	T05N, R04E, Sec. 05, NW (M)			Acres:	0.0		
Location:	EAST SIDE OF THE SACRAMENTO RIVER, 0.3 MILE SOUTH OF THE PAINTERSVILLE BRIDGE, ABOUT 1 MILE SSW OF COURTLAND.						
Detailed Location:	1994: NEST TREE WAS LOCATED 100 YARDS EAST OF RIVER ROAD ALONG A DRIVEWAY. COORDINATES FROM CDFW SWAINSON'S HAWK DATABASE. 2000: SURVEYOR REVISITED COORDINATES FROM CDFW DATABASE.						
Ecological:	1994 NEST TREE WAS A COTTONWOOD.						
General:	1994: 2 ADULTS AND 1 FEATHERED JUVENILE OBSERVED AT THE NEST ON 7 JUL. 2000: NO NEST LOCATED AND NO SWAINSON'S HAWKS OBSERVED ON 27 JUL, POSSIBLY DUE TO THE SURVEY BEING LATE IN THE SEASON.						
Owner/Manager:	PVT						



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Occurrence No.	754	Map Index:	41767	EO Index:	41767	Element Last Seen:	1994-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-30
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17152 / -121.64345			Accuracy:	80 meters		
UTM:	Zone-10 N4225715 E618826			Elevation (ft):	10		
PLSS:	T04N, R03E, Sec. 21, SE (M)			Acres:	0.0		
Location:	SOUTH SIDE OF THE SACRAMENTO RIVER, AT THE ENTRANCE TO VIERRAS RESORT, 2.5 MILES ENE OF RIO VISTA.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW 1994 SWAINSON'S HAWK DATABASE.						
Ecological:	1994: NEST TREE WAS A COTTONWOOD; SURROUNDED BY AGRICULTURE.						
General:	2 ADULTS AND 1 JUVENILE OBSERVED AT THE NEST ON 7 JUL 1994. SITE RESURVEYED ON 27 JUL 2000 FROM ACROSS RIVER, 1 SWAINSON'S HAWK OBS SOARING, NEST NOT SEEN; SURVEY WAS LATE IN THE SEASON.						
Owner/Manager:	PVT						

Occurrence No.	755	Map Index:	41768	EO Index:	41768	Element Last Seen:	2003-07-01
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-13
Quad Summary:	Thornton (3812124), Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.24553 / -121.47868			Accuracy:	nonspecific area		
UTM:	Zone-10 N4234151 E633124			Elevation (ft):	10		
PLSS:	T05N, R05E, Sec. 30 (M)			Acres:	22.0		
Location:	ALONG THE MOKELUMNE RIVER, ABOUT 1.7 MILES NNW OF WALNUT GROVE RD AT VAIL RD AND 2 MILES ENE OF WALNUT GROVE PO.						
Detailed Location:	1994 LOCATION FROM CDFW DATABASE OF SWHA OBSERVATIONS, TERRITORY "SA" (NO # ASSIGNED) ABOUT 0.6 MI W OF THE N END OF VAIL RD. 2003 NEST SITE IS ABOUT 0.3 MI FURTHER SOUTH, ABOUT 0.6 MILE W OF THE W END OF BARBER RD.						
Ecological:	2003: NEST AT TOP OF 50' JUNIPER. HABITAT CONSISTED OF RIPARIAN AND UPLAND, PRIMARILY VALLEY OAK WOODLAND/RIPARIAN, DOMINATED BY VALLEY OAKS, COTTONWOODS, SYCAMORES, & BLACK WALNUT. VINEYARDS TO S AND CROPLAND TO N.						
General:	1994: ACTIVE NEST OBSERVED ON 13 JUL. 2003: 1 FEATHERED JUVENILE OBS IN NEST ON 12 MAY; ADULT FEMALE ON NEST WITH 1 NESTLING OBS 1 JUL; A SECOND PAIR OBS, BUT NO NEST FOUND, ON NORTH/WEST SIDE OF RIVER.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	757	Map Index:	41770	EO Index:	41770	Element Last Seen:	1994-07-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-07-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27985 / -121.38050			Accuracy:	1/10 mile		
UTM:	Zone-10 N4238106 E641649			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 13, SE (M)			Acres:	0.0		
Location:	ALONG COSUMNES RIVER, ABOUT 0.7 MI S OF TWIN CITIES RD CROSSING & 3 MI SE OF FRANKLIN FIELD, COSUMNES RIVER PRESERVE.						
Detailed Location:	TERRITORIES SA062 (1987) AND "SA" (# NOT ASSIGNED, 1994) FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. TRS GIVEN FOR SA062, MAPPED TO COORDINATES GIVEN FOR "SA."						
Ecological:	HABITAT DESCRIBED AS RIPARIAN/AGRICULTURE/PASTURE.						
General:	2 ADULTS AND 2 YOUNG OBSERVED AT NEST IN 1987. ACTIVE NEST OBSERVED ON 13 JUL 1994.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	766	Map Index:	41785	EO Index:	41785	Element Last Seen:	2000-07-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.17635 / -121.58978			Accuracy:	1/5 mile		
UTM:	Zone-10 N4226322 E623518			Elevation (ft):	20		
PLSS:	T04N, R04E, Sec. 19 (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER, ABOUT 0.5 MILE NORTH OF THE ISLETON BRIDGE, NE OF ISLETON.						
Detailed Location:	TERRITORY SA063 IN CDFW DATABASE; MAPPED TO 1994 UTMS & "0.5 MI N OF ISLETON BRIDGE...19573 HWY 160, ON E SIDE OF RIVER." THAT ADDRESS IS IN COURTLAND; ISLETON RD WAS LIKELY MEANT. 2000: "ISLETON RD...~0.20 MI N OF BRIDGE ON E SIDE."						
Ecological:	1988 NEST TREE WAS A 60' EUCALYPTUS, SURROUNDING LAND USE WAS AGRICULTURE. 1994 NEST TREE WAS A COTTONWOOD. 2000 NEST TREE WAS A 60' EUCALYPTUS; SURROUNDED BY RIPARIAN TO THE NW AND SW, AND ROW CROPS TO THE NE AND SE.						
General:	2 ADULTS AND 3 JUVENILES OBSERVED IN 1988. 2 ADULTS OBSERVED NESTING ON 6 JUL 1994. 2 ADULTS OBSERVED DEFENDING NEST FROM A RED-TAILED HAWK ON 22 JUL 2000.						
Owner/Manager:	PVT						



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Occurrence No.	767	Map Index:	41786	EO Index:	41786	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-30
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16860 / -121.62760				Accuracy:	80 meters	
UTM:	Zone-10 N4225411 E620219				Elevation (ft):	20	
PLSS:	T04N, R03E, Sec. 27 (M)				Acres:	0.0	
Location:	WEST END OF LONG ISLAND, IN THE SACRAMENTO RIVER, 1 MILE WNW OF ISLETON.						
Detailed Location:	TERRITORY SA064 FROM CDFW 1979-1994 SWAINSON'S HAWK OBSERVATIONS DATABASE AT "SACRAMENTO RIVER, LONG ISLAND."						
Ecological:	1988: NEST TREE WAS A COTTONWOOD; SURROUNDED BY RESIDENTIAL. 1994: POSSIBLE NEST TREE IN COTTONWOOD, SURROUNDED BY AGRICULTURAL LAND. 2000: DOMINANT TREE SPP WERE ASH, LIVE OAK, SYCAMORE. BARN OWL OBSERVED.						
General:	1988: PAIR OBSERVED NESTING. 1994: 1 LIGHT-MORPH MALE & 1 DARK-MORPH MALE OBSERVED PERCHING, SOARING ON 28 APR; NEST IN COTTONWOOD OBS BUT NO ACTIVITY THERE. 2000: SITE REVISITED ON 27 JUL, NO NEST OR SWHA OBS (POSSIBLY DUE TO LATE SURVEY).						
Owner/Manager:	PVT						

Occurrence No.	804	Map Index:	42911	EO Index:	42911	Element Last Seen:	1999-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-07-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-05-11
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25963 / -121.44292				Accuracy:	80 meters	
UTM:	Zone-10 N4235768 E636228				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 21, SW (M)				Acres:	0.0	
Location:	WEST SIDE OF THORNTON ROAD AND NORTH OF THE MOKELUMNE RIVER, 3.5 MILES NW OF THORNTON.						
Detailed Location:							
Ecological:							
General:	NEST SITE CONFIRMED, 2 JUL 1999.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	807	Map Index:	42791	EO Index:	42791	Element Last Seen:	2009-04-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.22526 / -121.45220			Accuracy:	nonspecific area		
UTM:	Zone-10 N4231941 E635479			Elevation (ft):	3		
PLSS:	T04N, R05E, Sec. 05, NE (M)			Acres:	24.0		
Location:	ALONG WALNUT GROVE ROAD JUST WEST OF BLOSSOM ROAD INTERSECTION, 1.5 MILES WEST OF THORNTON.						
Detailed Location:	1994: UTMS FROM DFG SWHA DATABASE, TERRITORY #SJ114 "1/4 MI SW OF FOUR CORNERS NEAR THORNTON." 2000: NEW NEST LOC. FROM FIELD SURVEY FORMS, "ABOUT 1850' W OF BLOSSOM RD, ~30' S OF THE ROAD ALIGNMENT." 2009: DFG DATABASE OF 2009 SURVEY DATA.						
Ecological:	1994: NEST IN 50' COTTONWOOD(CW) AMONG SCATTERED MATURE TREES IN AG FIELDS. 2000: '94 NEST EMPTY; NEW NEST IN CW IN TREES ALONG WALNUT GROVE RD. VINEYARD S, LETTUCE NW, FALLOW NE. '09: NEST IN 40' CW, ALFALFA S, VINEYARD NW, RESIDENTIAL NE.						
General:	1994: 2 ADULTS & 1 YOUNG OBSERVED AT NEST ON 14 JUL, ADULTS SEEN FORAGING NEAR NEST ON 22 JUL. 2000: NEST-BUILDING & COPULATION OBS ON 11 APR; PAIR OBS AT NEST WITH 3 DOWNY YOUNG ON 20 JUN. 2009: ADULT(S) & YOUNG OBSERVED AT NEST ON APR 29.						
Owner/Manager:	PVT						
Occurrence No.	812	Map Index:	42914	EO Index:	42914	Element Last Seen:	2011-04-05
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2011-04-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-07
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.29020 / -121.43821			Accuracy:	nonspecific area		
UTM:	Zone-10 N4239168 E636582			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 16, NW (M)			Acres:	22.0		
Location:	VICINITY OF FRANKLIN BOULEVARD AT TWIN CITIES RD, ABOUT 0.5 MILE N OF LOST SLOUGH & 0.9 MILE SW OF FRANKLIN FIELD.						
Detailed Location:	1994: TERRITORY SA00* FROM DFG SWHA DATABASE; FORAGING GROUNDS SW OF INTERSECTION. 1999-2000: NEST TREE ALONG TWIN CITIES RD ABOUT 220M E OF INTERSECTION. 2002, '09, '11: NEST TREE(S) ALONG E SIDE OF FRANKLIN RD, 170-270M S OF INTERSECTION.						
Ecological:	2000: NEST TREE DESCRIBED AS 30' WILLOW WITH CORN/PASTURE TO EAST AND GRASSLAND TO WEST. 2002: NEST IN 50' WILLOW, IN PASTURE. NEST WAS ABANDONED AFTER 10 MAY, SURVEYOR SUSPECTED THE BIRDS WERE SHOT. 2009: NEST IN 25' WILLOW, IN PASTURE.						
General:	47 ADULTS & JUVS FORAGING ON 22 AUG 1994. 1999: NEST W/2 YOUNG. 2000: 1 SWHA PERCHED NEAR NEST ON 26 JUL. 2002: SWHA ON NEST, VACANT BY 10 MAY. 2009: NEST W/YOUNG. 2011: 4 TERRITORIAL SWHAS, COPULATION OBSERVED NEAR NEST ON 5 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	814	Map Index:	42917	EO Index:	42917	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.30435 / -121.42023			Accuracy:	80 meters		
UTM:	Zone-10 N4240765 E638128			Elevation (ft):	15		
PLSS:	T05N, R05E, Sec. 10, N (M)			Acres:	0.0		
Location:	WEST SIDE OF BRUCEVILLE ROAD JUST SOUTH OF CAMP ROAD INTERSECTION, ON THE EAST SIDE OF FRANKLIN FIELD.						
Detailed Location:	1999 NEST SITE DRAWN ON PHOTOCOPIED TOPO MAP ON W SIDE BRUCEVILLE RD, S OF FRANKLIN FIELD; HISTORIC AERIALS SHOW NO TREES IN AREA. MAPPED TO POINT FROM DFG SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	1999: NEST "STRAIGHT OVERHEAD"= IN ROADSIDE TREE? 2009: NEST IN 35' EUCALYPTUS WITH CROPLAND TO EAST AND RESIDENTIAL/URBAN TO WEST (BUILDINGS ASSOCIATED WITH FRANKLIN FIELD).						
General:	NEST WITH 2 CHICKS OBSERVED IN 1999. NEST WITH YOUNG OBSERVED ON 28 APR 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	815	Map Index:	42918	EO Index:	42918	Element Last Seen:	1999-07-07
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1999-07-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-07
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26011 / -121.40868			Accuracy:	80 meters		
UTM:	Zone-10 N4235872 E639222			Elevation (ft):	15		
PLSS:	T05N, R05E, Sec. 23, SW (M)			Acres:	0.0		
Location:	0.5 MILE NORTH OF THE COSUMNES RIVER, 1.25 MILES SSE OF THE INTERSECTION OF DESMOND ROAD AND BRUCEVILLE ROAD.						
Detailed Location:	TRS GIVEN FOR 1985-87 DETECTIONS AT TERRITORY #SA049 FROM DFG DATABASE OF SWAINSON'S HAWK OBSERVATIONS (CA. 1994). MAPPED TO NEST LOCATION MARKED ON ANNOTATED TOPO QUAD (2000).						
Ecological:							
General:	SWHA OBSERVED IN 1985, 1986, & 1987. 1 ADULT WITH NEST OBSERVED, 7 JUL 1999.						
Owner/Manager:	TNC						



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Occurrence No.	816	Map Index:	42919	EO Index:	42919	Element Last Seen:	1999-07-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-05-11
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27708 / -121.39236				Accuracy:	80 meters	
UTM:	Zone-10 N4237780 E640618				Elevation (ft):	20	
PLSS:	T05N, R05E, Sec. 13, SE (M)				Acres:	0.0	
Location:	0.9 MILE SOUTH OF TWIN CITIES ROAD AND 1.5 MILES EAST OF THE DESMOND ROAD/BRUCEVILLE ROAD JUNCTION, NORTH OF THORNTON.						
Detailed Location:							
Ecological:	NEST TREE IS AN OAK.						
General:	2 ADULTS WITH A NEST OBSERVED, 7 JUL 1999.						
Owner/Manager:	UNKNOWN						

Occurrence No.	817	Map Index:	42920	EO Index:	42920	Element Last Seen:	2004-05-27
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-05-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-28
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35728 / -121.44714				Accuracy:	nonspecific area	
UTM:	Zone-10 N4246599 E635676				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 20, SE (M)				Acres:	22.0	
Location:	SOUTHEAST CORNER OF CORE RD/FRANKLIN BLVD INTERSECTION, ABOUT 1.6 MILES S OF FRANKLIN & 5 MILES SW OF ELK GROVE.						
Detailed Location:	1994: FORAGING TERRITORY SA00* FROM DFG SWHA DATABASE. TWO NEST SITES: SW SITE ACTIVE 1999, MARKED ON TOPO. NE SITE ACTIVE 2003 (FROM DFG DATABASE OF NEST RECORDS 2000-04) & 2004 (FROM FIELD SURVEY FORM).						
Ecological:	1994: GROUP OF 71 SWHA OBSERVED FORAGING ON ALFALFA FIELD AT CORNER OF CORE & FRANKLIN. 1999: NEST TREE WAS A WILLOW. 2003: NEST IN 30' WILLOW. 2004: NEST TREE WAS A BLACK WILLOW. SURROUNDING HABITAT WAS IRRIGATED ALFALFA & PASTURE LAND.						
General:	1999: 1 SWHA OBSERVED ON NEST ON 30 JUN. 2000: SURVEYOR UNABLE TO LOCATE NEST. 2003: NEST WITH 1 FEATHERED YOUNG OBS ON 8 MAY. 2004: ACTIVE NEST; PAIR HATCHED 2 CHICKS, 1 SUCCESSFULLY FLEDGED.						
Owner/Manager:	UNKNOWN, PVT						



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Occurrence No.	823	Map Index:	43288	EO Index:	43288	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23228 / -121.49023			Accuracy:	1/10 mile		
UTM:	Zone-10 N4232665 E632138			Elevation (ft):	3		
PLSS:	T05N, R04E, Sec. 36, SE (M)			Acres:	0.0		
Location:	EAST SIDE OF THE MOKELUMNE RIVER, ABOUT 0.5 MILE NORTH OF THE WALNUT GROVE ROAD BRIDGE AND 3.5 MILES WEST OF THORNTON.						
Detailed Location:	2000: COORDINATES & DESCRIPTION FROM FIELD SURVEY FORM. 2009: DWR NEST SITE FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010; EXACT LOCATION OF NEST TREE UNKNOWN/NOT RECORDED.						
Ecological:	2000: NESTING ACTIVITY WAS CENTERED AROUND A LARGE COTTONWOOD. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	NESTING PAIR OBSERVED ON 11-12 APR 2000. 1 NESTING SWAINSON'S HAWK OBSERVED ON 14 MAY 2009.						
Owner/Manager:	TNC, UNKNOWN						
Occurrence No.	927	Map Index:	44021	EO Index:	44021	Element Last Seen:	2005-08-26
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.41587 / -121.72237			Accuracy:	80 meters		
UTM:	Zone-10 N4252731 E611538			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 35, NW (M)			Acres:	0.0		
Location:	SOUTH SIDE OF MIDWAY ROAD, 0.1 MILE WEST OF BULKLEY ROAD, 10 MILES ESE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 3. NEST TREE IS THE LARGEST WALNUT IN A ROW OF WALNUTS, ON THE SOUTH SIDE OF MIDWAY ROAD, JUST EAST OF A POWER POLE.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE NE, NW, AND SW, AND CULTIVATED LAND TO THE SE.						
General:	2 ADULTS OBSERVED NESTING ON 28 APR 2000. POSSIBLE NEST IN 2002 IN A LOCUST ON THE WEST SHOULDER, JUST SOUTH OF MIDWAY. NEST MONITORED 12 APR-10 AUG 2004; 2 YOUNG FLEDGED. NEST MONITORED 20 MAR-26 AUG 2005; 2 FLEDGED.						
Owner/Manager:	SOL COUNTY						



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Occurrence No.	933	Map Index:	45481	EO Index:	45481	Element Last Seen:	2001-06-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2001-06-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2001-08-07
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43830 / -121.39070			Accuracy:	80 meters		
UTM:	Zone-10 N4255673 E640451			Elevation (ft):	34		
PLSS:	T07N, R05E, Sec. 23, SE (M)			Acres:	0.0		
Location:	NORTH SIDE OF SHELDON ROAD, 0.5 MILE EAST OF HIGHWAY 99, BETWEEN ELK GROVE AND SACRAMENTO.						
Detailed Location:							
Ecological:	NEST TREE IS A EUCALYPTUS; SURROUNDED BY ANNUAL GRASSLAND, HAY PRODUCTION, AND URBAN DEVELOPMENT.						
General:	2 ADULTS AND 1 JUVENILE OBSERVED AT THE NEST ON 2 JUN 2001.						
Owner/Manager:	PVT						
Occurrence No.	992	Map Index:	47315	EO Index:	47315	Element Last Seen:	2009-04-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-08
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.37623 / -121.52571			Accuracy:	80 meters		
UTM:	Zone-10 N4248589 E628777			Elevation (ft):	12		
PLSS:	T06N, R04E, Sec. 15, NE (M)			Acres:	0.0		
Location:	ALONG THE WEST BANK OF THE SACRAMENTO RIVER, JUST NORTH OF COUNTY RD 142, 0.6 MILE NNW OF HOOD.						
Detailed Location:	1994: COORDINATES FOR TERRITORY "YO" (NO # ASSIGNED) FROM DFG DATABASE OF OBSERVATIONS 1979-94. 2000: COORDINATES FROM FIELD SURVEY FORM & DFG DATABASE OF SITES 2000-04. 2009: POINT FROM DFG SHAPEFILE OF NESTS RECORDED FROM 2009.						
Ecological:	1994: NEST IN VALLEY OAK. 2000: NEST IN VALLEY OAK 80+ FT IN HEIGHT; SURROUNDED BY ROW CROPS. 2009: NEST IN 45' VALLEY OAK SURROUNDED BY RESIDENTIAL, WITH CROPLAND TO THE SOUTHWEST.						
General:	1994: 2 ADULTS AND 2 JUVENILES OBSERVED AT NEST ON 13 JUL. 2000: 2 ADULTS OBSERVED (1 PERCHED, 1 SOARING) WITH 1 FEATHERED YOUNG ON 30 JUN. 2009: NEST WITH YOUNG OBSERVED ON 29 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1001	Map Index:	50639	EO Index:	50639	Element Last Seen:	2002-04-29
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-03-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44285 / -121.40474			Accuracy:	80 meters		
UTM:	Zone-10 N4256157 E639217			Elevation (ft):	30		
PLSS:	T07N, R05E, Sec. 23, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF HIGHWAY 99, 0.4 MILE NNW OF SHELDON ROAD, 2 MILES NW OF ELK GROVE.						
Detailed Location:							
Ecological:	NEST TREE IS A VALLEY OAK; NEST IS LOCATED ON THE SOUTH-FACING PORTION OF THE NEST TREE.						
General:	THE PAIR WAS OBSERVED COPULATING ON 18 APR 2002, AND THE FEMALE WAS OBSERVED INCUBATING ON 29 APR 2002.						
Owner/Manager:	PVT						
Occurrence No.	1010	Map Index:	50670	EO Index:	50670	Element Last Seen:	2009-07-XX
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44655 / -121.46428			Accuracy:	nonspecific area		
UTM:	Zone-10 N4256480 E634013			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 19, E (M)			Acres:	14.0		
Location:	ALONG BUFFERLANDS RD (=LAGUNA STATION RD), 0.3-0.6 MI N OF SIMS RD, AT THE SACRAMENTO COUNTY WASTEWATER TREATMENT PLANT.						
Detailed Location:	2003, 2004 NEST TREE ON W SIDE OF BUFFERLANDS RD ABOUT 0.3 MI N OF SIMS RD, MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-04 SWHA NEST RECORDS. 2002, 2009 NEST SITE ABOUT 1/4 MILE FURTHER NORTH, MAPPED TO COORDS & POINT MARKED ON TOPO.						
Ecological:	2002: NEST IN ISOLATED EUCALYPTUS NEXT TO HAY FIELDS. 2003: NEST LOW IN 70' EUC SURROUNDED BY PASTURE W/COMMERCIAL TO NE. 2004: NEST IN LARGE EUC IN RUDERAL GRASSLAND. 2009: NEST IN EUC. AT WATER TREATMENT PLANT/CO-GENERATION POWER PLANT.						
General:	BUFFERLANDS STAFF (ROGER JONES) REPORTED THAT SWHA NESTED HERE IN PREVIOUS YEARS. 2 ADULTS OBSERVED NESTING ON 1 MAY 2002. NEST WITH 2 FEATHERED YOUNG OBS 13 MAY 2003. PAIR FLEDGED 2 YOUNG IN 2004 AND 2009.						
Owner/Manager:	SRCSD						



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Occurrence No.	1011	Map Index:	50672	EO Index:	50672	Element Last Seen:	2002-05-01
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2002-05-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-03-20
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36169 / -121.42630			Accuracy:	80 meters		
UTM:	Zone-10 N4247118 E637489			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 22, NW (M)			Acres:	0.0		
Location:	0.25 MILE NORTH OF CORE ROAD AND 0.5 MILE WEST OF BRUCEVILLE ROAD, SOUTH OF SACRAMENTO.						
Detailed Location:							
Ecological:	NEST TREE IS AN ISOLATED TREE ALONG THE EDGE OF AN ALFALFA FIELD, ALONG AN IRRIGATION CANAL; SURROUNDED BY ALFALFA FIELDS AND AN OPEN AREA FOR VEHICLE STORAGE.						
General:	2 ADULTS OBSERVED NESTING ON 1 MAY 2002.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1012	Map Index:	50673	EO Index:	50673	Element Last Seen:	2002-05-29
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-05-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-03-20
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14174 / -121.42414			Accuracy:	80 meters		
UTM:	Zone-10 N4222714 E638093			Elevation (ft):	1		
PLSS:	T03N, R05E, Sec. 03, NW (M)			Acres:	0.0		
Location:	UPLAND CANAL, 0.5 MILE SE OF SYCAMORE SLOUGH, 5.5 MILES SOUTH OF THORNTON.						
Detailed Location:							
Ecological:	NEST TREE IS A COTTONWOOD, GROWING NEXT TO UPLAND CANAL, IN A SMALL STAND OF 4-5 TREES; SURROUNDED BY AGRICULTURE (ALFALFA AND ASPARAGUS).						
General:	PREY DELIVERY TO THE NEST OBSERVED ON 29 MAY 2002; NESTLINGS COULD NOT BE SEEN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1020	Map Index:	50720	EO Index:	50720	Element Last Seen:	2006-08-10
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2006-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-08
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.28414 / -121.60471			Accuracy:	nonspecific area		
UTM:	Zone-10 N4238262 E622031			Elevation (ft):	10		
PLSS:	T05N, R03E, Sec. 13, NE (M)			Acres:	21.0		
Location:	NE CORNER OF RYER ISLAND, ON RYER RD E JUST S OF CONFLUENCE OF MINER & SUTTER SLOUGHS & 1.5 MI ESE OF RYER AVE BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN ON FIELD SURVEY FORMS. RESSEGUIE'S COURTLAND 9 SITE.						
Ecological:	1999: NEST TREE WAS A SCRAGGLY, OLD SYCAMORE; SURROUNDED BY WATERWAYS AND AGRICULTURE. 2006: NEST WAS AT 80% HEIGHT OF TALL BLACK WALNUT JUST WEST OF ROAD; ALFALFA FIELDS TO WEST AND SLOUGH TO EAST.						
General:	2 ADULTS AND 1 JUVENILE OBSERVED AT THE NEST ON 4 JUL 1999. 2 ADULTS FLEDGED 1 YOUNG; SITE VISITED 10 TIMES FROM 16 MAR - 10 AUG 2006.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1024	Map Index:	50759	EO Index:	50759	Element Last Seen:	2005-08-22
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-08-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48402 / -121.67717			Accuracy:	80 meters		
UTM:	Zone-10 N4260350 E615375			Elevation (ft):	25		
PLSS:	T07N, R03E, Sec. 06, NE (M)			Acres:	0.0		
Location:	WEST SIDE OF ROAD 105, 0.25 MILE SOUTH OF ROAD 36, 5 MILES SE OF DAVIS.						
Detailed Location:	NEST TREE WAS LOCATED IN THE SE CORNER OF A "MIGRANT LABOR CAMP." 2001 NEST WAS FOUND AT THE 95% HEIGHT OF THIS SLENDER TREE. 2002 NEST WAS IN A SMALL PINE NEAR THE SOUTH EDGE OF THE CAMP. 2005 NEST TREE WAS IN A BLUE GUM SOUTH OF THE PINE.						
Ecological:	VARIOUS TREES USED FOR NESTING; 2002 TREE WAS A SMALL PINE. AREA SURROUNDED BY ALFALFA (EAST, SE), WHEAT (SOUTH), & THE CAMP (NORTH, WEST). THE "CAMP" APPEARS TO HAVE BE REDEVELOPED WITH MOBILE OR MODULAR HOMES AROUND 2002 (AERIALS) - 2004.						
General:	NEST MONITORED, 8 APR-24 SEP 2001; NEST DISAPPEARED BEFORE 28 MAY 2001. NEST MONITORED 4 APR-17 JUL 2002; 0 FLEDGED. INACTIVE IN 2004 (POORLY OBSERVED). NEST MONITORED 26 FEB-22 AUG 2005; 2 FLEDGED.						
Owner/Manager:	PVT						



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Occurrence No.	1027	Map Index:	50763	EO Index:	50763	Element Last Seen:	2009-06-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-28
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24009 / -121.66565				Accuracy:	80 meters	
UTM:	Zone-10 N4233296 E616771				Elevation (ft):	10	
PLSS:	T05N, R03E, Sec. 32, NE (M)				Acres:	0.0	
Location:	SOUTH END OF PROSPECT ISLAND, ALONG MINER SLOUGH, 6 MILES NNE OF RIO VISTA.						
Detailed Location:	MAPPED TO COORDINATES FOR NEST TREE FROM 1999 FIELD SURVEY FORM. MULTIPLE DETECTIONS REPORTED FROM VICINITY IN DWR SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010; EXACT NEST TREE LOCATIONS UNCLEAR, NOT MAPPED.						
Ecological:	1999 NEST TREE WAS LOCATED WITHIN A DIMINISHED RIPARIAN AREA, ALONG A LEVEE AND SLOUGH; GOOD FORAGING CROPS NEARBY; SURROUNDED BY AGRICULTURE AND RESTORED WETLANDS.						
General:	2 ADULTS AND 1 CHICK OBSERVED AT THE NEST ON 21 JUN 1999. MULTIPLE OBSERVATIONS OF SWAINSON'S HAWK PAIR EXHIBITING NESTING/TERRITORIAL BEHAVIOR, APR-JUN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1051	Map Index:	50835	EO Index:	50835	Element Last Seen:	2009-05-07
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-05-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-06
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16027 / -121.43267				Accuracy:	nonspecific area	
UTM:	Zone-10 N4224758 E637310				Elevation (ft):	3	
PLSS:	T04N, R05E, Sec. 28, SE (M)				Acres:	49.0	
Location:	WHITE SLOUGH WILDLIFE AREA, JUST NORTH OF WOODBRIDGE RD ABOUT 1.6 MILES W OF I-5 JUNCTION, AND 4.3 MILES S OF THORNTON.						
Detailed Location:	2001: UTMS APPROXIMATE FOR LOCATION DESCRIBED AS "ALONG CANAL AT WHITE SLOUGH WA, ABOUT 410 M N OF WOODBRIDGE RD." 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	2001: NEST TREE A WILLOW SURROUNDED BY PASTURE AND CROPLAND FORAGING AREAS. 2009: NEST TREE A WILLOW, IN "VERY THIN" RIPARIAN ADJACENT TO PASTURE.						
General:	1 ADULT OBSERVED AT THE NEST SITE ON 25 JUN 2001. NESTING PAIR OBSERVED ON 16 APR AND 7 MAY 2009, INCUBATION OBS BUT NEST SUCCESS NOT CONFIRMED.						
Owner/Manager:	DFG-WHITE SLOUGH WA						



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Occurrence No.	1052	Map Index:	50836	EO Index:	50836	Element Last Seen:	2009-05-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-05-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.13786 / -121.41726				Accuracy:	nonspecific area	
UTM:	Zone-10 N4222294 E638703				Elevation (ft):	5	
PLSS:	T03N, R05E, Sec. 03, SW (M)				Acres:	35.0	
Location:	WHITE SLOUGH WA; ABOUT 0.2 MILE W OF COTTA (=VICTOR) RD AT UPLAND CANAL, 7 MILES W OF LODI.						
Detailed Location:	2001: COORDINATES FROM FIELD SURVEY FORM, NEST TREE LOCATION "BESIDE COTTA RD [=VICTOR RD ON TOPOS] JUST EAST OF UPLAND CANAL." 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	2001: NEST IN A COTTONWOOD; SURROUNDING FORAGING HABITAT CONSISTS OF CROPLAND. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2001: 1 ADULT OBSERVED AT THE NEST SITE ON 25 JUN. 2009: 2 NESTING SWAINSON'S HAWKS OBSERVED ON 12 MAY.						
Owner/Manager:	UNKNOWN, DWR						

Occurrence No.	1055	Map Index:	50839	EO Index:	50839	Element Last Seen:	2001-07-06
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2001-07-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-04-02
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.32062 / -121.46361				Accuracy:	80 meters	
UTM:	Zone-10 N4242506 E634305				Elevation (ft):	10	
PLSS:	T05N, R05E, Sec. 05 (M)				Acres:	0.0	
Location:	NORTH SIDE OF LAMBERT ROAD, ABOUT 15 METERS WEST OF POINT PLEASANT ROAD, 2 MILES NW OF FRANKLIN FIELD.						
Detailed Location:							
Ecological:	NEST TREE IS A COTTONWOOD; SURROUNDED BY URBAN RESIDENTIAL AND VINEYARDS.						
General:	1 ADULT OBSERVED AT THE NEST ON 1 JUL 2001.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1104	Map Index:	50993	EO Index:	50993	Element Last Seen:	2009-07-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-10
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.40296 / -121.58340				Accuracy:	specific area	
UTM:	Zone-10 N4251476 E623692				Elevation (ft):	1	
PLSS:	T06N, R04E, Sec. 06, NW (M)				Acres:	7.6	
Location:	WEST SIDE OF JEFFERSON BOULEVARD, 0.3 MILE SOUTH OF GAFFNEY AVENUE, 7 MILES SW OF SACRAMENTO.						
Detailed Location:	2001: COORDINATES FROM FIELD SURVEY FORM. 2004-2006: NEST LOCATIONS REPORTED IN FIELD SURVEY FORMS, RESSEGUIE'S "CLARKSBURG 16" SITE. 2009: POINT FROM DFG SHAPEFILE OF SWHA NEST RECORDS.						
Ecological:	2001: NEST IN 35' JUNIPER. 2004, 2005: NEST IN LARGE SYCAMORE; ALFALFA TO N/W/E & CULTIVATED FIELDS S. RIVER OTTER FOUND DOR, 7 MAY '05. 2006: NEST IN RAGGED SYCAMORE AT W EDGE OF SITE. 2009: NEST IN 35' NATIVE TREE; ALFALFA N & CROPS S.						
General:	2001: 2 ADULTS & 1 JUVENILE (BANDED) OBSERVED AT NEST ON 22 JUN. 2004: NEST MONITORED 27 JUL-3 AUG; 4 YOUNG FLEDGED. 2005: ACTIVE NEST MONITORED APR-AUG; NO YOUNG OBS. 2006: NEST FLEDGED 1 YOUNG. 2009: NEST WITH YOUNG OBS 14 JUL.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1105	Map Index:	50994	EO Index:	50994	Element Last Seen:	2009-07-23
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-07-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.38480 / -121.54263				Accuracy:	specific area	
UTM:	Zone-10 N4249516 E627284				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 09, SE (M)				Acres:	19.0	
Location:	ALONG ELK SLOUGH, FROM CO RD 142 AT RD 144 NORTH 0.6 MILE, ABOUT 2.5 MILES SSW OF CLARKSBURG.						
Detailed Location:	MAPPED TO COORDINATES FROM FIELD SURVEY FORM AND CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 1999 SITE ACROSS FROM BOGLE VINEYARDS. 3-4 NEST SITES IN 2009.						
Ecological:	1999: NEST IN A COTTONWOOD WITHIN A RIPARIAN CORRIDOR ALONG A LEVEE FACILITY; SURROUNDED BY MIXED CROPLAND. 2009: 3 NESTS IN 35-40' VALLEY OAKS SURROUNDED BY FALLOW/RUDERAL LAND. POSSIBLE 4TH NEST IN RESIDENTIAL AREA AT END OF NISHIA LN.						
General:	1999: 2 ADULTS & 3 JUVENILES OBSERVED AT NEST ON 4 JUL. 2009: ADULT(S) OBS SOARING/PERCHING NEAR NISHIA LN ON 29 APR; DEFENSIVE ACTIVITY AT S NEST, 12 JUN; YOUNG OBS IN MIDDLE NEST, 21 JUN; YOUNG OBS IN N NEST, 23 JUL.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1146	Map Index:	51071	EO Index:	51071	Element Last Seen:	2001-04-19
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2001-04-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-04-22
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.17351 / -121.40065				Accuracy:	80 meters	
UTM:	Zone-10 N4226275 E640091				Elevation (ft):	15	
PLSS:	T04N, R05E, Sec. 26 (M)				Acres:	0.0	
Location:	WEST SIDE OF I-5, 0.1 MILE SW OF THE INTERSECTION OF ACAMPO ROAD, NORTH OF WOODBRIDGE ROAD, NORTH OF STOCKTON.						
Detailed Location:							
Ecological:	NEST TREE IS A EUCALYPTUS; SURROUNDED BY AGRICULTURE.						
General:	2 ADULTS OBSERVED NEST-BUILDING ON 19 APR 2001.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1147	Map Index:	51072	EO Index:	51072	Element Last Seen:	2007-XX-XX
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.37090 / -121.57829				Accuracy:	specific area	
UTM:	Zone-10 N4247926 E624193				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 18, N (M)				Acres:	17.0	
Location:	VICINITY OF THE INTERSECTION OF JEFFERSON BOULEVARD & NETHERLANDS ROAD, GREENDALE.						
Detailed Location:	1992: TERRITORY #YO221 IN DFG DATABASE. 2001: GIVEN COORDINATES JUST W OF INTERSECTION & S OF DITCH. 2004: SAME LOC AS '01. RESSEGUIE SITE COURTLAND 1. 2005: NEW SITE COURTLAND 6 0.2 MI TO E. 2007: ESTEP SITE YO-53, CA 0.1 MI E OF '05 TREE.						
Ecological:	2001: NEST TREE IN 85' ROADSIDE COTTONWOOD (CW); ALFALFA NEARBY. '04: NEST AT 2/3 HEIGHT ON NE SIDE OF CW. '05: AERIALS SHOW '04 NEST TREE REMOVED; NEW NEST IN BLACK WALNUT, NEW VINEYARD N, RUDERAL/VINEYARD S. '07: NEST IN ROADSIDE WALNUT.						
General:	1992: 2 ADULTS OBS FORAGING IN VICINITY. 2001: 2 ADULTS AND 1 NESTLING OBSERVED (YOUNG BANDED) ON 22 JUN. 2004: NEST MONITORED 28 MAR-3 AUG; 2 YOUNG FLEDGED. 2005: NEW NEST MONITORED 21 APR-9 AUG; 1 YOUNG FLEDGED. 2007: NEST W/1 YOUNG OBS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1148	Map Index:	51076	EO Index:	51076	Element Last Seen:	2007-XX-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-25
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31472 / -121.69814				Accuracy:	specific area	
UTM:	Zone-10 N4241536 E613811				Elevation (ft):	10	
PLSS:	T06N, R02E, Sec. 36, SE (M)				Acres:	10.0	
Location:	VICINITY OF LOOKOUT SLOUGH & SHAG SLOUGH CONFLUENCE, 2.5 MILES WEST OF THE SACRAMENTO RIVER DEEP WATER CHANNEL.						
Detailed Location:	TWO NEST SITES. NW SITE ACTIVE IN 2001-2005, MAPPED TO UTMS FROM FIELD SURVEY FORMS FOR RESSEGUIE SITE LIBERTY ISLAND 1. SE SITE ACTIVE IN 2007, AT "LIBERTY FARMS HQ," MAPPED TO COORDINATES FOR SITE YO-116 FROM 2008 ESTEP REPORT.						
Ecological:	2002/04 NEST AT 75% HEIGHT ON N SIDE OF TALLEST COTTONWOOD ON N SIDE OF LOOKOUT SLOUGH. 2005 NEST ON W SIDE OF SAME TREE. PASTURE TO N & S. '07 NEST IN EUCALYPTUS AT RURAL RESIDENCE ADJACENT TO SEASONAL WETLAND, IRRIGATED PASTURE, CROPLAND.						
General:	NEST MONITORED 27 APR-25 JUL 2001; 2 FLEDGED. MONITORED 4 APR-23 JUL 2002; 1 FLEDGED. MONITORED 18 MAR-15 AUG 2004; ACTIVE THROUGH 18 MAY/NO SIGHTINGS THEREAFTER. MONITORED 9 MAY-16 JUL 2005; 1 FLEDGED. ACTIVE NEST/SUCCESS UNKNOWN IN 2007.						
Owner/Manager:	PVT						

Occurrence No.	1149	Map Index:	51077	EO Index:	51077	Element Last Seen:	2005-07-29
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.49388 / -121.70479				Accuracy:	80 meters	
UTM:	Zone-10 N4261409 E612951				Elevation (ft):	35	
PLSS:	T08N, R02E, Sec. 36, S (M)				Acres:	0.0	
Location:	SOUTH SIDE OF TREMONT ROAD, 0.5 MILE WEST OF MACE BOULEVARD, 4 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 1 SITE. NEST SITE DOCUMENTED IN CDFW NEST RECORDS WAS AT SAME LOCATION. NEST TREE WAS LOCATED IN THE SW CORNER OF A CHURCH YARD; NEST WAS NOT VISIBLE FROM THE ROAD.						
Ecological:	NEST AT 90% HEIGHT OF A PINE; SURROUNDING FORAGING HABITAT CONSISTED OF CORN TO THE WEST, ALFALFA TO THE SOUTH AND EAST, AND WHEAT TO THE NORTH ACROSS THE ROAD.						
General:	NEST MONITORED MAR-JUL 2001; 2 FLEDGED. MONITORED 4 APR-15 JUL 2002; NO ACTIVE NEST FOUND. ACTIVE, INCUBATION OBS 5 JUN 2003. ADULTS DEFENDED TREE IN 2004, BUT EARLY DISTURBANCE CAUSED ABANDONMENT. MONITORED 1 APR-29 JUL 2005; 2 FLEDGED.						
Owner/Manager:	PVT						



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Occurrence No.	1150	Map Index:	51078	EO Index:	51078	Element Last Seen:	2001-04-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-06-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28

Quad Summary: Saxon (3812146)

County Summary: Solano

Lat/Long:	38.41314 / -121.72177	Accuracy:	80 meters
UTM:	Zone-10 N4252429 E611594	Elevation (ft):	30
PLSS:	T07N, R02E, Sec. 35, NW (M)	Acres:	0.0

Location: WEST SIDE OF BULKLEY ROAD, 0.2 MILE SOUTH OF MIDWAY ROAD, 6 MILES SE OF DIXON.

Detailed Location: NEST TREE WAS LOCATED NEAR THE CENTER OF A ROW OF SMALL, DECIDUOUS TREES ALONG A DITCH LEVEE; NEST LOCATED AT THE 80% HEIGHT OF THE NEST TREE.

Ecological: NEST TREE WAS A LOCUST; SURROUNDING FORAGING HABITAT CONSISTED OF CORN TO THE WEST, ALFALFA TO THE EAST, WHEAT TO THE NW, AND SUDAN GRASS TO THE NE.

General: NEST SITE MONITORED BETWEEN 27 MAR-18 AUG 2001; NO RAPTORS SEEN AT THIS SITE AFTER 29 APR 2001. INACTIVE IN 2002, 2004, AND 2005.

Owner/Manager: PVT

Occurrence No.	1151	Map Index:	51080	EO Index:	51080	Element Last Seen:	2005-07-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10

Quad Summary: Saxon (3812146)

County Summary: Solano

Lat/Long:	38.49517 / -121.74037	Accuracy:	80 meters
UTM:	Zone-10 N4261509 E609846	Elevation (ft):	45
PLSS:	T08N, R02E, Sec. 34, SE (M)	Acres:	0.0

Location: SOUTH SIDE OF TREMONT ROAD, 0.4 MILE WEST OF EGGERT ROAD, EAST OF DIXON.

Detailed Location: RESSEGUIE'S SAXON 5 SITE, ALSO RECORDED IN CDFW NEST RECORDS.

Ecological: NESTS WERE IN 2 SMALL LOCUSTS ON S SIDE OF ROAD, SURROUNDED BY CULTIVATED LAND. OTHER SURVEYORS IN 2000 AND 2002 IDENTIFIED THE NEST TREE AS WALNUT AND WILLOW, RESPECTIVELY.

General: NEST WITH 1 PARTIALLY-FEATHERED CHICK OBSERVED ON 29 JUN 2000. 3 FLEDGED IN 2001. 1 FLEDGED IN 2002. ADULT SWHA OBSERVED 0.3 MI TO W, BUT NO NEST FOUND IN 2004. 2 FLEDGED IN 2005.

Owner/Manager: PVT



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Occurrence No.	1152	Map Index:	51083	EO Index:	51083	Element Last Seen:	2005-07-16
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-20
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40931 / -121.70899				Accuracy:	specific area	
UTM:	Zone-10 N4252019 E612716				Elevation (ft):	25	
PLSS:	T07N, R02E, Sec. 36, NW (M)				Acres:	8.1	
Location:	0.1 MILE WEST OF YOLANO ROAD, 6 MILES SE OF DIXON.						
Detailed Location:	2001 NEST TREE IS THE TALLEST SYCAMORE IN THE EASTERN 1/3 OF THE RIPARIAN STRIP WEST OF YOLANO ROAD; NEST LOCATED AT THE 75% HEIGHT OF THE TREE CENTER. 2002 NEST FOUND IN THE FIRST RIPARIAN TREE WEST OF THE GAP; NEST AT 75% HEIGHT.						
Ecological:	TWO SYCAMORES WERE USED AS NEST TREES; SURROUNDING FORAGING HABITAT CONSISTED OF A LARGE HAY STORAGE AREA TO THE NORTH AND CORN TO THE SOUTH. ELEMENT OCCURRENCE #1158 AND #1152 WERE BOTH ACTIVE AND SUCCESSFULLY FLEDGED IN 2004.						
General:	NEST MONITORED 8 APR-25 JUL 2001; 3 FLEDGED. NEST MONITORED 4 APR-1 AUG 2002; POSSIBLY 2 MISSED FLEDGLINGS, 23 JUL 2002. NEST MONITORED 7 APR-5 AUG 2004; 2 FLEDGED. NEST MONITORED 22 APR-16 JUL 2005; 2 FLEDGED.						
Owner/Manager:	PVT						

Occurrence No.	1153	Map Index:	51084	EO Index:	51084	Element Last Seen:	2005-08-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40128 / -121.69953				Accuracy:	80 meters	
UTM:	Zone-10 N4251140 E613554				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 01, NE (M)				Acres:	0.0	
Location:	SOUTH SIDE OF KING ROAD, 0.3 MILE WEST OF WEST LEVEE ROAD, 7 MILES SE OF DIXON.						
Detailed Location:	SITE IS LOCATED AT FARMSTEAD #8364; NEST IS AT THE 95% HEIGHT OF THE MAIN TOP OF THE NE WILLOW, IN THE NE PORTION OF THE FARMSTEAD. SITE IS BARELY VISIBLE FROM THE ROAD.						
Ecological:	NEST TREE WAS A WILLOW; SURROUNDING FORAGING HABITAT CONSISTED OF A EXTENSIVE ALFALFA TO THE NORTH OF THE ROAD, PASTURE CLOSE TO THE FARMSTEAD SOUTH OF THE ROAD, AND CORN IN MOST OF THE AREA SOUTH OF THE ROAD.						
General:	NEST SITE MONITORED 8 APR-10 JUL 2001; 2 FLEDGED. NEST MONITORED 4 APR-28 JUL 2002; 1 FLEDGED. NEST MONITORED 7 APR-28 JUL 2004; 2 FLEDGED. NEST MONITORED 11 APR-24 AUG 2005; 3 FLEDGED.						
Owner/Manager:	PVT						



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Occurrence No.	1154	Map Index:	51085	EO Index:	51085	Element Last Seen:	2005-08-22
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.42018 / -121.74250			Accuracy:	80 meters		
UTM:	Zone-10 N4253185 E609774			Elevation (ft):	35		
PLSS:	T07N, R02E, Sec. 27, SW (M)			Acres:	0.0		
Location:	0.25 MILE NORTH OF MIDWAY ROAD AND 0.35 MILE EAST OF SIKES ROAD, 4 MILES SE OF DIXON.						
Detailed Location:	2001 NEST WAS LOCATED AT THE 90% HEIGHT, ON THE NORTH SIDE OF A LARGE BLACK WALNUT, JUST NW OF THE #7755 FARMSTEAD HOUSE.						
Ecological:	NEST TREE WAS A LARGE BLACK WALNUT; SURROUNDING FORAGING HABITAT CONSISTED OF SUDAN GRASS TO THE NW AND EAST, AND ALFALFA TO THE SW.						
General:	NEST MONITORED BETWEEN 29 APR-3 AUG 2001; 1 FLEDGED. SWHA PRESENT IN APR-MAY 2004, BUT THE ONLY NEST SEEN CONTAINED GHOW CHICKS. NEST MONITORED 23 APR-22 AUG 2005; 1 FLEDGED.						
Owner/Manager:	PVT						
Occurrence No.	1155	Map Index:	51086	EO Index:	51086	Element Last Seen:	2005-06-19
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-06-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.44897 / -121.72236			Accuracy:	80 meters		
UTM:	Zone-10 N4256404 E611488			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 14, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF BULKLEY ROAD, 0.25 MILE SOUTH OF HACKMAN ROAD, 5 MILES EAST OF DIXON.						
Detailed Location:	2001 NEST TREE LOCATED AT THE FRONT OF THE #7901 FARMSTEAD HOUSE; NEST FOUND AT THE 85% HEIGHT OF THE NEST TREE. 2002 NEST LOCATED AT 2/3 HEIGHT OF THE LOCUST AT THE NE CORNER OF THE RED BARN.						
Ecological:	NEST TREE WAS A LONE, TALL PINE (2001, 2004-2005); SURROUNDING FORAGING HABITAT CONSISTED OF PASTURE TO THE SOUTH, CULTIVATED TO THE EAST AND WEST, AND ALFALFA TO THE NE.						
General:	NEST MONITORED 29 APR-25 JUL 2001; 2 FLEDGED. NEST MONITORED 4 APR-23 JUL 2002; INCUBATION NOTED ON 3 MAY 2002, BUT NO LATER SIGHTINGS. NEST MONITORED 7 APR-28 JUL 2004; 1 FLEDGED. NEST-BUILDING OBSERVED 19 JUN 2005; NO LATER SIGHTINGS.						
Owner/Manager:	PVT						



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Occurrence No.	1156	Map Index:	51087	EO Index:	51087	Element Last Seen:	2002-07-28
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48671 / -121.69480				Accuracy:	80 meters	
UTM:	Zone-10 N4260625 E613833				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 01, NE (M)				Acres:	0.0	
Location:	SOUTH SIDE OF ROAD 36, IN THE JOG OF ROAD 104, 7 MILES NE OF DIXON.						
Detailed Location:	NEST LOCATED AT 2/3 HEIGHT, ON THE SOUTH SIDE, OF THE LONE TALL PINE, ON THE WEST SIDE OF THE FARMSTEAD.						
Ecological:	NEST TREE WAS A LONE, TALL PINE; SURROUNDING FORAGING HABITAT CONSISTED OF PASTURE TO THE WEST, WITH A FARMSTEAD TO THE SOUTH AND EAST.						
General:	NEST MONITORED 30 APR-10 AUG 2001; 1 FLEDGED. NEST SITE MONITORED 4 APR-28 JUL 2002; ONE SIGHTING OF A BUTEO ON THE NEST, AND A SWHA FLEDGLING OF UNKNOWN ORIGIN NEARBY, 5 JUL 2002. INACTIVE IN 2004 AND 2005.						
Owner/Manager:	PVT						

Occurrence No.	1157	Map Index:	51088	EO Index:	51088	Element Last Seen:	2005-08-24
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48044 / -121.74991				Accuracy:	80 meters	
UTM:	Zone-10 N4259863 E609036				Elevation (ft):	40	
PLSS:	T07N, R02E, Sec. 03, SW (M)				Acres:	0.0	
Location:	WEST SIDE OF SIKES ROAD, 1 MILE SOUTH OF TREMONT ROAD, 4 MILES NE OF DIXON.						
Detailed Location:	MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 20 SITE. 2001-2002 NEST TREE WAS THE SECOND BLACK WALNUT FROM THE NORTH, IN A ROW BETWEEN THE ROAD AND DITCH TO THE WEST; NEST FOUND AT THE 90% HEIGHT, NORTH OF CENTER.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDING FORAGING HABITAT CONSISTED OF TOMATOES TO THE WEST AND BARE DIRT (AFTER WHEAT HARVEST) TO THE EAST.						
General:	NEST MONITORED 29 MAY-3 AUG 2001; 1 FLEDGED. MONITORED 15 APR-5 AUG 2002; INCUBATION, 1 PART-FEATHERED CHICK OBS BUT 0 FLEDGED. MONITORED 9 APR-13 JUL 2004; 1 FLEDGED. MONITORED 11 APR-24 AUG 2005; NEST FOUND, SITE DEFENDED, BUT 0 FLEDGED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1158	Map Index:	51090	EO Index:	51090	Element Last Seen:	2004-08-05
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40906 / -121.71138			Accuracy:	80 meters		
UTM:	Zone-10 N4251989 E612508			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 36, NW (M)			Acres:	0.0		
Location:	0.25 MILE WEST OF YOLANO ROAD, 6 MILES SE OF DIXON.						
Detailed Location:	2001 NEST TREE WAS NEAR THE UPSTREAM (WEST) END OF THE RIPARIAN STRIP; NEST IS AT THE 85% HEIGHT OF THE NEST TREE, ON THE NORTH SIDE, HANGING OVER THE DIRT FARM ROAD.						
Ecological:	NEST TREE WAS AN ARIZONA ASH; SURROUNDING FORAGING HABITAT CONSISTED OF TOMATOES TO THE NORTH AND CORN TO THE SOUTH. ELEMENT OCCURRENCE #1158 AND #1152 WERE BOTH ACTIVE AND SUCCESSFULLY FLEDGED IN 2004.						
General:	NEST MONITORED 23 JUN-24 SEP 2001; 2 FLEDGED. NEST SITE MONITORED 2 MAY-28 JUL 2002; NO NEST FOUND, BUT 2 SWHA OF UNKNOWN AGE FLUSHED 23 JUL 2002. NEST MONITORED 7 APR-5 AUG 2004; 1 FLEDGED. INACTIVE IN 2005.						
Owner/Manager:	PVT						
Occurrence No.	1159	Map Index:	51099	EO Index:	51099	Element Last Seen:	2005-08-10
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48380 / -121.72373			Accuracy:	80 meters		
UTM:	Zone-10 N4260267 E611314			Elevation (ft):	35		
PLSS:	T07N, R02E, Sec. 02, NW (M)			Acres:	0.0		
Location:	WEST SIDE OF BULKLEY ROAD, 0.8 MILE SOUTH OF TREMONT ROAD, 6 MILES NE OF DIXON.						
Detailed Location:	2001-2002 NEST TREE WAS A SMALL PINE BETWEEN TWO PALMS; NEST WAS LOCATED AT THE 90% HEIGHT, ON THE NE SIDE OF THE NEST TREE. 2004-2005 NEST TREE WAS THE PALM JUST SW OF THE PINE USED IN 2001-2002.						
Ecological:	NEST TREE WAS A PALM (PREVIOUSLY A PINE); SURROUNDING FORAGING HABITAT CONSISTED OF ALFALFA IN ALL DIRECTIONS.						
General:	NEST MONITORED 11 JUL-3 AUG 2001; 1 FLEDGED. NEST MONITORED 4 APR-15 JUL 2002; 3 FLEDGED. NEST MONITORED 7 APR-10 AUG 2004; 1 FLEDGED. NEST MONITORED 11 APR-10 AUG 2005; 2 FLEDGED.						
Owner/Manager:	PVT						



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Occurrence No.	1160	Map Index:	51102	EO Index:	51102	Element Last Seen:	2005-08-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40921 / -121.70650			Accuracy:	80 meters		
UTM:	Zone-10 N4252011 E612934			Elevation (ft):	25		
PLSS:	T07N, R02E, Sec. 36, NW (M)			Acres:	0.0		
Location:	EAST SIDE OF YOLANO ROAD, 6 MILES SE OF DIXON.						
Detailed Location:	2001 NEST TREE WAS LOCATED OPPOSITE THE END OF THE MAJOR RIPARIAN STRIP; NEST FOUND AT THE 2/3 HEIGHT OF THE NEST TREE, ON THE NE SIDE. 2002 NEST LOCATED AT 3/4 HEIGHT ON THE SE SIDE OF THE NEST TREE.						
Ecological:	NEST TREE WAS A COTTONWOOD; SURROUNDING FORAGING HABITAT CONSISTED OF ALFALFA TO THE SE, CORN TO THE SW, AND TREES, FARMSTEAD, CORPORATION YARD TO THE NW AND NE.						
General:	NEST MONITORED 25 JUL-18 AUG 2001; 0 FLEDGED. NEST MONITORED 4 APR-15 AUG 2002; APPARENT INCUBATION ON 2 MAY 2002, BUT NONE FLEDGED. INACTIVE IN 2004. NEST MONITORED 22 APR-26 AUG 2005; 1 FLEDGED.						
Owner/Manager:	PVT						
Occurrence No.	1169	Map Index:	51132	EO Index:	51132	Element Last Seen:	2009-04-21
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146), Dixon (3812147)						
County Summary:	Solano						
Lat/Long:	38.42781 / -121.75132			Accuracy:	specific area		
UTM:	Zone-10 N4254022 E608992			Elevation (ft):	40		
PLSS:	T07N, R02E, Sec. 28, NE (M)			Acres:	11.0		
Location:	0.2 MILE SOUTH OF MILLER ROAD, 2 MILES EAST OF HIGHWAY 113, EAST OF DIXON.						
Detailed Location:	2002 NEST TREE WAS A BLACK WALNUT SOUTH OF THE FARMSTEAD AND WELL WEST OF SIKES ROAD. 2004 NEST LOCATED AT THE 75% HEIGHT, ON THE SE SIDE, OF A BLACK WALNUT SOUTH OF THE HOUSE. RESSEGUIE'S DIXON 52 SITE.						
Ecological:	NEST TREES WERE BLACK WALNUTS; SURROUNDING FORAGING HABITAT CONSISTED OF WHEAT TO THE NORTH AND SOUTH, AND SUNFLOWERS TO THE EAST.						
General:	NEST-BUILDING AND COPULATION BUT NO CHICKS OBSERVED 1 APR-10 AUG 2001. 2 FLEDGED 21 APR-17 JUL 2002. 1 FLEDGED 9 APR-10 AUG 2004. 1 FLEDGED 1 MAR-17 JUL 2005. NEST WITH YOUNG OBS ON 21 APR 2009.						
Owner/Manager:	PVT						



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Occurrence No.	1188	Map Index:	51163	EO Index:	51163	Element Last Seen:	2003-06-25
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2003-06-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-10
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40886 / -121.40985				Accuracy:	specific area	
UTM:	Zone-10 N4252377 E638835				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 03, NE (M)				Acres:	8.0	
Location:	SOUTH SIDE OF ELK GROVE BOULEVARD, JUST WEST OF WYMARK DRIVE IN ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM DFG DATABASE OF SWAINSON'S HAWK NEST RECORDS, 2000-2004. 2001, 2002, AND 2003 NESTS APPEAR TO BE IN SAME OR ADJACENT TREES.						
Ecological:	2000: NEST IN 30' WILLOW. 2001-03: NEST IN 50-60' VALLEY OAK. HABITAT WAS PASTURE/FALLOW/GRASSLAND TO S AND RESIDENTIAL TO N, BUT DEVELOPMENT SOUTH OF ELK GROVE BLVD IS REPLACING FORAGING HABITAT. SITE WAS GOOD EXCELLENT; NOW POOR (2013).						
General:	2000: ACTIVE NEST, BUT NO YOUNG, OBSERVED 31 MAY. 2001: ACTIVE NEST, INCUBATION OBS 20 MAY. 2002: NEST WITH 1 YOUNG OBS 16 MAY, NESTING PAIR OBS 4 JUN. 2003: NEST WITH 1 FEATHERED YOUNG OBS 25 JUN. CNDDDB NOTE 5/2013: MAY BE EXTIRPATED.						
Owner/Manager:	PVT						

Occurrence No.	1227	Map Index:	51742	EO Index:	51742	Element Last Seen:	2003-06-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-06-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-10
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.35093 / -121.57303				Accuracy:	nonspecific area	
UTM:	Zone-10 N4245716 E624687				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 20, SW (M)				Acres:	7.0	
Location:	EAST SIDE OF ELK SLOUGH, ABOUT 0.7 MILE SE OF JEFFERSON BLVD AT N COURTLAND RD AND 1.3 MILES N OF COURTLAND.						
Detailed Location:	YEAR 2000 NEST DETAILED WITH COORDINATES, BEARING, AND DISTANCE; APPEARS TO HAVE BEEN ON THE EAST SIDE OF THE SLOUGH. YEAR 2003 NEST APPEARS TO BE ON EAST SIDE OF SLOUGH AND IS LIKELY THE SAME LOCATION. BOTH LIKELY VIEWED FROM WAUKEENA RD.						
Ecological:	2000: NEST AT TOP OF A CLUMP OF MISTLETOE IN A 60' COTTONWOOD; SURROUNDING LAND USE CROPLAND TO NE & SE, ORCHARD/VINEYARD TO NW & SW. 2003: NEST IN MISTLETOE CLUMP ON 40' COTTONWOOD SURROUNDED BY ORCHARDS.						
General:	1 PARTIALLY-FEATHERED YOUNG OBSERVED IN THE NEST, TERRITORIAL ADULT(S) OBS ON 14 JUL 2000. 2 DOWNY YOUNG OBS IN NEST ON 2 JUN 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1288	Map Index:	53333	EO Index:	53333	Element Last Seen:	2005-07-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.49173 / -121.69586			Accuracy:	80 meters		
UTM:	Zone-10 N4261181 E613733			Elevation (ft):	35		
PLSS:	T08N, R02E, Sec. 36, SE (M)			Acres:	0.0		
Location:	WEST SIDE OF MACE BOULEVARD, 0.25 MILE NORTH OF THE JOG IN MACE BOULEVARD, 4 MILES SSE OF DAVIS.						
Detailed Location:	2001-2004 NEST TREE WAS THE FIRST BLACK WALNUT ON THE WEST SHOULDER, NORTH OF THE DIRT FARM ROAD LEADING WEST; THIS NEST TREE DISAPPEARED IN 2004. 2005 NEST TREE WAS THE FIRST BLACK WALNUT REMAINING NORTH OF THE DIRT ROAD.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE WEST AND RUDERAL TO THE EAST, ACROSS THE ROAD.						
General:	SUCCESSFUL NEST AT THIS SITE LIKELY MISSED IN 2001. NEST MONITORED 4 JUL-23 JUL 2002; 1 FLEDGED. NEST TREE WITH A SMALL NEST DISAPPEARED BETWEEN 11 JUN-13 JUL 2004. NEST MONITORED 30 MAR-10 AUG 2005; INCUBATION OBS ON 31 MAY, BUT 0 FLEDGED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1294	Map Index:	53567	EO Index:	53567	Element Last Seen:	2005-08-22
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-28
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.47732 / -121.67573			Accuracy:	80 meters		
UTM:	Zone-10 N4259608 E615511			Elevation (ft):	25		
PLSS:	T07N, R03E, Sec. 06, SE (M)			Acres:	0.0		
Location:	WEST SIDE OF ROAD 105, 0.7 MILE SOUTH OF ROAD 36, 5.4 MILES SE OF DAVIS.						
Detailed Location:	NEST TREE WAS THE BLACK WALNUT AT THE SE CORNER OF THE FARMSTEAD AT 31680 ROAD 105. MAPPED TO COORDINATES FROM FIELD SURVEY FORMS, RESSEGUIE SITE SAXON 2.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE SOUTH, NE, AND WEST, AND SAFFLOWER TO THE SE.						
General:	NEST SITE LIKELY OCCUPIED IN 2001. NEST MONITORED 4 APR-15 AUG 2002; 1 CHICK OBSERVED ON 15 AUG 2002; 1 FLEDGED. NEST MONITORED 18 MAR-13 JUL 2004; 1 FLEDGED. NEST MONITORED 28 FEB-22 AUG 2005; OCCUPIED, BUT NO CHICK DETECTED.						
Owner/Manager:	PVT						



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Occurrence No.	1324	Map Index:	56451	EO Index:	56467	Element Last Seen:	2005-07-30
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:			2005-07-30
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2011-09-28

Quad Summary: Saxon (3812146)

County Summary: Solano

Lat/Long:	38.39688 / -121.73187	Accuracy:	80 meters
UTM:	Zone-10 N4250612 E610736	Elevation (ft):	25
PLSS:	T06N, R02E, Sec. 03, NE (M)	Acres:	0.0

Location: 0.2 MILE NORTH OF THE INTERSECTION OF TREFOIL ROAD AND ETZEL ROAD, 5.5 MILES SE OF DIXON.

Detailed Location: RESSEGUIE'S SAXON 14. 2004 NEST LOCATED AT THE 80% HEIGHT OF A LOCUST IN THE SE CORNER OF A GROVE OF TREES. 2005 NEST WAS LOCATED IN A WALNUT IN THE SE PART OF THE GROVE.

Ecological: NEST TREE WAS A LOCUST; SURROUNDED BY CULTIVATED LAND TO THE WEST, ALFALFA CLOSE, THEN PASTURE.

General: SITE SUSPECTED IN 2001, BUT NOT CONFIRMED. NEST MONITORED 18 MAR-5 AUG 2004; 1 FLEDGED. NEST MONITORED 30 MAR-30 JUL 2005; 1 ADVANCED DEAD CHICK FOUND BELOW NEST AND 1 FLEDGED.

Owner/Manager: PVT

Occurrence No.	1325	Map Index:	56452	EO Index:	56468	Element Last Seen:	2005-08-21
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:			2005-08-21
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2011-09-28

Quad Summary: Saxon (3812146)

County Summary: Solano

Lat/Long:	38.41371 / -121.73993	Accuracy:	80 meters
UTM:	Zone-10 N4252471 E610008	Elevation (ft):	30
PLSS:	T07N, R02E, Sec. 34, NW (M)	Acres:	0.0

Location: 0.2 MILE SOUTH OF MIDWAY ROAD, 0.5 MILE EAST OF SIKES ROAD, 5 MILES SE OF DIXON.

Detailed Location: RESSEGUIE'S SAXON 21. 2004 NEST TREE LOCATED WITHIN A CLUMP OF TREES ALONG A PRIVATE DIRT ROAD. NEST/BIRDS DIFFICULT TO SEE.

Ecological: NEST TREE WAS A LOCUST; SUNFLOWERS GROWING TO THE WEST AND A HARVESTED WHEAT FIELD TO THE EAST.

General: SITE OCCUPIED BY RTHA IN 2001. PROBABLY UNOCCUPIED IN 2002. NEST MONITORED 18 MAR-5 AUG 2004; 1 FLEDGED. NEST MONITORED 23 APR-21 AUG 2005; POSSIBLE MISSED FLEDGLING.

Owner/Manager: PVT



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Occurrence No.	1326	Map Index:	56454	EO Index:	56470	Element Last Seen:	2005-07-29
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.44835 / -121.74626			Accuracy:	80 meters		
UTM:	Zone-10 N4256307 E609403			Elevation (ft):	40		
PLSS:	T07N, R02E, Sec. 15, SW (M)			Acres:	0.0		
Location:	EAST OF SIKES ROAD, 0.25 MILE SOUTH OF HACKMAN ROAD, 4 MILES EAST OF DIXON.						
Detailed Location:	2002 SITE FROM CDFW NEST RECORDS. MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 29: SECOND TREE FROM WEST, NORTH OF THE DRIVEWAY OF A LARGE FARMSTEAD AT 7890 SIKES ROAD (NEST VIEWED FROM ENE OF NEST TREE, NOT FROM THE ROAD).						
Ecological:	2002 NEST TREE IDENTIFIED AS A WALNUT. 2004 NEST AT 80% HEIGHT OF A LOCUST; CULTIVATED LAND IN ALL DIRECTIONS.						
General:	ACTIVE NEST OBSERVED ON 29 MAY 2002; NOTHING VISIBLE IN RETURN VISIT ON 25 JUN. NEST MONITORED 18 MAR-13 JUL 2004; 2 FLEDGED. NEST MONITORED 1 MAR-29 JUL 2005; 2 FLEDGED.						
Owner/Manager:	PVT						
Occurrence No.	1327	Map Index:	56458	EO Index:	56474	Element Last Seen:	2005-05-09
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48784 / -121.72292			Accuracy:	80 meters		
UTM:	Zone-10 N4260717 E611379			Elevation (ft):	35		
PLSS:	T07N, R02E, Sec. 02, NE (M)			Acres:	0.0		
Location:	EAST SIDE OF BULKLEY ROAD, 0.5 MILE SOUTH OF TREMONT ROAD, 6 MILES NE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 30. 2004 NEST LOCATED AT THE 90% HEIGHT, ON THE EAST SIDE, OF A RAGGED COTTONWOOD (EASTMOST OF THE LARGER TREES ON THE NORTH EDGE OF THE FARMSTEAD).						
Ecological:	NEST TREE WAS A COTTONWOOD; SURROUNDED BY ALFALFA TO THE WEST, NORTH, AND SOUTH.						
General:	NEST MONITORED 7 APR-5 AUG 2004; 1 FLEDGED. NEST MONITORED 22 APR-10 AUG 2005; INCUBATION OBSERVED ON 9 MAY, BUT NO FURTHER SIGHTINGS.						
Owner/Manager:	PVT						



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Occurrence No.	1328	Map Index:	56459	EO Index:	56475	Element Last Seen:	2004-08-20
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-08-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40147 / -121.72100				Accuracy:	80 meters	
UTM:	Zone-10 N4251135 E611679				Elevation (ft):	25	
PLSS:	T06N, R02E, Sec. 02, NE (M)				Acres:	0.0	
Location:	JUST SE OF THE INTERSECTION OF BULKLEY ROAD AND KING ROAD, 6 MILES SE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 31. 2004 NEST DIFFICULT TO SEE.						
Ecological:	NEST TREE WAS A PINE.						
General:	NEST MONITORED 12 APR-20 AUG 2004; ADULTS SEEN, FLEDGING OUTCOME UNKNOWN. INACTIVE IN 2005.						
Owner/Manager:	PVT						

Occurrence No.	1329	Map Index:	56460	EO Index:	56476	Element Last Seen:	2005-07-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.47411 / -121.70446				Accuracy:	80 meters	
UTM:	Zone-10 N4259216 E613010				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 12, SW (M)				Acres:	0.0	
Location:	SOUTH SIDE OF MAXWELL ROAD, 0.8 MILE EAST OF BULKLEY ROAD, 6 MILES ENE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 33. 2004 NEST LOCATED IN AN ELM AT THE SE CORNER OF THE HOUSE AT 8292 MAXWELL ROAD. 2005 NEST LOCATED IN A DEODAR CEDAR BETWEEN THE HOUSE AND THE ROAD.						
Ecological:	NEST TREE WAS A DEODAR CEDAR (2005).						
General:	NEST MONITORED 17 MAY-10 AUG 2004; 3 YOUNG FLEDGED. NEST MONITORED 11 APR-16 JUL 2005; 2 FLEDGED.						
Owner/Manager:	PVT						

Occurrence No.	1330	Map Index:	56461	EO Index:	56477	Element Last Seen:	2004-08-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-08-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-08-24
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48463 / -121.69861				Accuracy:	80 meters	
UTM:	Zone-10 N4260391 E613504				Elevation (ft):	25	
PLSS:	T07N, R02E, Sec. 01, NE (M)				Acres:	0.0	
Location:	SW OF THE INTERSECTION OF ROAD 36 AND THE WEST END OF MACE ROAD (HWY 104), 7 MILES ENE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 34. 2004 NEST TREE IS THE EASTMOST BLUE GUM EUCALYPTUS IN A ROW.						
Ecological:	NEST TREE IS A BLUE GUM EUCALYPTUS; SURROUNDED BY RUDERAL NORTH TO A FARMSTEAD AND CULTIVATED LAND TO THE SOUTH.						
General:	INADEQUATE OBSERVATION DUE TO DIFFICULTY GAINING ACCESS IN 2004. NEST MONITORED 19 MAY-12 AUG 2004; ON 19 MAY, ADULT DEFENDED NEST AND BEGGING CALLS WERE HEARD FROM THE NEXT TREE.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1331	Map Index:	56474	EO Index:	56490	Element Last Seen:	2005-04-12
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.49541 / -121.73128				Accuracy:	80 meters	
UTM:	Zone-10 N4261547 E610638				Elevation (ft):	40	
PLSS:	T08N, R02E, Sec. 35, NW (M)				Acres:	0.0	
Location:	NORTH SIDE OF TREMONT ROAD, JUST EAST OF EGGERT ROAD, 6 MILES NE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 35. SITE WAS LOCATED AT 8752 EGGERT ROAD, WHERE A NEW HOUSE WAS UNDER CONSTRUCTION IN 2004. NEST TREE WAS A EUCALYPTUS.						
Ecological:	NEST TREE WAS A BLUE GUM EUCALYPTUS; SURROUNDED BY A NEW ALMOND ORCHARD TO THE SOUTH AND EAST AND A WALNUT ORCHARD, JUST BEGINNING PRODUCTION, TO THE NORTH.						
General:	NEST SITE MONITORED 19 MAY-17 AUG 2004; ADULTS CONSISTENTLY PRESENT FROM 30 MAY-13 AUG, BUT NEST COULD NOT BE FOUND (NESTING PRESUMED). NEST MONITORED 12 APR-16 JUL 2005; NEST-BUILDING OBSERVED ON 12 APR, BUT NO LATER SIGHTINGS.						
Owner/Manager:	PVT						
Occurrence No.	1332	Map Index:	56475	EO Index:	56491	Element Last Seen:	2005-07-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-28
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.47425 / -121.71807				Accuracy:	80 meters	
UTM:	Zone-10 N4259215 E611823				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 11, SE (M)				Acres:	0.0	
Location:	NORTH SIDE OF MAXWELL ROAD, 0.15 MILE EAST OF BULKLEY ROAD, 6 MILES ENE OF DIXON.						
Detailed Location:	RESSEGUIE'S SAXON 36. SITE IS LOCATED AT A FARMSTEAD AT 8093 MAXWELL ROAD. 2004 NEST LOCATED AT THE 90% HEIGHT, ON THE SOUTH SIDE, OF THE SOUTHMOST RED GUM EUCALYPTUS WITHIN A NORTH-SOUTH ROW.						
Ecological:	NEST TREE WAS A RED GUM EUCALYPTUS.						
General:	NEST SITE MONITORED 5 AUG-10 AUG 2004; 1 YOUNG FLEDGED. NEST MONITORED 22 APR-11 AUG 2005; 1 LARGE CHICK SEEN ON 4 JUL, BUT NO FLEDGLING DETECTED.						
Owner/Manager:	PVT						



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Occurrence No.	1334	Map Index:	56574	EO Index:	56590	Element Last Seen:	2005-08-09
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-29
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.44004 / -121.58449				Accuracy:	80 meters	
UTM:	Zone-10 N4255589 E623534				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 19 (M)				Acres:	0.0	
Location:	WEST SIDE OF JEFFERSON BOULEVARD (HIGHWAY 84), 0.4 MILE SOUTH OF BABEL SLOUGH, 3 MILES NW OF CLARKSBURG.						
Detailed Location:	RESSEGUIE'S CLARKSBURG 3. 2004 NEST WAS LOCATED AT THE 85% HEIGHT, ON THE NE SIDE, OF A RAGGED COTTONWOOD FOUND 125 METERS FROM THE ROAD. 2005 NEST WAS LOCATED AT THE 75% HEIGHT OF THE SMALL OAK (NORTHMOST TREE OF 3RD CLUMP WEST OF ROAD).						
Ecological:	NEST TREE WAS AN OAK; SURROUNDED BY ALFALFA TO THE NORTH AND SOUTH.						
General:	NEST SITE MONITORED 28 MAR-3 AUG 2004; 3 YOUNG FLEDGED. NEST MONITORED 20 APR-9 AUG 2005; 1 FLEDGED.						
Owner/Manager:	PVT						

Occurrence No.	1335	Map Index:	56575	EO Index:	56591	Element Last Seen:	2007-XX-XX
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.43319 / -121.58271				Accuracy:	specific area	
UTM:	Zone-10 N4254832 E623701				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 30, NW (M)				Acres:	11.0	
Location:	ALONG JEFFERSON BOULEVARD (HIGHWAY 84), ABOUT 0.9 MILE SOUTH OF BABEL SLOUGH AND 2.5 MILES NW OF CLARKSBURG.						
Detailed Location:	TWO SITES: SOUTH SITE AT JEFFERSON BLVD ACTIVE 2004-05 (RESSEGUIE SITE CLARKSBURG 5) AND 2007 (ESTEP SITE YO-55); NORTH SITE ACTIVE 2007 (ESTEP SITE YO-91).						
Ecological:	2004 NEST DIFFICULT TO SEE, IN AN E-W ROW OF SMALL COTTONWOODS AT A FIELD BOUNDARY 0.3 MILE N OF WILLOW POINT WEST RD; WITH ALFALFA TO NE/W, CULTIVATED TO SE. 2007 NESTS IN RIPARIAN WILLOW (YO-91) AND ROADSIDE WALNUT (YO-55).						
General:	NEST MONITORED 28 MAR-11 AUG 2004; 3 YOUNG FLEDGED. NEST MONITORED 29 MAR-18 AUG 2005; POSSIBLE FLEDGLING OBSERVED ON 28 JUL 2005. 1 YOUNG SEEN IN YO-55 NEST, AND UNKNOWN OUTCOME AT YO-91 IN 2007.						
Owner/Manager:	PVT						



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Occurrence No.	1336	Map Index:	56577	EO Index:	56593	Element Last Seen:	2009-05-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.44602 / -121.58409			Accuracy:	nonspecific area		
UTM:	Zone-10 N4256253 E623559			Elevation (ft):	5		
PLSS:	T07N, R04E, Sec. 19, NW (M)			Acres:	17.0		
Location:	WEST SIDE OF JEFFERSON BOULEVARD (HIGHWAY 84) AND ALONG THE SOUTH OF BABEL SLOUGH, 3.25 MILES NW OF CLARKSBURG.						
Detailed Location:	1992: DETECTION IN VICINITY, REPORTED ON FIELD SURVEY FORM. 2004-05: RESSEGUIE SITE "CLARKSBURG 8" FROM FIELD SURVEY FORMS. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN SURVEY DATA 2009-2010.						
Ecological:	2004: NEST IN LARGE VALLEY OAK AT 80% HEIGHT; AT THE SOUTH MARGIN OF AN OPEN FIELD. 2005: GREAT HORNED OWL OCCUPYING 2004 NEST, NEW NEST NOT FOUND. 2009: NEST IN BAND OF OAKS BETWEEN WHEAT & ALFALFA FIELDS.						
General:	1992: 1 SEEN FORAGING IN VICINITY. 2004: NEST MONITORED 4 MAY-3 AUG; 1 YOUNG FLEDGED. NEST SITE MONITORED IN 2005 WITH ADULTS PRESENT APR-JUL, BUT NO NEST FOUND. AT LEAST 1, MAYBE 2, ACTIVE NESTS OBSERVED IN 2009; SUCCESS UNKNOWN.						
Owner/Manager:	PVT						

Occurrence No.	1337	Map Index:	56578	EO Index:	56594	Element Last Seen:	2005-08-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-29
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42461 / -121.58282			Accuracy:	80 meters		
UTM:	Zone-10 N4253879 E623706			Elevation (ft):	5		
PLSS:	T07N, R04E, Sec. 30 (M)			Acres:	0.0		
Location:	EAST SIDE OF JEFFERSON BOULEVARD (HIGHWAY 84), 0.3 MILE SOUTH OF WILLOW POINT ROAD, 2.6 MILES WEST OF CLARKSBURG.						
Detailed Location:	RESSEGUIE'S CLARKSBURG 10. 2004 NEST WAS LOCATED AT THE 90% HEIGHT OF AN EAST SHOULDER BLACK WALNUT.						
Ecological:	NEST TREE WAS A BLACK WALNUT; SURROUNDED BY CULTIVATED LAND TO THE EAST, VINEYARD TO THE WEST, AND HARVEY LYMAN AG SERVICE TO THE SW.						
General:	NEST SITE MONITORED 15 MAY-3 AUG 2004; 1 YOUNG FLEDGED. NEST MONITORED 29 MAR-18 AUG 2005; ADULTS OBSERVED DEFENDING THE 2004 NEST, BUT NO YOUNG OBSERVED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1338	Map Index:	56579	EO Index:	56595	Element Last Seen:	2007-XX-XX
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.41467 / -121.58863				Accuracy:	specific area	
UTM:	Zone-10 N4252769 E623215				Elevation (ft):	5	
PLSS:	T07N, R03E, Sec. 36, NE (M)				Acres:	9.0	
Location:	NORTH SIDE OF CLARKSBURG ROAD, 0.3 MILE WEST OF JEFFERSON BOULEVARD, 3 MILES WEST OF CLARKSBURG.						
Detailed Location:	2004-2005: NEST WAS LOCATED AT THE 80% HEIGHT OF THE TALLEST WILLOW ON THE NORTH SIDE OF A DITCH ALONG THE NORTH SIDE OF THE ROAD. RESSEGUIE'S CLARKSBURG 13. 2007: SITE YO58 FROM 2008 ESTEP REPORT, GIVEN COORDINATES ABOUT 90 M EAST.						
Ecological:	2004-05: NEST TREE WAS A WILLOW; SURROUNDED BY ALFALFA TO THE NE, RUDERAL TO THE NW, AND SUDAN GRASS TO THE SOUTH. 2007: NEST IN WILLOW IN ROADSIDE TREE ROW, SURROUNDED BY ALFALFA AND IRRIGATED CROPS.						
General:	NEST SITE MONITORED 6 JUN-27 JUL 2004; 3 YOUNG FLEDGED. NEST MONITORED 12 FEB-28 JUL 2005; 1 YOUNG FLEDGED. NEST IN 2007 FAILED.						
Owner/Manager:	PVT						

Occurrence No.	1339	Map Index:	56581	EO Index:	56597	Element Last Seen:	2009-07-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-10
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42943 / -121.57264				Accuracy:	specific area	
UTM:	Zone-10 N4254428 E624586				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 29, NW (M)				Acres:	14.0	
Location:	ALONG WILLOW POINT ROAD, ABOUT 0.5 MILE EAST OF JEFFERSON BOULEVARD & 2.25 MILES WNW OF CLARKSBURG.						
Detailed Location:	1994: TERRITORY "YO" (NO # ASSIGNED) FROM DFG DATABASE OF SWHA OBSERVATIONS, 1979-94. 2004-05: RESSEGUIE SITE "CLARKSBURG 15." 2004 NEST ON S SIDE OF ROAD. 2005 NEST 0.1 MI E, ON N SIDE. 2009: POINT FROM DFG SHAPEFILE OF NEST RECORDS, 2009.						
Ecological:	1994: NEST IN NATIVE TREE. 2004: NEST AT 90% HEIGHT IN SYCAMORE SURROUNDED BY ALFALFA, WITH TOMATOES SE. 2005: NEST IN TALL ROADSIDE PINE AT 95% HEIGHT. 2009: PRESUMED NEST IN 50' NON-NATIVE TREE, SURROUNDED BY VINEYARD WITH CROPS TO NW.						
General:	1994: NEST WITH 2 YOUNG OBSERVED ON 4 AUG. 2004: NEST MONITORED 10 JUL-3 AUG; 2 YOUNG HATCHED, 1 FLEDGED & 1 PREDATED. 2005: ACTIVE NEST MONITORED 6 MAR-18 AUG; NO YOUNG DETECTED. 2009: ACTIVITY OBS AROUND NEST ON 14 JUL, NO YOUNG DETECTED.						
Owner/Manager:	PVT						



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Occurrence No.	1340	Map Index:	56585	EO Index:	56601	Element Last Seen:	2004-08-03
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-29
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42554 / -121.54396			Accuracy:	80 meters		
UTM:	Zone-10 N4254036 E627097			Elevation (ft):	5		
PLSS:	T07N, R04E, Sec. 28 (M)			Acres:	0.0		
Location:	SOUTH SIDE OF WILLOW POINT ROAD, 0.4 MILE WEST OF WILLOW AVENUE, 0.7 MILE NW OF CLARKSBURG.						
Detailed Location:	RESSEGUIE'S CLARKSBURG 17. 2004 NEST WAS LOCATED AT THE 90% HEIGHT OF A MULTI-TRUNKED BLUE GUM EUCALYPTUS, AT THE SW CORNER OF THE FARMSTEAD AT 52105 WILLOW POINT ROAD.						
Ecological:	NEST TREE WAS A BLUE GUM EUCALYPTUS; SURROUNDED BY CULTIVATED LAND.						
General:	NEST SITE MONITORED 27 JUL-3 AUG 2004; 1 YOUNG FLEDGED. NEST SITE MONITORED 20 APR-28 JUL 2005; UNOCCUPIED IN 2005.						
Owner/Manager:	PVT						

Occurrence No.	1341	Map Index:	56587	EO Index:	56603	Element Last Seen:	2005-05-08
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.34413 / -121.60205			Accuracy:	nonspecific area		
UTM:	Zone-10 N4244923 E622162			Elevation (ft):	5		
PLSS:	T06N, R03E, Sec. 25, NW (M)			Acres:	13.0		
Location:	SOUTH SIDE OF COURTLAND ROAD, 0.5 MILE WEST OF MORSE (=MORRIS) ROAD, 2 MILES NW OF COURTLAND.						
Detailed Location:	COURTLAND 3 SITE. 2004 NEST TREE ON S SHOULDER 0.5 MILE W OF MORSE. 2005-06 NEST TREE ON S SHOULDER 0.35 MILE W OF MORSE, "FIRST TREE EAST OF 2004 NEST TREE." 2004 TREE (W) APPEARS TO HAVE FALLEN OVER, 2009+ AERIALS & GOOGLE STREET VIEW.						
Ecological:	2004: NEST IN A COTTONWOOD; VINEYARDS TO N & S, RUDERAL TO N ALONG THE ROAD & TO S ALONG LARGE DITCH. 2005: NEW NEST IN WILLOW VACATED, NEST BUILDING IN TREE FROM '04. 2006: NESTING AT NEW TREE FROM '05, WILLOW OR COTTONWOOD (UNCLEAR).						
General:	MONITORED 15 MAY-3 AUG 2004: 1 YOUNG FLEDGED. INCUBATION OBS 8 MAY 2005, NEW NEST VACANT BY 29 MAY, TWIGS CARRIED TO '04 NEST TREE ON 2 JUL, NO NEST/YOUNG BY 29 JUL. 2006: INCUBATION OBS 22 MAY, PAIR DEFENSIVE 3 AUG, NO YOUNG BY 14 AUG.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1342	Map Index:	56589	EO Index:	56605	Element Last Seen:	2005-08-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.36551 / -121.58402				Accuracy:	nonspecific area	
UTM:	Zone-10 N4247319 E623702				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 18, SW (M)				Acres:	10.0	
Location:	EAST SIDE OF JEFFERSON BOULEVARD, 0.3 MILE SOUTH OF SOUTH NETHERLANDS ROAD, 2.5 MILES NNW OF COURTLAND.						
Detailed Location:	2003: COORDINATES FROM DFG DATABASE OF SWAINSON'S HAWK NEST RECORDS, 2000-2004. 2004 NEST IN FIRST TREE S OF DIRT ROAD RUNNING E, ON E SHOULDER OF ROAD; UTMS DON'T MATCH DESCRIPTION.						
Ecological:	2003: NEST TREE A 40' WALNUT WITH ORCHARD/VINEYARD TO NE & SE AND GRAZING TO NW & SW. 2004: NEST TREE WAS A BLACK WALNUT; SURROUNDED BY A VINEYARD TO THE EAST AND ALFALFA TO THE WEST.						
General:	2003: 1 FEATHERED YOUNG SEEN IN NEST ON 2 JUN. 2004: NEST MONITORED 27 JUL-3 AUG; 1 YOUNG FLEDGED. 2005: NEST SITE MONITORED 21 APR-18 AUG; ADULTS DEFENDED SITE, BUT NO NEST OR YOUNG SEEN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1368	Map Index:	56864	EO Index:	56880	Element Last Seen:	2009-04-23
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-04-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48727 / -121.67751				Accuracy:	80 meters	
UTM:	Zone-10 N4260709 E615340				Elevation (ft):	25	
PLSS:	T07N, R03E, Sec. 06, NE (M)				Acres:	0.0	
Location:	JUST SW OF THE INTERSECTION OF ROAD 105 AND ROAD 36, 5 MILES SE OF DAVIS.						
Detailed Location:	VICINITY OF TERRITORY "YO" (NO # ASSIGNED) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO UTMS GIVEN FOR RESSEGUIE'S SAXON 17.5 SITE. THE SAME NEST TREE WAS USED FOR MULTIPLE YEARS.						
Ecological:	NEST TREE WAS A 100' BLUE GUM JUST INSIDE THE FENCE OF THE MIGRANT LABOR CAMP PROPERTY; SURROUNDED BY A WASTEWATER DISPOSAL AREA TO THE SW, THEN ALFALFA, RUDERAL TO THE NORTH, AND ALFALFA TO THE NE AND SE.						
General:	ACTIVE, INCUBATION OBSERVED ON 21 JUN 1994. NEST USED BY RED-TAILED HAWKS BEFORE 2004 (& GREAT HORNED OWLS IN 2000). MONITORED MAR-JUL 2004; 1 YOUNG FLEDGED. MONITORED FEB-JUL 2005; 1 FLEDGED. ACTIVE, INCUBATION OBS ON 23 APR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1422	Map Index:	61127	EO Index:	61163	Element Last Seen:	2004-05-23
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-05-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-04-27
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35787 / -121.41736			Accuracy:	80 meters		
UTM:	Zone-10 N4246708 E638276			Elevation (ft):	25		
PLSS:	T06N, R05E, Sec. 22, NE (M)			Acres:	0.0		
Location:	EAST SIDE OF BRUCEVILLE ROAD, 0.5 MILE NORTH OF ESCHINGER ROAD.						
Detailed Location:							
Ecological:	NEST TREE IS A EUCALYPTUS.						
General:	1 DARK-MORPH FEMALE OBSERVED ON NEST ON 23 MAY 2004; NEST FAILED WHEN IT WAS BLOWN OUT OF THE NEST TREE, AND THERE WAS NO ATTEMPT AT RE-NESTING.						
Owner/Manager:	PVT						
Occurrence No.	1423	Map Index:	61128	EO Index:	61164	Element Last Seen:	2004-05-25
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-05-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-04-27
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35433 / -121.40420			Accuracy:	80 meters		
UTM:	Zone-10 N4246335 E639433			Elevation (ft):	30		
PLSS:	T06N, R05E, Sec. 23, SW (M)			Acres:	0.0		
Location:	0.25 MILE NORTH OF ESCHINGER ROAD AND 0.7 MILE EAST OF BRUCEVILLE ROAD, 3.75 MILES SW OF ELK GROVE.						
Detailed Location:							
Ecological:	NEST TREE IS A FREMONT COTTONWOOD ALONG A DRAINAGE CANAL; SURROUNDED BY PASTURE LAND.						
General:	2 ADULTS SUCCESSFULLY FLEDGED 2 CHICKS IN 2004.						
Owner/Manager:	PVT						
Occurrence No.	1429	Map Index:	61562	EO Index:	61598	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25677 / -121.45644			Accuracy:	nonspecific area		
UTM:	Zone-10 N4235431 E635050			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 29, N (M)			Acres:	13.0		
Location:	SOUTH BANK OF THE MOKELUMNE RIVER, ABOUT 0.4 MILE W OF I-5 BRIDGE AND 3 MILES ENE OF WALNUT GROVE.						
Detailed Location:	2005: COORDINATES FROM FIELD SURVEY FORM. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010. 2009 NEST SITE ABOUT 0.1 MILE E OF 2005 SITE.						
Ecological:	2005: NEST TREE WAS A VALLEY OAK WITHIN RIPARIAN HABITAT ALONG THE MOKELUMNE RIVER; FLOCKS OF TRICOLORED BLACKBIRDS OBSERVED IN THE VICINITY ON 3 JUN. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	FEMALE OBSERVED ON NEST ON 3 MAY 2005. ONE SWAINSON'S HAWK OBSERVED ON NEST WITH ONE PERCHED NEARBY ON 14 MAY, AND 1 NESTING SWHA OBSERVED ON 26 MAY 2009.						
Owner/Manager:	RECLAMATION DISTRICT 348						



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Occurrence No.	1440	Map Index:	62296	EO Index:	62333	Element Last Seen:	2005-07-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-08-15
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40555 / -121.72188			Accuracy:	80 meters		
UTM:	Zone-10 N4251587 E611596			Elevation (ft):	25		
PLSS:	T07N, R02E, Sec. 35, SW (M)			Acres:	0.0		
Location:	ALONG THE WEST SIDE OF BULKLEY ROAD, 0.25 MILE NORTH OF KING ROAD, 13 MILES SW OF DAVIS.						
Detailed Location:	RESSEGUIE'S SAXON 38. NEST TREE WAS LOCATED AT A SMALL FARMSTEAD CONTAINING LOCUST TREES. NEST WAS LOCATED AT THE 2/3 HEIGHT OF THE TALLEST LOCUST NW OF THE HOUSE.						
Ecological:	NEST TREE IS A LOCUST; SURROUNDED BY ALFALFA TO THE NE AND CULTIVATED LAND IN ALL OTHER DIRECTIONS.						
General:	NEST MONITORED 22 APR-16 JUL 2005; 1 FLEDGED.						
Owner/Manager:	PVT						

Occurrence No.	1451	Map Index:	62340	EO Index:	62377	Element Last Seen:	2009-07-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-29
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.41476 / -121.59765			Accuracy:	80 meters		
UTM:	Zone-10 N4252766 E622427			Elevation (ft):	5		
PLSS:	T07N, R03E, Sec. 36, NW (M)			Acres:	0.0		
Location:	NORTH SHOULDER OF CLARKSBURG ROAD, 0.8 MILE WEST OF JEFFERSON BOULEVARD, 3.5 MILES WEST OF CLARKSBURG.						
Detailed Location:	2005: NEST IN FIRST TREE EAST OF THE DIRT ROAD LEADING N, ON N SIDE OF CLARKSBURG RD, RESSEGUIE SITE CLARKSBURG 20; UTMS FROM FIELD SURVEY FORM. 2009: DETECTION FROM DFG SHAPEFILE OF NEST SITES RECORDED 2009, ABOUT 0.1 MILE FURTHER SE.						
Ecological:	2005: NEST AT 90% HEIGHT IN OAK WITHIN A LINE OF TREES ALONG THE NORTH SHOULDER; SURROUNDED BY ALFALFA TO THE NORTH AND SOUTH. 2009: POSSIBLE NEST IN 30' TREE CODED AS "OTHER EXOTIC" (NOT EUCALYPTUS OR WALNUT), SURROUNDED BY ALFALFA.						
General:	2005: NEST MONITORED 10 APR-9 AUG; 2 FLEDGED. 2009: SWAINSON'S HAWK ACTIVITY OBSERVED IN VICINITY ON 14 JUL; ACTIVE NEST PRESUMED, BUT SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1461	Map Index:	62361	EO Index:	62398	Element Last Seen:	2005-07-28
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-08-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.39306 / -121.60610				Accuracy:	80 meters	
UTM:	Zone-10 N4250348 E621727				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 02 (M)				Acres:	0.0	
Location:	SOUTH SHOULDER OF CENTRAL AVENUE, 0.3 MILE EAST OF Z LINE ROAD, 4.5 MILES WSW OF CLARKSBURG.						
Detailed Location:	NEST LOCATED AT THE 80% HEIGHT, SOUTH OF CENTER, OF THE EASTMOST SHOULDER TREE.						
Ecological:	NEST TREE IS A BLACK WALNUT.						
General:	NEST MONITORED 10 APR-28 JUL 2005; ADULTS OBSERVED NEST-BUILDING ON 10 APR, WHITEWASH AND PELLETS BENEATH TREE ON 12 JUN, AND ADULTS PRESENT, BUT NO CHICK EVER DETECTED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1462	Map Index:	62366	EO Index:	62403	Element Last Seen:	2005-07-13
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-07-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-08-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42814 / -121.55777				Accuracy:	80 meters	
UTM:	Zone-10 N4254304 E625886				Elevation (ft):	3	
PLSS:	T07N, R04E, Sec. 29 (M)				Acres:	0.0	
Location:	SOUTH SIDE OF WILLOW POINT ROAD, 1.3 MILES EAST OF JEFFERSON BOULEVARD, 1.6 MILES WNW OF CLARKSBURG.						
Detailed Location:	NEST LOCATED AT THE 90% HEIGHT, JUST SOUTH OF THE TREES AROUND THE FARMSTEAD HOUSE.						
Ecological:	NEST TREE IS A BLACK WALNUT; SURROUNDED BY ALFALFA TO THE SOUTH AND CULTIVATED LAND TO THE NORTH.						
General:	NESTING STRONGLY SUSPECTED IN 2004, BUT NEVER CONFIRMED. NEST MONITORED 20 APR-13 JUL 2005; 2 FLEDGED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1463	Map Index:	62368	EO Index:	62405	Element Last Seen:	2009-04-15
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-04-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.40935 / -121.55507				Accuracy:	specific area	
UTM:	Zone-10 N4252223 E626154				Elevation (ft):	3	
PLSS:	T07N, R04E, Sec. 33, SW (M)				Acres:	10.0	
Location:	ALONG TULE ROAD, ABOUT 0.4 MILE SOUTH OF CLARKSBURG ROAD INTERSECTION AND 1.7 MILES SW OF CLARKSBURG.						
Detailed Location:	MAPPED TO COORDINATES FROM 2005 FIELD SURVEY FORM & DFG SHAPEFILE OF NEST SITES FROM 2009.						
Ecological:	2005: NEST IN TALL COTTONWOOD AT 75% HEIGHT; ALFALFA TO THE NORTH & SOUTH AND VINEYARDS TO THE EAST. 2009: NEST IN 30' VALLEY OAK WITH VINEYARDS TO EAST AND ALFALFA & OTHER CROPS TO WEST.						
General:	2005: ACTIVE NEST MONITORED MAY-JUL; 1 DOWNY CHICK OBSERVED ON 12 JUN WAS LATER PREDATED (CARCASS FOUND JUST SOUTH OF NEST TREE). 2009: ACTIVE NEST, INCUBATION OBSERVED ON 15 APR.						
Owner/Manager:	PVT						



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Occurrence No.	1464	Map Index:	62369	EO Index:	62406	Element Last Seen:	2009-05-18
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-05-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.39590 / -121.56764			Accuracy:	specific area		
UTM:	Zone-10 N4250714 E625080			Elevation (ft):	1		
PLSS:	T06N, R04E, Sec. 05, S (M)			Acres:	10.0		
Location:	NORTH SIDE OF CENTRAL AVENUE, JUST EAST OF MAIN SLOUGH (=MAIN DRAINAGE CANAL), ABOUT 2.6 MILES SW OF CLARKSBURG.						
Detailed Location:	2005: NEST LOCATED OVER THE NORTH ROAD SHOULDER, IN THE FIRST BLACK WALNUT EAST OF THE SLOUGH; UTMS FROM FIELD SURVEY FORM. 2009: NEST ABOUT 1/4 MILE FURTHER EAST ON CENTRAL; COORDINATES FROM DFG SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2005: NEST TREE WAS A BLACK WALNUT SURROUNDED BY ALFALFA TO THE SOUTH AND CULTIVATED LAND TO THE NORTH. 2009: NEST IN TREE CODED AS "OTHER NATIVE" (NOT VALLEY/BLUE OAK, COTTONWOOD, WILLOW, OR PINE), WITH ALFALFA TO NORTH & CROPLAND SOUTH.						
General:	NEST MONITORED 29 MAY-28 JUL 2005; 1 FLEDGED. ACTIVE NEST WITH INCUBATION OBSERVED ON 18 MAY 2009.						
Owner/Manager:	PVT						

Occurrence No.	1472	Map Index:	62463	EO Index:	62500	Element Last Seen:	2005-08-19
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2005-08-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-09-01
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.41585 / -121.73031			Accuracy:	80 meters		
UTM:	Zone-10 N4252719 E610844			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 35, NW (M)			Acres:	0.0		
Location:	NORTH SIDE OF MIDWAY ROAD, 0.5 MILE WEST OF BULKLEY ROAD, 5.3 MILES SE OF DIXON.						
Detailed Location:							
Ecological:	NEST TREE IS UNKNOWN; SURROUNDED BY TREES AND BUILDINGS TO THE NORTH AND MANY SUITABLE TREES TO THE SOUTH.						
General:	SUSPECTED AS A NEST SITE IN 2001, BUT NOT CONFIRMED. UNOCCUPIED IN 2002. NEST SITE MONITORED 23 APR-19 AUG 2005; 1 CHICK FLEDGED, BUT NEST WAS NOT VISIBLE.						
Owner/Manager:	PVT						



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Occurrence No.	1473	Map Index:	62465	EO Index:	62502	Element Last Seen:	2005-07-29
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-07-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-09-01
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.43591 / -121.74814				Accuracy:	80 meters	
UTM:	Zone-10 N4254924 E609257				Elevation (ft):	40	
PLSS:	T07N, R02E, Sec. 22, SW (M)				Acres:	0.0	
Location:	EAST SIDE OF SIKES ROAD, 0.3 MILE NORTH OF MILLER ROAD, 4 MILES ESE OF DIXON.						
Detailed Location:							
Ecological:	NEST TREE IS UNKNOWN; SURROUNDED BY ALFALFA TO THE WEST, PASTURE TO THE SOUTH AND EAST, AND ANOTHER FARMSTEAD TO THE NORTH.						
General:	NEST SITE MONITORED 23 APR-29 JUL 2005; ADULTS DEFENDED THE AREA, BUT NO NEST OR CHICK EVER OBSERVED.						
Owner/Manager:	PVT						

Occurrence No.	1474	Map Index:	62466	EO Index:	62503	Element Last Seen:	2005-08-21
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-08-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-09-01
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.49505 / -121.69942				Accuracy:	80 meters	
UTM:	Zone-10 N4261546 E613417				Elevation (ft):	35	
PLSS:	T08N, R02E, Sec. 36, NE (M)				Acres:	0.0	
Location:	NORTH SHOULDER OF TREMONT ROAD, 0.3 MILE NORTH OF MILLER ROAD, 4 MILES SE OF DAVIS.						
Detailed Location:	NEST LOCATED AT THE 90% HEIGHT OF THE WESTMOST SMALL, MUTILATED BLACK WALNUT.						
Ecological:	NEST TREE IS A BLACK WALNUT; SURROUNDED BY CULTIVATED LAND TO THE SOUTH AND RUDERAL TO THE NORTH.						
General:	NEST MONITORED 19 JUN-21 AUG 2005; ADULT SEEN ON NEST 20 JUN 2005, BUT NO CHICK DETECTED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1478	Map Index:	62531	EO Index:	62568	Element Last Seen:	2007-XX-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.46826 / -121.56443				Accuracy:	80 meters	
UTM:	Zone-10 N4258748 E625235				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 08, SE (M)				Acres:	0.0	
Location:	BABEL SLOUGH, ABOUT 0.8 MI SW OF SACRAMENTO NORTHERN RR CROSSING & 1 MI SE OF ARCADE, E SIDE SACRAMENTO RIVER.						
Detailed Location:	RESSEGUIE'S CLARKSBURG 36 SITE. MAPPED TO COORDINATES GIVEN FOR SITE YO-56 FROM 2008 ESTEP REPORT.						
Ecological:	2005 NEST TREE NOT LOCATED; SITE WAS SURROUNDED BY VINEYARD TO THE NORTH AND CULTIVATED LAND SOUTH. 2007: NEST IN RIPARIAN COTTONWOOD SURROUNDED BY ALFALFA, VINEYARDS, AND IRRIGATED CROPLANDS.						
General:	NEST SITE MONITORED 14 JUL-18 AUG 2005; NO NEST FOUND, BUT 2 YOUNG FLEDGED. NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	PVT						



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Occurrence No.	1479	Map Index:	62533	EO Index:	62570	Element Last Seen:	2007-XX-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.46330 / -121.56802			Accuracy:	80 meters		
UTM:	Zone-10 N4258193 E624931			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 17, NW (M)			Acres:	0.0		
Location:	BABEL SLOUGH, ABOUT 1.5 MILES NNE OF JEFFERSON BLVD AT REAMER LN, ABOUT 3.5 MILES WEST OF FREEPORT.						
Detailed Location:	RESSEGUIE SITE CLARKSBURG 1. MAPPED TO COORDINATES GIVEN FOR SITE YO-87 FROM 2008 ESTEP REPORT.						
Ecological:	2004-2005: NEST TREE NOT LOCATED; SITE WAS SURROUNDED BY VINEYARD TO THE EAST AND WEST. 2007: NEST IN ROADSIDE VALLEY OAK SURROUNDED BY ALFALFA, IRRIGATED CROPS, AND VINEYARDS.						
General:	NEST WAS SUSPECTED IN 2004, BUT NO NEST OR CHICK WERE FOUND. NEST SITE MONITORED 10 APR-9 AUG 2005; NO NEST FOUND, BUT 1 FLEDGED JUVENILE OBSERVED. ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1545	Map Index:	62991	EO Index:	63064	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Clarksburg (3812145), Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49624 / -121.62073			Accuracy:	specific area		
UTM:	Zone-10 N4261778 E620277			Elevation (ft):	10		
PLSS:	T08N, R03E, Sec. 35, W (M)			Acres:	10.0		
Location:	YOLO BYPASS WILDLIFE AREA, 1.75 MILES SE OF THE INTERSECTION OF ROAD 34A & ROAD 106A, 5 MILES SE OF DAVIS.						
Detailed Location:	2004: MAPPED TO COORDINATES FROM DFG DATABASE OF SWAINSON'S HAWK NEST RECORDS 2000-2004. 2009: NEST TREE ABOUT 1/4 MILE TO SW, MAPPED TO POINT IN DFG SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2004: NEST TREE WAS IN A COTTONWOOD GROVE SURROUNDED BY ROW CROPS IN ALL DIRECTIONS. 2009: NEST IN 25' WILLOW SURROUNDED BY CROPLAND.						
General:	2004: COPULATION OBSERVED NEAR NEST ON 28 APR; EXACT NEST LOCATION/NEST SUCCESS UNKNOWN. 2009: ACTIVE NEST, INCUBATION OBSERVED ON 28 APR; NEST SUCCESS UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA, UNKNOWN						



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Occurrence No.	1643	Map Index:	64999	EO Index:	65078	Element Last Seen:	2006-06-23
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2006-06-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-07-05
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.46436 / -121.51629				Accuracy:	80 meters	
UTM:	Zone-10 N4258381 E629442				Elevation (ft):	7	
PLSS:	T07N, R04E, Sec. 14, NW (M)				Acres:	0.0	
Location:	0.7 MILE SW OF FREEPORT BEND ON THE SACRAMENTO RIVER, 0.75 MILE WEST OF FREEPORT.						
Detailed Location:	NEST TREE WAS LOCATED FAIRLY CLOSE TO THE SACRAMENTO RIVER.						
Ecological:	NEST TREE WAS A LARGE WILLOW ADJACENT TO AN AGRICULTURAL DITCH, LOCATED WITHIN RIPARIAN VEGETATION DOMINATED BY WILLOW, BLACKBERRY, AND REEDS. ALFALFA FIELDS AND VINEYARDS ARE FOUND ADJACENT TO THE NEST TREE.						
General:	2 ADULTS OBSERVED NEST-BUILDING ON 23 JUN 2006.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1674	Map Index:	67151	EO Index:	67304	Element Last Seen:	2003-04-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-19
Quad Summary:	Jersey Island (3812116), Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.12336 / -121.67751				Accuracy:	nonspecific area	
UTM:	Zone-10 N4220329 E615918				Elevation (ft):	5	
PLSS:	T03N, R03E, Sec. 07, NE (M)				Acres:	148.0	
Location:	VICINITY OF NW CORNER OF TWITCHELL ISLAND ALONG SEVENMILE SLOUGH, 2.5 MI SSE OF RIO VISTA.						
Detailed Location:	MAPPED PER COORDINATES GIVEN IN DFG FIELD SURVEY FORMS AND DIGITAL DATASETS. 2001 NEST TREE LOCATION DESCRIBED AS "TWITCHELL ISLAND RD. AT BRANNAN IS. STATE PARK," 2003 NEST TREE ABOUT 525 METERS FURTHER EAST.						
Ecological:	2001 NEST TREE WAS 80' COTTONWOOD. ROW CROPS TO NE & NW, ALFALFA TO SE, AND PARKS TO SW. 2003 NEST TREE WAS A 25' EXOTIC TREE; SURROUNDED BY RIPARIAN TO THE NE, AND ROW CROPS TO THE NW, SW, AND SE.						
General:	ACTIVE NEST, INCUBATION OBSERVED ON 3 MAY 2001. ACTIVE SWHA NEST, WITH 2 ADULTS PRESENT, OBSERVED ON 25 APR 2003; ONE ADULT SITTING IN NEST, ONE SOARING.						
Owner/Manager:	UNKNOWN, DPR-BRANNAN ISLAND SR						



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Occurrence No.	1693	Map Index:	69763	EO Index:	70572	Element Last Seen:	2005-08-09
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2005-08-09	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2007-08-20	

Quad Summary: Clarksburg (3812145)

County Summary: Yolo

Lat/Long:	38.45787 / -121.56994	Accuracy:	80 meters
UTM:	Zone-10 N4257587 E624773	Elevation (ft):	12
PLSS:	T07N, R04E, Sec. 17, SW (M)	Acres:	0.0

Location: 0.75 MILE NNE OF THE INTERSECTION OF BABEL SLOUGH ROAD AND PUMPHOUSE ROAD, 8 MILES SOUTH OF WEST SACRAMENTO.

Detailed Location: SITE LOCATED ON THE EAST SIDE OF BABEL SLOUGH.

Ecological: NEST TREE UNKNOWN, SINCE EXACT NEST LOCATION NEVER DETERMINED.

General: NESTING SUSPECTED, BUT NOT CONFIRMED, IN 2004. SITE CONSISTENTLY OCCUPIED AND DEFENDED BY ADULTS IN 2005; ADULTS PRESENT ON 28 MAY, 13 JUN, 13 JUL, AND 29 JUL 2005.

Owner/Manager: PVT

Occurrence No.	1808	Map Index:	87321	EO Index:	88306	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-07	

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long:	38.19102 / -121.69463	Accuracy:	2/5 mile
UTM:	Zone-10 N4227815 E614311	Elevation (ft):	10
PLSS:	T04N, R03E, Sec. 18, W (M)	Acres:	0.0

Location: JUST SE OF RIO VISTA MUNICIPAL AIRPORT, ABOUT 0.6 MI NE OF AIRPORT RD AT BAUMANN RD & 1.8 MI W OF RYER ISLAND FERRY.

Detailed Location: MAPPED TO VICINITY OF UTM COORDINATES PROVIDED IN 2007 REPORT; NO DATUM GIVEN, ACCURACY LOW. MAPPED TO INCLUDE NEAREST LIKELY NESTING HABITAT (TREES VISIBLE IN 2007 AERIAL PHOTOS).

Ecological:

General: NESTING OBSERVED IN TREE (SPECIES NOT RECORDED) DURING 2007 SURVEY FOR BREEDING RAPTORS; NEST SUCCESS UNKNOWN/NOT RECORDED.

Owner/Manager: UNKNOWN



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Occurrence No.	1809	Map Index:	87322	EO Index:	88307	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-11-21	

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long:	38.21717 / -121.70183	Accuracy:	1/5 mile
UTM:	Zone-10 N4230708 E613640	Elevation (ft):	0
PLSS:	T04N, R02E, Sec. 01, SE (M)	Acres:	0.0

Location: S SIDE OF DITCH ABOUT 1.7 MI SSW OF LIBERTY ISLAND FERRY AND 3 MI ENE OF CANRIGHT RD AT MCCORMACK RD, W OF CACHE SLOUGH.

Detailed Location: MAPPED TO VICINITY OF UTM COORDINATES PROVIDED IN 2007 REPORT; NO DATUM GIVEN, ACCURACY LOW. ONLY TREES VISIBLE IN 2007 AERIAL ARE ALONG S SIDE OF IRRIGATION DITCH ADJACENT TO GIVEN LOCATION.

Ecological:

General: NESTING OBSERVED IN TREE DURING 2007 SURVEY FOR BREEDING RAPTORS; NEST SUCCESS UNKNOWN/NOT RECORDED.

Owner/Manager: UNKNOWN

Occurrence No.	1810	Map Index:	87324	EO Index:	88309	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-11-26	

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long:	38.24749 / -121.70846	Accuracy:	nonspecific area
UTM:	Zone-10 N4234064 E613013	Elevation (ft):	0
PLSS:	T05N, R02E, Sec. 25, SW (M)	Acres:	69.0

Location: LINDSEY SLOUGH, ABOUT 0.6 MILE W OF HASTINGS FERRY AND 3 MILES E OF PETERSON RANCH.

Detailed Location: 2003: LAT/LONG GIVEN IN DFG DATABASE, LOCATION "ON A SMALL ISLAND IN LINDSAY SL, NEAR HASTINGS ISLAND BRIDGE." 2007: UTMS PROVIDED IN REPORT; NO DATUM GIVEN, SUSPECT LOW ACCURACY. MAPPED TO INCLUDE BOTH SITES.

Ecological: 2003: PAIR NESTED IN ALDER ON SMALL ISLAND IN SLOUGH.

General: 2003: FEMALE SAT IN NEST AT LEAST 1 MONTH BUT NO CHICKS PRODUCED; OBS MAY-SEP. 2007: NESTING OBSERVED (TREE SPECIES NOT RECORDED) DURING 2007 SURVEY FOR BREEDING RAPTORS; SUCCESS NOT RECORDED.

Owner/Manager: UNKNOWN



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Occurrence No.	1812	Map Index:	87340	EO Index:	88326	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-27
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.17384 / -121.66488				Accuracy:	1/5 mile	
UTM:	Zone-10 N4225945 E616945				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 20, SE (M)				Acres:	0.0	
Location:	SE BANK SACRAMENTO RIVER AT CACHE SLOUGH CONFLUENCE, ABOUT 0.9 MI S OF RYER IS. FERRY & 1.4 MI NE OF RIO VISTA BRIDGE.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010; EXACT LOCATION OF NEST TREE UNKNOWN/NOT RECORDED.						
Ecological:	2009: NEST IN RIPARIAN TREE.						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED AT/NEAR NEST ON 28 APR & 1 OBSERVED ON 28 MAY 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1826	Map Index:	87454	EO Index:	88431	Element Last Seen:	1994-07-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-07-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-11-30
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.22195 / -121.55673				Accuracy:	3/5 mile	
UTM:	Zone-10 N4231426 E626335				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 04 (M)				Acres:	0.0	
Location:	ALONG THE SACRAMENTO RIVER ABOUT 2.4 MILES E OF HOWARD LANDING AND 5 MILES NNE OF ISLETON.						
Detailed Location:	TERRITORIES SA (NO # ASSIGNED) & SA083 FROM SWAINSON'S HAWK DATABASE. 1993 DETECTION ON E SIDE OF RIVER. 1994 OBSERVATION POINTS ON E SIDE RIVER, FLEDGLINGS SEEN ACROSS RIVER (14513 HWY 160). 2000 OBS PTS ON W SIDE RIVER.						
Ecological:	1993: POSSIBLE NEST TREE WAS LARGE COTTONWOOD (CW) ON LEVEE NEXT TO CULTIVATED FIELDS; LAND USE RESIDENTIAL, RESORT, AGRICULTURE. 1994: SWHA OBS IN CW TREES, LAND USE WAS AG. 2000: VACANT NEST IN 40' CW. KITE OBS IN SYCAMORE ACROSS RIVER.						
General:	1993: 2 ADULTS OBS FORAGING & RETURNING TO POTENTIAL NEST TREE ON 12 JUL, NEST NOT SEEN. 1994: 1 ADULT OBS ON 6 JUL, FEMALE & 3 FLEDGED JUVENILES OBS IN COTTONWOODS ON W SIDE RIVER. 2000: UNOCCUPIED NEST FOUND.						
Owner/Manager:	PVT						



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Occurrence No.	1827	Map Index:	87456	EO Index:	88433	Element Last Seen:	2009-04-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25552 / -121.50364			Accuracy:	1/10 mile		
UTM:	Zone-10 N4235224 E630921			Elevation (ft):	10		
PLSS:	T05N, R04E, Sec. 25, NW (M)			Acres:	0.0		
Location:	DELTA MEADOWS, ABOUT 0.5 MILE NE OF LOCKE AND 2.5 MILES SE OF VORDEN ON THE SACRAMENTO RIVER.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	2009: NEST TREE WAS A SYCAMORE.						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED AT NEST ON 2 APR 2009.						
Owner/Manager:	DPR, SAC COUNTY						
Occurrence No.	1828	Map Index:	87458	EO Index:	88434	Element Last Seen:	2009-07-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.26377 / -121.52680			Accuracy:	80 meters		
UTM:	Zone-10 N4236108 E628881			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 22, SE (M)			Acres:	0.0		
Location:	WEST SIDE OF THE SACRAMENTO RIVER, ALONG HWY 160; ABOUT 1.2 MILES SE OF VORDEN AND 1.3 MILES NW OF LOCKE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE BASED ON 2009 SURVEYS OF SWAINSON'S HAWK NEST SITES. LOCATION DESCRIPTION "SE CORNER OF SURVEY BLOCK [#1706]/ALONG STATE HIGHWAY 160."						
Ecological:	2009: NEST IN 30' VALLEY OAK. SURROUNDING LAND USE IS FALLOW/RUDERAL.						
General:	YOUNG AND ADULT SWAINSON'S HAWKS SEEN AT NEST ON 20 JUL 2009; SOARING, PERCHING, INCUBATION, AND TERRITORIAL DEFENSE OBSERVED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1829	Map Index:	87459	EO Index:	88435	Element Last Seen:	2009-06-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29109 / -121.51764			Accuracy:	80 meters		
UTM:	Zone-10 N4239152 E629633			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 11, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF HERZOG RD ABOUT 0.5 MILE N OF VORDEN RD INTERSECTION, 1.6 MILES NE OF VORDEN ON THE SACRAMENTO RIVER.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE BASED ON 2009 SURVEYS OF SWAINSON'S HAWK NEST SITES. LOCATION DESCRIPTION "NE CORNER OF [SURVEY] BLOCK [#1706]/ ON HERZOG ROAD BETWEEN VORDEN AND ALFALFA PLANT RD."						
Ecological:	2009: NEST IN 20' TREE CODED AS "OTHER NATIVE" (NOT BLUE OAK, COTTONWOOD, PINE, VALLEY OAK OR WILLOW), ALFALFA FIELDS TO NE AND SE, FALLOW/RUDERAL LANDS TO NW AND SW.						
General:	SWAINSON'S HAWKS ADULTS AND YOUNG SEEN AT NEST ON 23 JUN 2009. SOARING, PERCHING, INCUBATING, FORAGING, AND TERRITORIAL DEFENSE BEHAVIORS OBSERVED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1830	Map Index:	87463	EO Index:	88439	Element Last Seen:	2010-04-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-04-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.30484 / -121.51034			Accuracy:	nonspecific area		
UTM:	Zone-10 N4240688 E630247			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 11 (M)			Acres:	26.0		
Location:	ALONG SNODGRASS SLOUGH, ABOUT 0.7 MILE SE OF HERZOG RD AT RUSSELL RD & 2.5 MILES NE OF VORDEN ON THE SACRAMENTO RIVER.						
Detailed Location:	2003, 2009: MAPPED TO COORDINATES FROM CDFW SWAINSON'S HAWK NEST SITE SURVEY DATASETS. 2010: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2003: NEST IN ALDER TREE AT N END OF EGRET ROOKERY. CROPS TO NE & SE, RIPARIAN TO NW & SW. 2009: NEST IN 45' COTTONWOOD. RIPARIAN TO NE & SE, CROPS TO NW & SW. 2010: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2003: 2 DOWNY YOUNG OBSERVED IN NEST ON 11 JUN. 2009: 2 OBS PERCHED TOGETHER IN VICINITY ON 9 APR. SWHA AT NEST OBS INCUBATING AND DEFENDING TERRITORY ON 20 APR. 2010: 1 NESTING SWHA OBSERVED ON 7 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1831	Map Index:	87465	EO Index:	88447	Element Last Seen:	2010-04-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-04-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.30605 / -121.49996				Accuracy:	nonspecific area	
UTM:	Zone-10 N4240838 E631153				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 01 (M)				Acres:	31.0	
Location:	ALONG OLD RAILROAD GRADE ABOUT 1 MILE ESE OF HERZOG ROAD AT RUSSELL ROAD & 2.2 MILES WNW OF I-5 AT DIERSSSEN ROAD.						
Detailed Location:	2003 COORDINATES FROM CDFW SWAINSON'S HAWK NEST SITE SURVEY DATASET. 2010 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA; EXACT LOC OF NEST TREE UNKNOWN/NOT RECORDED.						
Ecological:	2003: NEST IN 35' COTTONWOOD. SURROUNDING LAND USE WAS CROPLAND. 2010: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2 DOWNY YOUNG SEEN IN THE NEST ON 5 JUN 2003. 1 NESTING SWAINSON'S HAWK OBSERVED ON 7 APR 2010.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1832	Map Index:	87468	EO Index:	88448	Element Last Seen:	2009-06-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-07
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32430 / -121.51952				Accuracy:	1/5 mile	
UTM:	Zone-10 N4242834 E629410				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 34, SE (M)				Acres:	0.0	
Location:	ALONG SNODGRASS SLOUGH ABOUT 0.6 MILE NORTH OF HERZOG ROAD AT RUSSELL ROAD AND 1.6 MILES SE OF HWY 160 AT LAMBERT RD.						
Detailed Location:	1992 DETECTION FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS, GIVEN TRS IN VICINITY, LOC: "SE WILSE[=WILSON?]/LAMBERT JCT." 2009 NESTING SITES PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	1992: SURROUNDING HABITAT WAS GRASSLANDS. NEST TREE SPECIES NOT RECORDED. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S)/RIPARIAN SCRUB.						
General:	DFG SWHA TERRITORY #SA071: 2 ADULTS OBSERVED AT/NEAR A NEST ON 10 JUL 1992. 2-3 NESTING SWAINSON'S HAWKS OBSERVED AT 1-2 NEST SITES ON 11 JUN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1833	Map Index:	87471	EO Index:	88451	Element Last Seen:	2003-05-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-03
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29086 / -121.60290			Accuracy:	80 meters		
UTM:	Zone-10 N4239011 E622178			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 12, S (M)			Acres:	0.0		
Location:	SUTTER ISLAND; ALONG E SIDE OF SUTTER SLOUGH ABOUT 0.3 MI N OF CONFLUENCE WITH MINER SLOUGH AND 1.5 MI SE OF OXFORD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST SITES. STATED LOCATION "SUTTER ISLAND - WEST SIDE."						
Ecological:	2003: NEST IN 75' TREE CODED AS "OTHER NATIVE" (NOT BLUE OAK, VALLEY OAK, COTTONWOOD, WILLOW OR PINE). PREDOMINANT LAND USE IS ORCHARDS.						
General:	SWAINSON'S HAWK OBSERVED ON NEST, INCUBATING; ONE FEATHERED CHICK OBS IN NEST ON 7 MAY 2003.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1834	Map Index:	87481	EO Index:	88459	Element Last Seen:	2003-05-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29977 / -121.57996			Accuracy:	nonspecific area		
UTM:	Zone-10 N4240030 E624169			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 07, NE (M)			Acres:	35.0		
Location:	STEAMBOAT SLOUGH, ABOUT 0.4 MILE SW OF ITS SACRAMENTO RIVER CONFLUENCE AND 0.1 MILE N OF SUTTER ISLAND CROSS ROAD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. TWO NEST SITES, NORTH AT "SOUTHSIDE OF SLOUGH, 100 YARDS WEST [=SW?] OF MARINA," & SOUTH AT "0.2 MILE E OF SUTTER ISLAND RD/SUTTER ISLAND RR."						
Ecological:	2003: BOTH NEST TREES WERE 50' COTTONWOODS, SURROUNDING LAND USE WAS ORCHARD.						
General:	NORTH NEST IDENTIFIED ON 7 MAY, SOUTH NEST ON 22 MAY. ON RETURN VISIT ON 9 JULY BOTH NESTS WERE UNOCCUPIED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1835	Map Index:	87490	EO Index:	88465	Element Last Seen:	2003-05-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-04
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.34537 / -121.58056				Accuracy:	1/5 mile	
UTM:	Zone-10 N4245089 E624038				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 30, N (M)				Acres:	0.0	
Location:	ALONG ELK SLOUGH JUST NORTH OF WAUKEENA RD AT COURTLAND RD, ABOUT 1.2 MILES NW OF COURTLAND.						
Detailed Location:	1987 DETECTION OF BREEDING PAIR IN VICINITY (JEFFERSON RD 1/4 MI N OF COURTLAND RD). MAPPED TO 2003 LOCATION FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS 2000-2004; COORDS DON'T QUITE MATCH "WAUKEENA RD- NORTH 1/4 MI COURTLAND RD."						
Ecological:	1987 DETECTION IN OPEN, RECENTLY PLOWED FIELDS. 2003 NEST IN ONE OF A SMALL GROVE OF LOCUST TREES, WITH ORCHARDS TO THE NE & SE AND CROPLAND TO THE NW AND SW.						
General:	1987: SWAINSON'S HAWK PAIR OBSERVED ON GROUND IN FIELD, MATE-FEEDING & COPULATING. 2003: 1 FEATHERED YOUNG OBS ON NEST ON 8 MAY, DETECTIONS OF ADULTS NOT RECORDED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1836	Map Index:	87513	EO Index:	88487	Element Last Seen:	2003-06-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.35642 / -121.58843				Accuracy:	1/10 mile	
UTM:	Zone-10 N4246305 E623332				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 24, NE (M)				Acres:	0.0	
Location:	NORTH COURTLAND ROAD, ABOUT 0.2 MILE WEST OF JEFFERSON BLVD INTERSECTION AND 2 MILES NORTHWEST OF COURTLAND.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF NEST SITE RECORDS FROM 2000-2004.						
Ecological:	2003: NEST IN 30' VALLEY OAK, SURROUNDING LAND USE WAS CROPLAND.						
General:	SWAINSON'S HAWK NEST RECORDED ON 5 JUN 2003; NO YOUNG CONFIRMED, SURVEYORS COULD NOT SEE CLEARLY INTO THE NEST TREE.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1837	Map Index:	87514	EO Index:	88488	Element Last Seen:	2003-05-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.35113 / -121.61374				Accuracy:	1/5 mile	
UTM:	Zone-10 N4245685 E621129				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 23, SW (M)				Acres:	0.0	
Location:	ALONG DITCH ABOUT 0.5 MI SE OF N COURTLAND RD AT WIDGEON RD (=RD 149) & 0.5 MI NE OF COURTLAND RD AT DUCK SLOUGH BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 NEST SITES. COORDS FALL IN MIDDLE OF FIELD ABOUT 0.15 MI FROM NEAREST TREE TO E (IN AERIAL PHOTOS FROM 2003). DESCRIPTION GIVES NEAREST INTERSECTION, "N COURTLAND RD & WIDGEON RD."						
Ecological:	NEST IN 40' COTTONWOOD SURROUNDED BY CROPLAND.						
General:	TWO FEATHERED YOUNG OBSERVED IN NEST ON 8 MAY 2003; PRESENCE AND BEHAVIOR OF ADULTS NOT RECORDED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1838	Map Index:	87516	EO Index:	88490	Element Last Seen:	2009-05-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.36600 / -121.50929				Accuracy:	1/5 mile	
UTM:	Zone-10 N4247476 E630230				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 14, S (M)				Acres:	0.0	
Location:	NORTH SIDE OF HOOD FRANKLIN ROAD ABOUT 0.6 MILE ESE HWY 160 INTERSECTION & 1.9 MILES SW OF I-5 INTERSECTION.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	1 NESTING SWAINSON'S HAWK OBSERVED ON 20 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1839	Map Index:	87518	EO Index:	88492	Element Last Seen:	2009-04-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14285 / -121.49594				Accuracy:	1/5 mile	
UTM:	Zone-10 N4222733 E631799				Elevation (ft):	0	
PLSS:	T03N, R04E, Sec. 01, N (M)				Acres:	0.0	
Location:	SYCAMORE SLOUGH ABOUT 0.4 MILE E OF CONFLUENCE WITH THE SOUTH MOKELUMNE RIVER & 2 MILES NW OF HWY 12 AT N GLASSCOCK RD.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA 2009-2010.						
Ecological:	HABITAT DESCRIBED AS "NON-RIPARIAN TREE(S)."						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED ON 8 APR 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1840	Map Index:	87547	EO Index:	88523	Element Last Seen:	1985-06-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1985-06-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-07
Quad Summary:	Isleton (3812125), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25279 / -121.54071				Accuracy:	2/5 mile	
UTM:	Zone-10 N4234870 E627683				Elevation (ft):	-10	
PLSS:	T05N, R04E, Sec. 27 (M)				Acres:	0.0	
Location:	ON GRAND ISLAND, ABOUT 1.5 MILES NE OF RYDE.						
Detailed Location:	TERRITORY #SA050 FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. MAPPED TO STATED LOCATION: "1.5 MILE NORTHEAST OF RYDE." GIVEN TRS T5N R4E SEC 32 SW 1/4 OF NE 1/4 DOES NOT MATCH STATED LOCATION.						
Ecological:	SURROUNDING HABITAT DESCRIBED AS PASTURE/AGRICULTURAL. NEST TREE SPECIES NOT RECORDED.						
General:	2 ADULTS AND 1 JUVENILE SWAINSON'S HAWK OBSERVED AT/NEAR A NEST ON 24 JUN 1985.						
Owner/Manager:	PVT						



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Occurrence No.	1841	Map Index:	87554	EO Index:	88530	Element Last Seen:	2007-06-27
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-07-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16381 / -121.39881			Accuracy:	80 meters		
UTM:	Zone-10 N4225201 E640270			Elevation (ft):	10		
PLSS:	T04N, R05E, Sec. 26 (M)			Acres:	0.0		
Location:	EAST SIDE OF N THORNTON RD (I-5 NORTH FRONTAGE ROAD) ABOUT 0.2 MILE NORTH OF WOODBRIDGE ROAD INTERSECTION.						
Detailed Location:	NEST TREE ON GROUNDS OF A DAIRY FARM. MAPPED TO COORDINATES GIVEN IN 2004 THESIS (SITE #TH5) AND ON 2007 FIELD SURVEY FORM. ADJACENT TREES APPEAR TO HAVE BEEN USED IN 2004 AND 2007.						
Ecological:	2004: NEST IN ELM SURROUNDED BY AGRICULTURE. 2007: NEST NEAR TOP OF VALLEY OAK ON SE SIDE. SURROUNDING LAND USE OPEN FIELDS OF HAY & OTHER CROPS. DISTURBANCE FROM HEAVY EQUIPMENT USED AT DAIRY. NO APPARENT IMPACT FROM I-5 TRAFFIC.						
General:	2002: BREEDING PAIR OBSERVED IN VICINITY THROUGH SEASON, NEST NOT CONFIRMED. 2003: NEST OBS THROUGH SEASON, 1 YOUNG FLEDGED. 2007: 2 YOUNG FIRST OBS 22 JUN, 1 BRANCHING BY 23-24 JUN, EMPTY NEST BY 3 JUL; PRESUME 2 FLEDGED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1842	Map Index:	87556	EO Index:	88532	Element Last Seen:	2003-09-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-09-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18212 / -121.38460			Accuracy:	1/10 mile		
UTM:	Zone-10 N4227255 E641480			Elevation (ft):	15		
PLSS:	T04N, R05E, Sec. 24, W (M)			Acres:	0.0		
Location:	ALONG UNNAMED CANAL NW OF LODI; ABOUT 0.7 MILE NW OF ACAMPO RD AT RAY RD AND 1.1 MILES SE OF I-5 AT PELTIER RD.						
Detailed Location:	LOCATION FROM 2004 THESIS FOR NEST SITE #AC1. OBSERVATION POINT UTMS PLUS BEARING & DISTANCE GIVEN FOR 2002 DETECTION. 2003 NEST AT SAME LOCATION, DESCRIBED AS "CANAL BETWEEN PROPERTIES, NORTH OF ACAMPO RD, WEST OF RAY RD."						
Ecological:	2002 & 2003: NEST IN VALLEY OAK ADJACENT TO CANAL, SURROUNDED BY VINEYARDS/URBAN-AGRICULTURE.						
General:	2002: PAIR OBSERVED THROUGHOUT SEASON AT/NEAR NEST, BUT NEST SUCCESS NOT CONFIRMED. 2003: PAIR OBS NESTING BUT NEST SUCCESS NOT CONFIRMED; OBS ON MULTIPLE OCCASIONS, GIVEN DATE 24 SEP.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1843	Map Index:	87561	EO Index:	88535	Element Last Seen:	2003-04-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18669 / -121.40208				Accuracy:	80 meters	
UTM:	Zone-10 N4227736 E639940				Elevation (ft):	10	
PLSS:	T04N, R05E, Sec. 23, NW (M)				Acres:	0.0	
Location:	ALONG THORNTON RD (I-5 NORTH FRONTAGE RD) ABOUT 0.2 MI S OF PELTIER RD INTERSECTION & 1 MI NW OF ACAMPO RD RR CROSSING.						
Detailed Location:	MAPPED TO COORDINATES PROVIDED IN 2004 THESIS FOR SITE TH2, "THORNTON RD. (EAST SIDE) ~0.4 KM SOUTH OF PELTIER RD."						
Ecological:	NEST WAS IN COTTONWOOD SURROUNDED BY URBAN/AGRICULTURAL LAND USE, NEAR A CANAL.						
General:	2002: MULTIPLE OBSERVATIONS(MO) OF SINGLE SWHA NEAR NEST TREE, NEST SEEN, NO FLEDGLINGS OBSERVED. 2003: MO OF SWHA ON NEST & PERCHED NEAR NEST; 1 YOUNG FLEDGED; DATE GIVEN IN REPORT IS 10 APR THOUGH PRESUMABLY LATER OBSERVATIONS WERE MADE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1844	Map Index:	87562	EO Index:	88536	Element Last Seen:	1994-07-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-07-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18925 / -121.42079				Accuracy:	2/5 mile	
UTM:	Zone-10 N4227992 E638296				Elevation (ft):	5	
PLSS:	T04N, R05E, Sec. 15 (M)				Acres:	0.0	
Location:	ALONG PELTIER RD, ABOUT 0.9 MILE WEST OF I-5 AND 2.3 MILES SOUTH OF THORNTON.						
Detailed Location:	MAPPED TO COORDINATES AND LOCATION DESCRIPTIONS FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS. TERRITORY SJ015 IN 1981-82, "3/4 OF 1 MI W OF HWY 5 ON PELTIER RD;" SJ099 IN 1994 DETECTION "ON PELTIER RD, 1 MI W OF I-5."						
Ecological:	1981: GRASSY FIELD WITH "GOOD [NESTING] TREES" A MILE AWAY. 1994: NEST IN 50' COTTONWOOD IN ROW OF COTTONWOOD TREES ALONG PELTIER ROAD. SURROUNDING LAND USE IS AGRICULTURAL FIELDS.						
General:	1981: 1 ADULT OBSERVED (FLYOVER). 1982: NO NESTS OR HAWKS OBSERVED. 1994: 1 FLEDGLING OBSERVED ON NEST; 2 ADULTS DEFENDING NEST ON 11 AND 22 JUL.						
Owner/Manager:	PVT						



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Occurrence No.	1845	Map Index:	87564	EO Index:	88537	Element Last Seen:	2003-06-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19364 / -121.44688				Accuracy:	nonspecific area	
UTM:	Zone-10 N4228440 E636003				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 17 (M)				Acres:	168.0	
Location:	VICINITY OF PELTIER RD/BLOSSOM RD INTERSECTION, ABOUT 2 MILES WEST OF I-5 AT PELTIER RD AND 2.3 MILES SW OF THORNTON.						
Detailed Location:	MAPPED TO LOCATION DESCRIPTIONS IN 2004 THESIS: SITE PE6 AT "PELTIER RD, ~0.5 KM EAST OF CANAL/BLOSSOM RD CURVE" AND BM1 AT "BLOSSOM RD, ALONG CANAL TO EAST, ~0.5 KM NORTH OF CURVE (PELTIER RD)."						
Ecological:	TWO NEST SITES DESCRIBED IN THE VICINITY; PE6 NEST IN COTTONWOOD & BM1 NEST IN WILLOW. SURROUNDING HABITAT WAS URBAN/AGRICULTURAL WITH NEARBY CANALS.						
General:	2004: 2 BREEDING PAIRS OBSERVED ON MULTIPLE OCCASIONS; BOTH PAIRS FLEDGED 1 YOUNG. NESTS WERE LOCATED LATER (PRESUMABLY, AFTER THE BREEDING SEASON WAS FINISHED).						
Owner/Manager:	UNKNOWN						
Occurrence No.	1846	Map Index:	87570	EO Index:	88544	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20411 / -121.43024				Accuracy:	1/5 mile	
UTM:	Zone-10 N4229627 E637441				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 09, SE (M)				Acres:	0.0	
Location:	ALONG BEAVER SLOUGH, ABOUT 0.9 MILE E OF BLOSSOM ROAD CROSSING AND 1.3 MILES SSW OF THORNTON.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN ENVIRONMENTAL SURVEY DATA FOR 2009-2010.						
Ecological:	2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2 SWAINSON'S HAWKS OBSERVED BRINGING NEST MATERIAL INTO TREE ON 14 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1847	Map Index:	87572	EO Index:	88545	Element Last Seen:	2009-06-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21262 / -121.45485				Accuracy:	1/5 mile	
UTM:	Zone-10 N4230534 E635271				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 08, N (M)				Acres:	0.0	
Location:	ALONG UNNAMED CANAL ABOUT 0.7 MILE NW OF BLOSSOM RD AT BEAVER SLOUGH CROSSING AND 2 MILES WSW OF THORNTON PO.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2009: NEST 20 FEET UP IN MEDIUM-SIZED COTTONWOOD ON BANK OF POND (=CANAL).						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED ON 26 MAY 2009. 1 SWAINSON'S HAWK OBSERVED FLYING FROM THE NEST ON 17 JUN 2009; NO SIGN OF YOUNG IN NEST.						
Owner/Manager:	DWR						

Occurrence No.	1848	Map Index:	87575	EO Index:	88548	Element Last Seen:	2003-04-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20043 / -121.40506				Accuracy:	80 meters	
UTM:	Zone-10 N4229256 E639652				Elevation (ft):	10	
PLSS:	T04N, R05E, Sec. 14, NW (M)				Acres:	0.0	
Location:	E SIDE OF RR TRACKS ALONG THE NW MAIN CANAL, ABOUT 0.8 MI N OF PELTIER RD AT I-5 AND 1.7 MI WSW OF KILE RD AT RAY RD.						
Detailed Location:	TERRITORY KR2. MAPPED TO LOCATION GIVEN IN 2004 THESIS AS UTMS FOR OBSERVATION POINT WITH DISTANCE AND BEARING TO NEST TREE. STATED LOCATION "RR TRACKS/CANAL, ~350 M SOUTH OF WHERE KILE RD CURVES FROM N/S TO W/E."						
Ecological:	2003: NEST IN VALLEY OAK ADJACENT TO CANAL, SURROUNDED BY URBAN/AGRICULTURAL LAND USE.						
General:	2003: MULTIPLE OBSERVATIONS OF BREEDING PAIR AT/NEAR NEST MADE THROUGHOUT SURVEY (GIVEN DATE IS 11 APR); 2 YOUNG WERE FLEDGED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1849	Map Index:	87578	EO Index:	88551	Element Last Seen:	2002-05-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-05-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-19
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21918 / -121.41903				Accuracy:	80 meters	
UTM:	Zone-10 N4231315 E638394				Elevation (ft):	10	
PLSS:	T04N, R05E, Sec. 03, SW (M)				Acres:	0.0	
Location:	KILE ROAD AT N MIDSECTION STREET IN THORNTON, ABOUT 0.8 MILE SE OF I-5 AT WEST WALNUT GROVE ROAD.						
Detailed Location:	MAPPED TO UTM COORDINATES FOR 2002 NEST SITE GIVEN IN 2004 THESIS, SITE TH4 AT "END OF KILE RD/MIDSECTION." NEST SITE NOT FOUND/RECORDED IN 2003, MULTIPLE FLYOVERS SIGHTED NEARBY AT "UNIVERSAL WOOD PRODUCTS, NORTH OF KILE RD ALONG RR."						
Ecological:	2002: NEST IN VALLEY OAK. HABITAT WAS VALLEY OAK WOODLAND IN RESIDENTIAL USE AREA.						
General:	2002: NESTING PAIR OBSERVED PERCHED NEAR NEST AND FLYING TO AND FROM NEST TREE ON MULTIPLE OCCASIONS (GIVEN DATE IS 17 MAY); 0 YOUNG PRODUCED. 2003: TERRITORIAL SWHA OBSERVED FLYING BY AREA ON MULTIPLE OCCASIONS, NO NEST FOUND.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1850	Map Index:	87580	EO Index:	88553	Element Last Seen:	2003-03-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-03-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.22788 / -121.43093				Accuracy:	nonspecific area	
UTM:	Zone-10 N4232263 E637336				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 04, NE (M)				Acres:	12.0	
Location:	ALONG EAST SIDE OF I-5, JUST NORTH OF WEST WALNUT GROVE ROAD ONRAMP, IN THORNTON.						
Detailed Location:	MAPPED TO LOCATIONS GIVEN IN 2004 THESIS FOR BREEDING TERRITORY TH1, AS UTMS OF OBSERVATION POINTS WITH BEARING & DISTANCE TO NEST TREES. IT SEEMS DIFFERENT TREES WERE USED IN 2002 & 2003, THOUGH '03 SITE DESCRIBED AS "LAST YEAR'S TREE."						
Ecological:	2002-2003 NEST TREES WERE COTTONWOODS. HABITAT DESCRIBED AS VALLEY OAK WOODLAND, SURROUNDING LAND USE WAS RESIDENTIAL.						
General:	2002: BREEDING PAIR OBS AT NEST ON 3 APR. INCUBATION WAS OBSERVED, BUT NEST SUCCESS UNKNOWN. 2003: BREEDING PAIR OBS AT NEST ON MULTIPLE OCCASIONS (ONLY DATE GIVEN IN REPORT IS 19 MAR); PAIR FLEDGED 1 YOUNG.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1851	Map Index:	87583	EO Index:	88555	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21576 / -121.49739				Accuracy:	1/5 mile	
UTM:	Zone-10 N4230821 E631541				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 12 (M)				Acres:	0.0	
Location:	ALONG THE S MOKELUMNE RIVER, ABOUT 0.5 MI SSE OF WALNUT GROVE RD (J11) AT N STATEN ISLAND RD & 1.3 MI NE OF EAGLE TREE.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA; EXACT LOCATION OF NEST TREE UNKNOWN/NOT RECORDED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	1 NESTING SWAINSON'S HAWK OBSERVED ON 26 MAY 2009; NEST SUCCESS UNKNOWN/NOT RECORDED.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	1852	Map Index:	87584	EO Index:	88556	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.24053 / -121.48580				Accuracy:	nonspecific area	
UTM:	Zone-10 N4233587 E632510				Elevation (ft):	0	
PLSS:	T05N, R05E, Sec. 31 (M)				Acres:	24.0	
Location:	ALONG THE MOKELUMNE RIVER, ABOUT 0.9 MILE N OF NEW HOPE LANDING AND 1.4 MILES E OF WALNUT GROVE POST OFFICE.						
Detailed Location:	2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2009: HABITAT DESCRIBED AS RIPARIAN TREE(S). NEST APPROXIMATELY 30' UP IN NEST TREE (SPECIES NOT RECORDED).						
General:	2009: 1 SWAINSON'S HAWK OBSERVED SITTING ON NEST ON 22 APR; 1 NESTING SWHA OBS ON 14 & 26 MAY.						
Owner/Manager:	TNC, UNKNOWN						



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Occurrence No.	1853	Map Index:	87587	EO Index:	88559	Element Last Seen:	2009-04-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.23363 / -121.45268				Accuracy:	80 meters	
UTM:	Zone-10 N4232869 E635421				Elevation (ft):	0	
PLSS:	T05N, R05E, Sec. 32, SE (M)				Acres:	0.0	
Location:	ABOUT 0.6 MILE NW OF N BLOSSOM ROAD AT W WALNUT GROVE ROAD AND 0.8 MILE ESE OF N VAIL ROAD AT W LAUFFER ROAD.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF 2009 SWAINSON'S HAWK SURVEY DATA. ONLY DESCRIPTION GIVEN IS "BLOSSOM RD."						
Ecological:	2009 NEST IN15' TREE CODED AS "OTHER NATIVE" (NOT BLUE OAK, VALLEY OAK, COTTONWOOD, WILLOW, OR PINE). ALFALFA FIELDS TO NORTH & ORCHARDS/VINEYARDS TO SOUTH (APPEAR TO BE VINEYARDS IN AERIAL PHOTOGRAPHS).						
General:	ADULT SWAINSON'S HAWK(S) ENGAGED IN NEST-BUILDING & FORAGING, AND NEST WITH YOUNG OBSERVED ON 29 APR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1854	Map Index:	87589	EO Index:	88560	Element Last Seen:	2002-05-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-05-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.24119 / -121.43736				Accuracy:	1/10 mile	
UTM:	Zone-10 N4233731 E636748				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 33, NW (M)				Acres:	0.0	
Location:	ALONG UNNAMED DITCH ABOUT 0.5 MILE SE OF I-5 AT BARBER RD AND 0.8 MILE NW OF N THORNTON RD (J8) AT NEW HOPE RD.						
Detailed Location:	MAPPED TO SITE TH3 LOCATION IN 2004 THESIS, GIVEN AS OBSERVATION POINT WITH DISTANCE AND BEARING TO NEST TREE, AND DESCRIPTION "EAST SIDE I-5, BETWEEN WALNUT GROVE/BARBER RDS."						
Ecological:	NEST IN COTTONWOOD.						
General:	NESTING PAIR SEEN AT AND NEAR NEST ON MULTIPLE OCCASIONS IN 2002 (ONLY DATE GIVEN IS 17 MAY), NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1855	Map Index:	87600	EO Index:	88571	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-12
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26975 / -121.47328				Accuracy:	1/10 mile	
UTM:	Zone-10 N4236847 E633552				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 19, NE (M)				Acres:	0.0	
Location:	ABOUT 1.3 MI ESE OF TWIN CITIES RD AT SNODGRASS SLOUGH & 1.7 MI NW OF I-5 AT THE MOKELUMNE RIVER.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2009: 1 SWAINSON'S HAWK OBS PERCHED ON NEST ON 8 APR; NESTING PAIR OBS, 1 ON NEST & 1 PERCHED NEAR NEST, ON 22 APR. NEST SUCCESS UNKNOWN/NOT RECORDED.						
Owner/Manager:	TNC						

Occurrence No.	1856	Map Index:	87603	EO Index:	88574	Element Last Seen:	2009-07-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-12
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26417 / -121.44724				Accuracy:	80 meters	
UTM:	Zone-10 N4236266 E635841				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 20, SE (M)				Acres:	0.0	
Location:	ALONG THE COSUMNES RIVER, ABOUT 0.9 MI NNW OF FRANKLIN BLVD AT BENSON FERRY RD AND 1.5 MI SSE OF I-5 AT TWIN CITIES RD.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009, GIVEN DESCRIPTION "SE QUADRANT OF SURVEY BLOCK [1708], JUST EAST OF I-5."						
Ecological:	2009: NEST IN 25' VALLEY OAK; HABITAT DESCRIBED AS SEASONAL WETLAND TO EAST AND COMMERCIAL/HIGHWAY (I-5) TO WEST.						
General:	ACTIVE NEST WITH YOUNG OBSERVED ON 22 JUL 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1857	Map Index:	87606	EO Index:	88579	Element Last Seen:	2009-06-04
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26806 / -121.48859				Accuracy:	nonspecific area	
UTM:	Zone-10 N4236638 E632216				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 24, NE (M)				Acres:	32.0	
Location:	ABOUT 0.5 MILE SE OF TWIN CITIES RD AT SNODGRASS SLOUGH AND 1.7 MILES NNE OF LOCKE.						
Detailed Location:	MAPPED TO POINTS FROM CDFW SHAPEFILE OF SWHA NEST RECORDS FROM 2009 & DWR SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE IS UNKNOWN.						
Ecological:	NEST IN 80' VALLEY OAK. SURROUNDING HABITAT IS FALLOW CROPLAND.						
General:	2009: 1 NESTING SWHA OBS ON 30 APR. ADULT(S) OBSERVED AT NEST, INCUBATING, ON 6 JUN. NO YOUNG OBSERVED, NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1858	Map Index:	87608	EO Index:	88581	Element Last Seen:	2009-06-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26472 / -121.43151				Accuracy:	80 meters	
UTM:	Zone-10 N4236351 E637216				Elevation (ft):	10	
PLSS:	T05N, R05E, Sec. 21, SE (M)				Acres:	0.0	
Location:	CRUMP RANCH, ABOUT 0.8 MI NNE OF THE COSUMNES & MOKELUMNE RIVER CONFLUENCE & 0.9 MI SSE OF FRANKLIN BLVD AT DESMOND RD.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. LOCATION STATED AS "COSUMNES BARN."						
Ecological:	NEST IN 25' VALLEY OAK. SURROUNDING HABITAT DESCRIBED AS FALLOW CROPLAND TO THE EAST AND RESIDENTIAL/URBAN TO THE WEST (2009 AERIALS SHOW LIMITED DEVELOPMENT ALONG FRANKLIN BLVD).						
General:	ACTIVE NEST WITH YOUNG OBSERVED ON 29 JUN 2009.						
Owner/Manager:	TNC						



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Occurrence No.	1859	Map Index:	87618	EO Index:	88587	Element Last Seen:	2002-04-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-04-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.31008 / -121.39569			Accuracy:	1/10 mile		
UTM:	Zone-10 N4241438 E640262			Elevation (ft):	20		
PLSS:	T05N, R05E, Sec. 02, SE (M)			Acres:	0.0		
Location:	ALONG UNNAMED SLOUGH ABOUT 0.8 MILE SSE OF LAMBERT RD AT CARROLL RD, 1.4 MI NE OF BRUCEVILLE RD AT CAMP RD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004, PROBABLY FOR AN OBSERVATION POINT; LOCATION STATED AS "S OF 8390 LAMBERT RD, OFF OF ONETO."						
Ecological:	NEST IN 50' VALLEY OAK. HABITAT TO NE DESCRIBED AS RIPARIAN, WITH CROPLAND TO WEST.						
General:	BREEDING PAIR OBSERVED COPULATING, PERCHING NEAR NEST ON 17 APR 2002.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1860	Map Index:	87621	EO Index:	88590	Element Last Seen:	2009-07-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28200 / -121.43809			Accuracy:	80 meters		
UTM:	Zone-10 N4238258 E636607			Elevation (ft):	10		
PLSS:	T05N, R05E, Sec. 16, SE (M)			Acres:	0.0		
Location:	ABOUT 0.6 MI SSE OF FRANKLIN BLVD AT TWIN CITIES RD & 1.8 MI N OF COSUMNES & MOKELUMNE RIVER CONFLUENCE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 25' COTTONWOOD SURROUNDED BY GRASSLAND.						
General:	NEST WITH YOUNG OBSERVED ON 15 JULY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1861	Map Index:	87622	EO Index:	88591	Element Last Seen:	2009-04-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28498 / -121.46542			Accuracy:	80 meters		
UTM:	Zone-10 N4238549 E634212			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 17, NW (M)			Acres:	0.0		
Location:	ABOUT 0.4 MILE W OF I-5 AT TWIN CITIES ROAD, 3.4 MILES NE OF LOCKE.						
Detailed Location:	1994 DETECTIONS BY I-5 AT TWIN CITIES RD, FROM CDFW SWHA DATABASE, TERRITORIES SJ00* (FORAGING GROUNDS) & "SA" (NO # ASSIGNED). MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-04 NEST RECORDS & CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2003 NEST IN 30' WILLOW WITH CROPLAND TO EAST AND PASTURE TO WEST. 2009 NEST IN SAME OR ADJACENT TREE.						
General:	1994: SWHA INCLUDING FORAGING GROUP OF 9 BIRDS OBSERVED, NO NEST RECORDED. 2003: NEST WITH 1 FEATHERED YOUNG OBSERVED ON 19 MAY. 2009: ACTIVE NEST, INCUBATION OBS ON 20 APR.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1862	Map Index:	87623	EO Index:	88592	Element Last Seen:	2003-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31486 / -121.50252			Accuracy:	80 meters		
UTM:	Zone-10 N4241812 E630913			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 02, NE (M)			Acres:	0.0		
Location:	ALONG UNNAMED SLOUGH ABOUT 1 MILE ESE OF LAMBERT RD AT SNODGRASS SLOUGH AND 2.4 MILES SW OF POINT PLEASANT.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. LOCATION STATED AS "LAMBERT RD- RR EASEMENT- SUTTER HOME."						
Ecological:	NEST IN 40' COTTONWOOD WITH CROPLANDS TO EAST AND ORCHARD/VINEYARD TO WEST.						
General:	NEST WITH ONE PARTIALLY-FEATHERED YOUNG OBSERVED ON 5 JUN. POSSIBLE SECOND CHICK OBS ON RETURN VISIT, 9 JUL 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1863	Map Index:	87625	EO Index:	88594	Element Last Seen:	2009-04-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29735 / -121.51185			Accuracy:	1/10 mile		
UTM:	Zone-10 N4239855 E630129			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 11 (M)			Acres:	0.0		
Location:	W SIDE SNODGRASS SLOUGH, ABOUT 0.3 MILE ESE OF ALFALFA PLANT ROAD AT HERZOG ROAD & 2 MILES NE OF VORDEN.						
Detailed Location:	NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE UNKNOWN.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED ON 9 APR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1864	Map Index:	87628	EO Index:	88597	Element Last Seen:	2009-04-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.30819 / -121.47625			Accuracy:	nonspecific area		
UTM:	Zone-10 N4241109 E633222			Elevation (ft):	10		
PLSS:	T05N, R05E, Sec. 06 (M)			Acres:	15.0		
Location:	KUHN RANCH, FROM ABOUT 0.7 TO 1 MILE NW OF I-5 AT DIERSSEN RD AND 1 TO 1.3 MILES SSW OF I-5 AT LAMBERT RD.						
Detailed Location:	2003: COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK 2000-2004 NEST RECORDS; THE MIDDLE OF 3 NEST SITES MAPPED HERE. 2009: POINTS FROM CDFW SHAPEFILE OF NESTS RECORDED IN 2009; N-MOST NEST AT POND, S NEST JUST SW OF MAIN RANCH BUILDINGS.						
Ecological:	2003: NEST IN 50' COTTONWOOD SURROUNDED BY ORCHARD/VINEYARD. 2009: N NEST IN 25' WILLOW IN SEASONAL WETLAND, S NEST IN 25' TREE CODED AS "OTHER EXOTIC" (NOT EUCALYPTUS OR WALNUT) WITH PASTURE TO THE EAST & FALLOW/RUDERAL LAND TO THE WEST.						
General:	2003: ACTIVE NEST OBSERVED 3 JUN, BUT NO YOUNG SEEN. 2009: YOUNG OBSERVED IN NORTH NEST, NEST-BUILDING OBSERVED AT SOUTH NEST SITE (SUCCESS UNKNOWN) ON 20 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1865	Map Index:	87629	EO Index:	88598	Element Last Seen:	2009-05-04
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.31200 / -121.44714				Accuracy:	80 meters	
UTM:	Zone-10 N4241573 E635761				Elevation (ft):	10	
PLSS:	T05N, R05E, Sec. 04, W (M)				Acres:	0.0	
Location:	ALONG UNNAMED ROAD ABOUT 0.6 MILE SSW OF FRANKLIN BLVD AT LAMBERT RD AND 1.2 MILES NE OF I-5 AT DIERSSEN RD.						
Detailed Location:	1993 OBSERVATION WAS IN AREA ABOUT 0.5 MI W OF THE OCCURRENCE. MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST SITES RECORDED IN 2009.						
Ecological:	NEST IN 25' TREE CODED AS "OTHER NATIVE" (NOT COTTONWOOD, WILLOW, BLUE OR VALLEY OAK, OR PINE), WITH FALLOW/RUDERAL LAND TO NORTH AND CROPLAND TO SOUTH. NEARBY PASTURES USED FOR FORAGING, AS OBSERVED IN JUL 1993.						
General:	ONE ADULT OBSERVED FORAGING IN 1993. SWAINSON'S HAWK(S) INCUBATING ON NEST OBSERVED ON 4 MAY 2009.						
Owner/Manager:	CITY OF ELK GROVE						

Occurrence No.	1866	Map Index:	87630	EO Index:	88599	Element Last Seen:	2003-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34526 / -121.47264				Accuracy:	nonspecific area	
UTM:	Zone-10 N4245227 E633470				Elevation (ft):	10	
PLSS:	T06N, R05E, Sec. 30, N (M)				Acres:	27.0	
Location:	ALONG UNNAMED CREEK, ON BOTH SIDES OF I-5, ABOUT 1.2 MI NW TO 1 MI N OF POINT PLEASANT.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. 3 NESTS SITES; NEST FURTHEST EAST IS IN STONE LAKES NWR PARCEL.						
Ecological:	3 NEST SITES IN 2003: W NEST IN 70' COTTONWOOD WITH CROPLAND TO SOUTH; MIDDLE NEST IN 50' COTTONWOOD SURROUNDED BY PASTURE; BOTH WEST OF I-5. E NEST ON EAST SIDE OF I-5, IN 30' WILLOW SURROUNDED BY PASTURE WITH CROPLAND TO THE NE.						
General:	TWO PARTIALLY-FEATHERED YOUNG OBSERVED IN WEST NEST ON 11 JUN; 2 FEATHERED YOUNG SEEN IN MIDDLE NEST & 1 FEATHERED YOUNG IN EAST NEST ON 9 JUL 2003.						
Owner/Manager:	UNKNOWN, USFWS-STONE LAKES NWR						



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Occurrence No.	1867	Map Index:	87631	EO Index:	88601	Element Last Seen:	2003-05-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.32743 / -121.46873			Accuracy:	80 meters		
UTM:	Zone-10 N4243254 E633844			Elevation (ft):	10		
PLSS:	T06N, R05E, Sec. 31, SE (M)			Acres:	0.0		
Location:	JUST SW OF KORN RD AT KESTREL LAKE RD ON THE WEST SIDE OF I-5, POINT PLEASANT.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. JUDGING FROM AERIAL PHOTOS, THE NEST TREE APPEARS TO BE LOCATED ON A DAIRY FARM.						
Ecological:	NEST IN 50' TREE CODED AS "OTHER NATIVE" (NOT BLUE OR VALLEY OAK, COTTONWOOD, WILLOW, OR PINE), SURROUNDED BY PASTURE.						
General:	ACTIVE NEST OBSERVED, BUT NO YOUNG SEEN ON 19 MAY 2003. NEST DESTROYED (BLOWN DOWN) AT UNKNOWN DATE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1868	Map Index:	87633	EO Index:	88602	Element Last Seen:	2003-06-03
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.33566 / -121.45713			Accuracy:	1/5 mile		
UTM:	Zone-10 N4244185 E634843			Elevation (ft):	15		
PLSS:	T06N, R05E, Sec. 32, NW (M)			Acres:	0.0		
Location:	SOUTH OF POINT PLEASANT RD, ABOUT 0.4 MILE SE OF FOGG RD INTERSECTION AND 0.5 MILE SW OF FRANKLIN RD INTERSECTION.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. LOCATION APPEARS TO BE AN OBSERVATION POINT, AS NEAREST TREES VISIBLE IN AERIAL PHOTOS ARE MORE THAN 200 M AWAY.						
Ecological:	NEST IN 30' TREE CODED AS "OTHER EXOTIC" (NOT EUCALYPTUS OR WALNUT), SURROUNDED BY PASTURE.						
General:	NEST WAS DIFFICULT TO OBSERVE DUE TO DISTANCE, BUT FOOD RETRIEVED WAS OBSERVED THROUGH NESTING SEASON; APPEARED TO HAVE AT LEAST 1 FEATHERED YOUNG ON 3 JUN 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1869	Map Index:	87634	EO Index:	88603	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.33383 / -121.44472				Accuracy:	nonspecific area	
UTM:	Zone-10 N4244000 E635931				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 33, NW (M)				Acres:	10.0	
Location:	ALONG E SIDE OF HEIN RD ABOUT 0.5 MI SSE OF POINT PLEASANT RD, 1.1 MILES E OF POINT PLEASANT, 1.5 MI W OF BRUCEVILLE.						
Detailed Location:	2003: COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS. 2009: POINT FROM CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2003: NEST IN 30' TREE CODED AS "OTHER EXOTIC" (NOT EUCALYPTUS OR WALNUT) SURROUNDED BY PASTURE. 2009: NEST IN 40' COTTONWOOD SURROUNDED BY PASTURE.						
General:	ACTIVE NEST OBSERVED, BUT NO YOUNG SEEN ON 3 JUN 2003. NEST WITH YOUNG OBS ON 28 APR 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1870	Map Index:	87635	EO Index:	88604	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.32222 / -121.43409				Accuracy:	specific area	
UTM:	Zone-10 N4242727 E636882				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 33, SE (M)				Acres:	12.0	
Location:	NORTH SIDE OF LAMBERT RD ABOUT 0.6 MILE E OF FRANKLIN BLVD INTERSECTION AND 1.3 MI SW OF BRUCEVILLE.						
Detailed Location:	1994: FORAGING TERRITORY (#SA00*) FROM CDFW SWAINSON'S HAWK OBSERVATION DATABASE IS NEARBY, ON SOUTH SIDE OF LAMBERT RD. 2009: TWO NEST SITES FROM CDFW SHAPEFILE OF SWHA NEST RECORDS FROM 2009.						
Ecological:	1994: FLOODED FIELDS SOUTH OF LAMBERT RD. 2009: W NEST IN 40' EUCALYPTUS, E NEST IN 35' TREE CODED AS "OTHER NATIVE" (NOT BLUE OR VALLEY OAK, WILLOW, COTTONWOOD, OR PINE) SURROUND ALFALFA & PASTURE.						
General:	GROUPS OF 20-100 SWHA OBS FORAGING ON MULTIPLE OCCASIONS JUL-SEP 1994. TWO NESTS WITH YOUNG SEEN ON 28 APR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1871	Map Index:	87636	EO Index:	88605	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.33454 / -121.41716				Accuracy:	80 meters	
UTM:	Zone-10 N4244119 E638339				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 34, N (M)				Acres:	0.0	
Location:	EAST SIDE OF BRUCEVILLE RD LESS THAN 0.1 MILE SOUTH OF POINT PLEASANT RD JUNCTION, IN BRUCEVILLE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 40' COTTONWOOD SURROUNDED BY CROPS, RESIDENTIAL LAND USE.						
General:	NEST WITH YOUNG OBSERVED ON 28 APRIL 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1872	Map Index:	87637	EO Index:	88606	Element Last Seen:	2003-05-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34108 / -121.44505				Accuracy:	80 meters	
UTM:	Zone-10 N4244804 E635888				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 28, SW (M)				Acres:	0.0	
Location:	NORTH OF POINT PLEASANT RD, ABOUT 0.2 MILE NE OF FRANKLIN BLVD INTERSECTION & 1.5 MILES WNW OF BRUCEVILLE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004.						
Ecological:	2003: NEST IN 30' WILLOW, WITH PASTURE TO THE SOUTH AND CROPLAND TO THE NORTH.						
General:	NEST WITH 1 FEATHERED YOUNG OBSERVED ON 8 MAY 2003.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1873	Map Index:	87638	EO Index:	88607	Element Last Seen:	2003-07-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34754 / -121.43952				Accuracy:	80 meters	
UTM:	Zone-10 N4245529 E636360				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 28, NW (M)				Acres:	0.0	
Location:	ABOUT 0.3 MILE SW OF ED RAU RD AT ESCHINGER RD AND 1.7 MILES NE OF POINT PLEASANT.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004.						
Ecological:	2003: NEST IN 30' WILLOW SURROUNDED BY CROPLAND.						
General:	NEST WITH 2 FEATHERED YOUNG OBSERVED ON 8 JUL 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1874	Map Index:	87640	EO Index:	88609	Element Last Seen:	2009-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-14
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34837 / -121.42683			Accuracy:	80 meters		
UTM:	Zone-10 N4245640 E637467			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 28, NE (M)			Acres:	0.0		
Location:	SOUTH OF ESCHINGER RD ABOUT 0.5 MILE ESE OF ED RAU RD INTERSECTION & 1 MILE NW OF BRUCEVILLE.						
Detailed Location:	MAPPED TO POINT IN CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 20' COTTONWOOD SURROUNDED BY PASTURE.						
General:	NEST WITH YOUNG OBSERVED ON 9 JUL 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1875	Map Index:	87641	EO Index:	88610	Element Last Seen:	2003-05-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-20
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35917 / -121.43593			Accuracy:	80 meters		
UTM:	Zone-10 N4246824 E636652			Elevation (ft):	15		
PLSS:	T06N, R05E, Sec. 21, N (M)			Acres:	0.0		
Location:	JUST NORTH OF CORE RD AT ITS INTERSECTION WITH ED RAU RD, ABOUT 1.7 MILES SE OF FRANKLIN.						
Detailed Location:	MAPPED TO COORDINATES FOR 2003 NEST, FROM CDFW NEST RECORDS, 2000-2004. OBSERVATION POINT PLUS BEARING AND DISTANCE TO NEST TREE GIVEN FOR 2001 DETECTION; ABOUT 75 M NORTH OF 2003 TREE.						
Ecological:	2001 NEST IN 70' COTTONWOOD SURROUNDED BY PASTURE; KITE NEST SEEN ABOUT 300 M TO THE NW. 2003 NEST IN 40' COTTONWOOD SURROUNDED BY PASTURE.						
General:	BREEDING PAIR OBSERVED AT NEST, BUT NO YOUNG SEEN ON 22 APR 2001. NEST WITH 1 FEATHERED YOUNG OBS ON 8 MAY 2003.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1876	Map Index:	87642	EO Index:	88611	Element Last Seen:	2009-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36301 / -121.44204			Accuracy:	80 meters		
UTM:	Zone-10 N4247241 E636110			Elevation (ft):	15		
PLSS:	T06N, R05E, Sec. 21, NW (M)			Acres:	0.0		
Location:	SOUTH END OF UNNAMED SLOUGH ABOUT 0.7 MILE NE OF FRANKLIN BLVD AT CORE RD AND 1.3 MILES SSE OF FRANKLIN.						
Detailed Location:	MAPPED TO POINT IN CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 35' COTTONWOOD WITH ALFALFA TO THE NORTH AND PASTURE TO THE SOUTH.						
General:	NEST WITH YOUNG OBSERVED ON 9 JUL 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1877	Map Index:	87644	EO Index:	88613	Element Last Seen:	2009-07-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36651 / -121.40282				Accuracy:	80 meters	
UTM:	Zone-10 N4247689 E639530				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 14, SW (M)				Acres:	0.0	
Location:	E SIDE OF RAU ROAD, ABOUT 0.4 MI S OF KAMMERER ROAD INTERSECTION AND 3 MI ESE OF FRANKLIN.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004 & POINT FROM CDFW SHAPEFILE OF NEST RECORDS, 2009. 2003 & 2009 NESTS APPEAR TO BE IN SAME TREE.						
Ecological:	2003, 2009: NEST IN 35' EUCALYPTUS. SURROUNDING LAND USES ARE PASTURE, RESIDENTIAL, CROPLAND, AND ORCHARD/VINEYARD.						
General:	2003: ACTIVE NEST OBSERVED; NEST WAS DAMAGED AND ABANDONED BY 13 MAY. 2009: NEST WITH YOUNG OBSERVED ON 8 JUL.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1878	Map Index:	87646	EO Index:	88615	Element Last Seen:	2003-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-07-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.37216 / -121.42064				Accuracy:	1/10 mile	
UTM:	Zone-10 N4248289 E637963				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 15, W (M)				Acres:	0.0	
Location:	JUST WEST OF BRUCEVILLE ROAD AT KAMMERER ROAD, ABOUT 1.9 MILES ESE OF FRANKLIN.						
Detailed Location:	1994 DETECTION AT TERRITORY "SA" (NO # ASSIGNED) FROM CDFW DATABASE OF SWAINSON'S HAWK OBSERVATIONS FROM 1979-1994. MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004.						
Ecological:	NEST TREE IN 50' COTTONWOOD SURROUNDED BY PASTURE.						
General:	1994: PAIR OBSERVED ON SOARING 14 JUN. 2003: 1 FLEDGED YOUNG OBSERVED IN NEST ON 2 JUL.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1879	Map Index:	87647	EO Index:	88617	Element Last Seen:	2003-06-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35689 / -121.49187				Accuracy:	80 meters	
UTM:	Zone-10 N4246491 E631768				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 24, W (M)				Acres:	0.0	
Location:	ALONG NORTH ARM OF S STONE LAKE, ABOUT 1.3 MILES SSW OF STONE LAKE RD AT HOOD FRANKLIN RD & 1.6 MILES SE OF HOOD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. JUST SE THE BOUNDARY OF STONE LAKES NATIONAL WILDLIFE REFUGE.						
Ecological:	NEST IN 60' COTTONWOOD WITH PASTURE TO THE EAST AND CROPLAND TO THE WEST.						
General:	2 DOWNY YOUNG OBSERVED IN NEST ON 11 JUN 2003.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1880	Map Index:	87649	EO Index:	88618	Element Last Seen:	2003-05-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36385 / -121.48425				Accuracy:	80 meters	
UTM:	Zone-10 N4247274 E632421				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 24, NE (M)				Acres:	0.0	
Location:	ALONG NORTH ARM OF S STONE LAKE, ABOUT 0.1 MI W OF STONE LAKE RD, 0.9 MI SW OF I-5 AT HOOD FRANKLIN RD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004. ABOUT 0.3 MILE EAST OF STONE LAKES NWR BOUNDARY.						
Ecological:	NEST IN 50' WILLOW SURROUNDED BY PASTURE.						
General:	NEST WITH 1 FEATHERED YOUNG OBSERVED ON 15 MAY 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1881	Map Index:	87650	EO Index:	88619	Element Last Seen:	2003-06-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38678 / -121.48373			Accuracy:	80 meters		
UTM:	Zone-10 N4249818 E632425			Elevation (ft):	0		
PLSS:	T06N, R04E, Sec. 12, E (M)			Acres:	0.0		
Location:	STONE LAKE STATE PARK, ABOUT 0.9 MILE NNW OF I-5 AT HOOD FRANKLIN RD AND 2.3 MILES NE OF HOOD.						
Detailed Location:	TRS GIVEN FOR 1993 DETECTION AT TERRITORY SA072 IN CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. MAPPED TO COORDINATES FROM CDFW DATABASE OF SWHA NEST RECORDS, 2000-2004.						
Ecological:	2003 NEST IN 50' COTTONWOOD SURROUNDED BY GRASSLAND.						
General:	SWAINSON'S HAWKS OBS IN AREA MAY & JUN 1993. ACTIVE NEST OBSERVED, BUT NO YOUNG SEEN BECAUSE NEST WAS HARD TO SEE INTO, ON 10 JUN 2003.						
Owner/Manager:	DPR-STONE LAKE PARK						

Occurrence No.	1882	Map Index:	87657	EO Index:	88625	Element Last Seen:	2009-04-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38440 / -121.49622			Accuracy:	nonspecific area		
UTM:	Zone-10 N4249537 E631338			Elevation (ft):	5		
PLSS:	T06N, R04E, Sec. 12, SW (M)			Acres:	8.0		
Location:	SOUTH END OF N STONE LAKE, ABOUT 1.2 MILES NW OF I-5 AT HOOD FRANKLIN RD AND 1.6 MILES NE OF HOOD.						
Detailed Location:	2003: COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2003: NEST IN 45' WILLOW SURROUNDED BY PASTURE. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	ABANDONED NEST OBSERVED ON 10 JUN 2003. 1-2 NESTING SWAINSON'S HAWKS OBSERVED ON 17 APR 2009.						
Owner/Manager:	DPR-STONE LAKE PARK						



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Occurrence No.	1883	Map Index:	87659	EO Index:	88628	Element Last Seen:	2009-05-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.39175 / -121.49681				Accuracy:	nonspecific area	
UTM:	Zone-10 N4250351 E631274				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 12 (M)				Acres:	22.0	
Location:	N STONE LAKE, ON EAST AND WEST SHORE; ABOUT 0.6 MI ENE OF ROSEBUD LANDING AND 1.6 MI NW OF I-5 AT HOOD FRANKLIN RD.						
Detailed Location:	2003: COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS, 2000-2004. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2003: NEST ON W LAKESHORE, IN 45' VALLEY OAK SURROUNDED BY GRASSLAND. 2009: NESTING SITE ON E LAKESHORE, HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2003: ACTIVE NEST WITH 0 YOUNG OBSERVED ON 9 JUN. 2009: 2 NESTING SWAINSON'S HAWKS OBSERVED ON 5 MAY. NEST SUCCESS UNKNOWN/NOT RECORDED.						
Owner/Manager:	DPR-STONE LAKE PARK						

Occurrence No.	1884	Map Index:	87662	EO Index:	88632	Element Last Seen:	2003-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38124 / -121.45358				Accuracy:	80 meters	
UTM:	Zone-10 N4249248 E635068				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 08, SE (M)				Acres:	0.0	
Location:	JUST NE FRANKLIN BLVD AT KENNETH WAY, FRANKLIN.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	NEST IN 60' SYCAMORE TREE SURROUNDED BY PASTURE, WITH RESIDENTIAL TO THE SOUTHEAST.						
General:	PAIR SITTING ON NEST WITH 2 FEATHERED YOUNG OBSERVED IN THE NEST ON 13 MAY 2003.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1885	Map Index:	87665	EO Index:	88634	Element Last Seen:	2002-07-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-07-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37840 / -121.41974				Accuracy:	80 meters	
UTM:	Zone-10 N4248983 E638030				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 15, NW (M)				Acres:	0.0	
Location:	ABOUT 0.1 MILE SW OF BILBY ROAD AT BRUCEVILLE ROAD, 1.9 MILES E OF FRANKLIN.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	NEST IN 50' WALNUT WITH CROPLAND TO NORTH AND ORCHARD/VINEYARD AND PASTURE TO SOUTH.						
General:	1 CHICK BRANCHING ON 16 JUL; ACTIVE NEST REVISITED ON 18 JUL 2002.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1886	Map Index:	87668	EO Index:	88637	Element Last Seen:	2009-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38295 / -121.41598				Accuracy:	specific area	
UTM:	Zone-10 N4249493 E638349				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 10 (M)				Acres:	15.0	
Location:	EAST SIDE OF BRUCEVILLE RD, VICINITY OF BILBY ROAD, ABOUT 2 MILES E OF FRANKLIN.						
Detailed Location:	THREE NEST SITES. MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS AND POINT FROM CDFW SHAPEFILE OF NEST RECORDS FROM 2009.						
Ecological:	2003: N NEST IN 40' TREE CODED AS "OTHER NATIVE" (NOT BLUE/VALLEY OAK, PINE, WILLOW OR COTTONWOOD); S NEST IN "OTHER EXOTIC" (NOT EUC OR WALNUT); SUROUNDED BY PASTURE 2009: NEST IN 40' EUCALYPTUS; FALLOW/RUDERAL LAND TO E, RESIDENTIAL TO W.						
General:	2003: TWO ACTIVE NESTS OBSERVED ON 24 JUN; 1 ADULT OBS FLYING INTO NEST WITH 1 FEATHERED YOUNG AND LEAVING N NEST, 1 FEMALE ADULT OBS STANDING IN S NEST (NEST FAILURE PRESUMED). 2009: NEST WITH YOUNG OBSERVED ON 9 JUL.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1887	Map Index:	87670	EO Index:	88639	Element Last Seen:	2009-04-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39468 / -121.41352				Accuracy:	specific area	
UTM:	Zone-10 N4250799 E638542				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 03, SE (M)				Acres:	15.0	
Location:	VICINITY OF BRUCEVILLE ROAD AT POPPY RIDGE ROAD, ABOUT 2.2 MILES ENE OF FRANKLIN.						
Detailed Location:	1994 DETECTION AT TERRITORY SA (NO # ASSIGNED) FROM CDFW DATABASE OF 1979-94 SWHA OBSERVATIONS. THREE NEST SITES, MAPPED TO COORDINATES FROM CDFW DATABASE OF SWHA NEST RECORDS 2000-04, & POINT FROM CDFW SHAPEFILE OF NESTS RECORDS FROM 2009.						
Ecological:	2009: NEST IN 35' VALLEY OAK SURROUNDED BY RESIDENTIAL WITH FALLOW/RUDERAL LAND TO SE.						
General:	1994: 1 SWHA OBS, NO NEST FOUND. 2003: 3 PARTIALLY-FEATHERED YOUNG OBS IN W NEST 13 MAY-2 JUL; PAIR PERCHED IN TELEPHONE POLE NEAR E NEST ON 25 JUN (NO ACTIVITY, POSSIBLY FAILED/ABANDONED). 2009: NEST WITH YOUNG OBS ON 29 APR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1888	Map Index:	87671	EO Index:	88640	Element Last Seen:	2003-06-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39059 / -121.42695				Accuracy:	80 meters	
UTM:	Zone-10 N4250325 E637377				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 09, NE (M)				Acres:	0.0	
Location:	FRANKLIN HIGH SCHOOL CAMPUS, ABOUT 0.5 MILE W OF BRUCEVILLE ROAD AT POPPY RIDGE ROAD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS. 2002 AND 2003 NESTS APPEAR TO HAVE BEEN IN SAME/ADJACENT TREES.						
Ecological:	2002: NEST IN 75' WALNUT SURROUNDED BY GRASSLAND WITH RESIDENTIAL TO THE NW. 2003: NEST IN 45' WALNUT WITH RESIDENTIAL W & FALLOW/RUDERAL LAND E. SINCE THE FIRST NEST DETECTION, MUCH OF THE SURROUNDING OPEN SPACE HAS BEEN DEVELOPED.						
General:	1 FEATHERED CHICK OBSERVED IN NEST ON 19 JUL 2002. ADULTS SHADING 1 DOWNY CHICK IN NEST OBS ON 26 JUN 2003.						
Owner/Manager:	PVT						

Occurrence No.	1889	Map Index:	87672	EO Index:	88641	Element Last Seen:	2003-06-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40176 / -121.38734				Accuracy:	specific area	
UTM:	Zone-10 N4251624 E640814				Elevation (ft):	40	
PLSS:	T06N, R05E, Sec. 01, W (M)				Acres:	11.0	
Location:	WEST SIDE OF I-99 ABOUT 0.5 MILE SOUTH OF ELK GROVE BOULEVARD INTERSECTION, ELK GROVE.						
Detailed Location:	TWO NEST SITES. MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	2001 NEST IN 60' VALLEY OAK SURROUNDED BY CROPLAND. 2003 NEST IN 60' VALLEY OAK WITH RESIDENTIAL TO THE EAST AND FALLOW LAND TO THE WEST. 2001 NEST TREE APPEARS TO HAVE BEEN CUT IN 2002 TO MAKE WAY FOR ONGOING AUTO MALL EXPANSION.						
General:	2001: ACTIVE NEST; COPULATION & NEST-BUILDING OBSERVED ON 30 APR, INCUBATION OBS ON 20 MAY. 2003: NEST WITH TWO DOWNY YOUNG OBS ON 25 JUN.						
Owner/Manager:	PVT						



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Occurrence No.	1890	Map Index:	87676	EO Index:	88644	Element Last Seen:	2003-06-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-06-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40692 / -121.41932				Accuracy:	80 meters	
UTM:	Zone-10 N4252148 E638012				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 03, NW (M)				Acres:	0.0	
Location:	ABOUT 0.2 MILE SW OF BRUCEVILLE RD/ELK GROVE BLVD INTERSECTION IN ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	2003: NEST IN 40' COTTONWOOD, SURROUNDED BY RESIDENTIAL WITH CROPLAND TO THE SE. SINCE THE DETECTION (SOME TIME LATE 2003/EARLY 2004), THE AREA HAS BEEN COMPLETELY DEVELOPED. AIR PHOTOS SHOW SOME TREES REMAIN, SURROUNDED BY PARKING LOT.						
General:	ADULT MALE OBSERVED ON 18, 24, & 25 JUN; NEST WITH 1 DOWNY YOUNG OBS ON 25 JUN 2003. IF NOT EXTIRPATED, THIS SITE IS HIGHLY DEGRADED (B. ACORD 5/2013).						
Owner/Manager:	PVT						

Occurrence No.	1891	Map Index:	87680	EO Index:	88649	Element Last Seen:	2002-04-02
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2002-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40819 / -121.43831				Accuracy:	80 meters	
UTM:	Zone-10 N4252261 E636352				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 04, NW (M)				Acres:	0.0	
Location:	SOUTH SIDE OF ELK GROVE BOULEVARD ABOUT 0.6 MILE EAST OF FRANKLIN BOULEVARD INTERSECTION, ELK GROVE.						
Detailed Location:	1993-94 DETECTIONS AT TERRITORY #SA078 FROM CDFW DATABASE OF 1979-94 SWAINSON'S HAWK OBSERVATIONS (COORDS DON'T MATCH DESC "ELK GROVE BLVD 1.2 MI E FRANKLIN BLVD"). MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-04 NEST RECORDS.						
Ecological:	1994: NEST IN VALLEY OAK. 2000: SURVEYOR UNABLE TO LOCATE NEST. 2002: NEST IN 70' VALLEY OAK; FIRST NEST ABANDONED, 2ND NEST SUSPECTED IN EVEN LARGER OAK NEARBY. JUDGING FROM AERIALS, ALL AVAILABLE NEST TREES WERE CUT DOWN LATER THAT YEAR.						
General:	1993: PAIR OBS IN AREA 16 JUL. 1994: TERRITORIAL FEMALE DEFENDING 2 FLEDGLINGS 14 JUL. 2000: NO NEST FOUND (INADEQUATE OBS). 2002: ACTIVE NEST/0 YOUNG OBS ON 2 APR; NEST LATER ABANDONED, PAIR STAYED IN AREA BUT 2ND NEST NOT FOUND.						
Owner/Manager:	PVT						



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Occurrence No.	1892	Map Index:	87682	EO Index:	88651	Element Last Seen:	2003-06-26
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2003-06-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40202 / -121.43932				Accuracy:	80 meters	
UTM:	Zone-10 N4251575 E636275				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 04, NW (M)				Acres:	0.0	
Location:	NORTHWEST CORNER OF HEATHER FIELD WAY AND SUMMER GLEN WAY IN ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWHA NEST RECORDS.						
Ecological:	2003: NEST IN 75' VALLEY OAK SURROUNDED BY RESIDENTIAL. SINCE THIS DETECTION, THE AREA HAS BEEN ENTIRELY DEVELOPED, BUT JUDGING FROM 2012 AERIALS, THE NEST TREE APPEARS TO STILL BE STANDING, THOUGH SURROUNDED BY TRACT HOUSING.						
General:	NEST WITH 1 DOWNY YOUNG OBSERVED ON 26 JUN 2003.						
Owner/Manager:	PVT						

Occurrence No.	1893	Map Index:	87684	EO Index:	88653	Element Last Seen:	2003-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40293 / -121.44898				Accuracy:	80 meters	
UTM:	Zone-10 N4251662 E635429				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 05, NE (M)				Acres:	0.0	
Location:	JUST SOUTH OF PERCHERON DR AT WESTFALEN WAY, ABOUT 0.4 MI S OF FRANKLIN BLVD AT ELK GROVE BLVD IN ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWHA NEST RECORDS.						
Ecological:	2003 NEST TREE IN 60' VALLEY OAK SURROUNDED BY RESIDENTIAL. SINCE 2003, THE AREA HAS BEEN COMPLETELY DEVELOPED, THOUGH 2012 AERIALS SHOW THE NEST TREE MAY STILL BE STANDING.						
General:	NEST WITH 2 FEATHERED YOUNG OBSERVED ON 13 MAY 2003.						
Owner/Manager:	PVT						



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Occurrence No.	1894	Map Index:	87685	EO Index:	88654	Element Last Seen:	2009-05-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40916 / -121.48614				Accuracy:	1/10 mile	
UTM:	Zone-10 N4252298 E632173				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 36 (M)				Acres:	0.0	
Location:	WEST SIDE I-5 AT ELK GROVE BOULEVARD EXIT.						
Detailed Location:	1992 DETECTIONS IN VICINITY. MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE UNKNOWN.						
Ecological:	2009: NEST IN COTTONWOOD TREE. SHRIKE NEST OBSERVED NEARBY. WETLAND PRESERVES AND RUDERAL FIELDS WEST OF I-5 USED AS FORAGING HABITAT.						
General:	FORAGING SWAINSON'S HAWKS OBSERVED IN 1992. NESTING SWHA OBS ON 21 APR & 5 MAY 2009. ADULT OBS ON NEST, NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1895	Map Index:	87686	EO Index:	88655	Element Last Seen:	2009-05-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.41833 / -121.50149				Accuracy:	nonspecific area	
UTM:	Zone-10 N4253294 E630817				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 35 (M)				Acres:	70.0	
Location:	ALONG CANAL PARALLELLING SOUTHERN PACIFIC RAILROAD, ABOUT 1 MI NW OF I-5 AT ELK GROVE BLVD AND 1.5 MI E OF CLARKSBURG.						
Detailed Location:	2003: MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 NEST RECORDS. 2009: NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. NORTHERNMOST NEST SITE(S) WITHIN STONE LAKES NWR.						
Ecological:	2003: NEST IN 50' COTTONWOOD TREE WITH PASTURE TO EAST AND RIPARIAN TO WEST. 2009: 1 NEST IN VALLEY OAK, OTHER NESTS POSSIBLY PRESENT BUT NOT DESCRIBED. NESTING RED-TAILED HAWKS OBSERVED IN VICINITY.						
General:	2003: ACTIVE NEST OBSERVED ON 14 MAY, NEST EMPTY BY 14 JUL. 2009: 3 OBSERVATIONS OF NESTING PAIRS IN VICINITY 3 APR-21 MAY, 1 ACTIVE NEST OBSERVED ON 21 APR. NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN, USFWS-STONE LAKES NWR						



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Occurrence No.	1896	Map Index:	87687	EO Index:	88656	Element Last Seen:	2009-04-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42335 / -121.49009				Accuracy:	1/10 mile	
UTM:	Zone-10 N4253868 E631803				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 36 (M)				Acres:	0.0	
Location:	STONE LAKES NWR, ALONG SLOUGH ON W SIDE OF I-5 ABOUT 1 MI NNW OF ELK GROVE BLVD EXIT & 2 MI E OF CLARKSBURG.						
Detailed Location:	NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	2 NESTING SWAINSON'S HAWKS OBSERVED ON 30 APR 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	1897	Map Index:	87688	EO Index:	88657	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43740 / -121.49563				Accuracy:	80 meters	
UTM:	Zone-10 N4255419 E631294				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 25, NW (M)				Acres:	0.0	
Location:	ALONG MORRISON CREEK ABOUT 0.3 MI WSW OF I-5 CROSSING & 1.3 MI SSE OF FREEPORT BRIDGE OVER THE SACRAMENTO RIVER.						
Detailed Location:	1992, 2009 DETECTIONS IN VICINITY. MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 NEST RECORDS.						
Ecological:	1992: PAIR SEEN FORAGING OVER CUT ALFLALFA AND NEWLY-DISKED GRAIN FIELDS. 2003: NEST IN 70' COTTONWOOD WITH RIPARIAN TO THE WEST AND CROPLAND/FALLOW LAND TO THE EAST.						
General:	FORAGING PAIR OBSERVED IN 1992. NEST WITH 1 PARTIALLY-FEATHERED YOUNG OBS ON 10 JUN 2003. PAIR PRESENT THROUGHOUT THE YEAR IN 2009, NESTING SUSPECTED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1898	Map Index:	87689	EO Index:	88658	Element Last Seen:	2009-07-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44566 / -121.48250			Accuracy:	80 meters		
UTM:	Zone-10 N4256354 E632425			Elevation (ft):	0		
PLSS:	T07N, R04E, Sec. 24, E (M)			Acres:	0.0		
Location:	SOUTH SIDE OF BEACH LAKE, ALONG MORRISON CREEK ON THE E SIDE OF I-5 ABOUT 1.3 MI SE OF FREEPORT BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS. HISTORICAL NEST SITES MENTIONED IN TABLE OF 2009 SWHA OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	2003 NEST IN 50' COTTONWOOD SUROUNDED BY FALLOW/RUDERAL LAND. AREA SURVEYED IN 2009; NEST NOT FOUND, BUT SURVEYOR NOTED NESTING IN DENSE VALLEY OAKS "IN PREVIOUS YEARS." ANOTHER HISTORICAL NEST SITE, ABOUT 0.3 MI SW, ALSO VACANT IN 2009.						
General:	NEST WITH 1 YOUNG OBSERVED ON 14 MAY 2003. JUVENILE OBS IN AREA ON 20 JUL 2009, BUT NO NEST FOUND.						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	1899	Map Index:	87690	EO Index:	88659	Element Last Seen:	2009-06-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44582 / -121.49011			Accuracy:	80 meters		
UTM:	Zone-10 N4256361 E631760			Elevation (ft):	5		
PLSS:	T07N, R04E, Sec. 24, NE (M)			Acres:	0.0		
Location:	EAST SIDE OF I-5 ON BEACH LAKE RD, ABOUT 0.4 MI N OF MORRISON CREEK CROSSING & 0.9 MI SE OF FREEPORT BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES FOR 2009 SWAINSON'S HAWK OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS. LOCATION STATED AS "NW SHORE OF MEADOWLARK LAKE."						
Ecological:							
General:	NEST WITH 1 DOWNY CHICK OBSERVED JUN 2009; NO ACTIVITY ON NEST OBS DURING 3 SURVEY DAYS IN JUL.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	1900	Map Index:	87691	EO Index:	88660	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45697 / -121.47463			Accuracy:	specific area		
UTM:	Zone-10 N4257621 E633091			Elevation (ft):	5		
PLSS:	T07N, R05E, Sec. 18, S (M)			Acres:	10.0		
Location:	ALONG MORRISON CREEK JUST W OF LAGUNA CREEK CONFLUENCE, ABOUT 1.5 MILES E OF FREEPORT BRIDGE.						
Detailed Location:	MAPPED TO COORDINATES FOR 2 NEST SITES FROM 2009 SWAINSON'S HAWK OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS. LOCATIONS STATED AS "UPPER CELL & LAGUNA CREEK," "NORTH LEVEE & MORRISON CREEK."						
Ecological:	2009: BOTH NESTS IN GOODDING'S WILLOWS.						
General:	TWO ACTIVE NESTS MONITORED FROM MAY-JUL 2009; EACH FLEDGED 2 YOUNG.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	1901	Map Index:	87692	EO Index:	88661	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45507 / -121.46429			Accuracy:	80 meters		
UTM:	Zone-10 N4257425 E633997			Elevation (ft):	5		
PLSS:	T07N, R05E, Sec. 18, S (M)			Acres:	0.0		
Location:	NORTH SIDE OF WASTEWATER TREATMENT PLANT ALONG LAGUNA CREEK, ABOUT 0.4 MI SE OF MORRISON CREEK CONFLUENCE.						
Detailed Location:	COORDINATES FROM TABLE OF SWAINSON'S HAWK OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS, 2009. STATED LOCATION "SEPTAGE AREA ADJACENT TO TREATMENT PLANT."						
Ecological:	NEST IN GOODDING'S WILLOW.						
General:	ACTIVE NEST MONITORED MAY-JUL 2009; NEST FLEDGED 3 YOUNG.						
Owner/Manager:	SRCSD						



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Occurrence No.	1902	Map Index:	87696	EO Index:	88669	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44650 / -121.45410				Accuracy:	80 meters	
UTM:	Zone-10 N4256488 E634902				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 20, NE (M)				Acres:	0.0	
Location:	SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT PROPERTY, S OF LAGUNA CK ABOUT 0.5 MI SSW OF FRANKLIN BLVD AT CALVINE RD.						
Detailed Location:	MAPPED TO COORDINATES OF 2009 SWHA OBSERVATIONS ON SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS. STATED LOCATION "FISH HEAD LAKE ON EAST SIDE OF BUFFERLANDS."						
Ecological:							
General:	ACTIVE NEST MONITORED MAY-JUL 2009; TWO YOUNG FLEDGED.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	1903	Map Index:	87698	EO Index:	88671	Element Last Seen:	1990-04-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43057 / -121.41613				Accuracy:	1/5 mile	
UTM:	Zone-10 N4254778 E638245				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 27, SE (M)				Acres:	0.0	
Location:	BIG HORN ROAD JUST EAST OF BRUCEVILLE ROAD INTERSECTION, ABOUT 0.9 MILE SW OF I-99 AT SHELDON ROAD.						
Detailed Location:	MAPPED TO TRS AND STATED LOCATION FOR TERRITORY #SA070 IN CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. NEST TREE AT "BIG HORN, EAST OF BRUCEVILLE." EXACT LOCATION OF NEST TREE NOT KNOWN.						
Ecological:	1990 NEST IN VALLEY OAK AMIDST OPEN FIELDS/GRASS. MUCH OF THE SURROUNDING AREA HAS BEEN FURTHER DEVELOPED SINCE THIS DETECTION.						
General:	2 ADULTS AND 1 JUVENILE SEEN AT NEST ON 20 APR 1990.						
Owner/Manager:	PVT						



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Occurrence No.	1904	Map Index:	87699	EO Index:	88672	Element Last Seen:	2004-06-24
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2004-06-24	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-02-21	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45130 / -121.41372			Accuracy:	80 meters		
UTM:	Zone-10 N4257082 E638417			Elevation (ft):	25		
PLSS:	T07N, R05E, Sec. 22, NW (M)			Acres:	0.0		
Location:	NORTH SIDE OF SHASTA AVE ABOUT 0.2 MILE E OF BRUCEVILLE RD INTERSECTION & 0.3 MILE W OF W STOCKTON BLVD, ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	2004 NEST IN 100' EUCALYPTUS WITH RESIDENTIAL TO SOUTH AND FALLOW/RUDERAL TO NORTH. SUBSEQUENTLY TENNIS COURTS, PARK & LIBRARY WERE BUILT ON LAND W AND SW OF NEST SITE (FROM AERIALS).						
General:	SWHA PAIR OBSERVED ON AND/OR NEAR NEST ON 9 MAY & 24 JUN 2004; NO YOUNG OBSERVED, NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1905	Map Index:	87700	EO Index:	88673	Element Last Seen:	2010-06-25
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2010-06-25	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-02-25	
Quad Summary:	Florin (3812144), Sacramento East (3812154)						
County Summary:	Sacramento						
Lat/Long:	38.49926 / -121.49382			Accuracy:	80 meters		
UTM:	Zone-10 N4262286 E631339			Elevation (ft):	10		
PLSS:	T08N, R04E, Sec. 36, SW (M)			Acres:	0.0		
Location:	SOUTHEAST CORNER OF BING MALONEY GOLF COURSE, ABOUT 0.3 MILE NW OF FLORIN RD AT 21ST STREET, SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	2009, 2010: NEST IN TALL COTTONWOOD WITHIN A GOLF COURSE FAIRWAY JUST NORTH OF A PUBLIC PARK. VISIBLE DISTURBANCE FROM RECREATION, POSSIBLE THREAT OF TREE REMOVAL DUE TO GOLF COURSE OPERATIONS.						
General:	2009: ACTIVE NEST, INCUBATION OBSERVED ON 20 MAY; 4 ADULTS SEEN, OTHER BREEDING PAIRS SUSPECTED IN VICINITY. 2010: NESTING SWHA & ADDITIONAL PAIR OBS 12 MAY; ADULT & 1 HATCHLING OBS ON NEST 25 JUN.						
Owner/Manager:	PVT						



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Occurrence No.	1906	Map Index:	87701	EO Index:	88674	Element Last Seen:	2009-07-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.38682 / -121.50699				Accuracy:	specific area	
UTM:	Zone-10 N4249791 E630393				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 11, SE (M)				Acres:	10.0	
Location:	ALONG CANAL ON EAST SIDE OF RR TRACKS BETWEEN THE SACRAMENTO RIVER & N STONE LAKE, ABOUT 1-1.4 MILES NNE OF HOOD.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASES OF 2000-2004 & 2009 SWAINSON'S HAWK NEST RECORDS, & POINT FROM DWR SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA.						
Ecological:	2 NESTING TERRITORIES; N TERRITORY ACTIVE IN 2003 & '09; S IN '09. 2003: NEST IN 70' COTTONWOOD. 2009: N NEST IN 45' VALLEY OAK. S NEST IN 25' VALLEY OAK. SURROUNDING HABITAT RIPARIAN, SEASONAL WETLAND, GRASSLAND, FALLOW, PASTURE.						
General:	2003: ACTIVE NEST OBS 9 JUN; NEST SUCCESS UNKNOWN. 2009: N NEST OBS 28 APR, YOUNG SEEN IN NEST ON 19 JUN; YOUNG IN S NEST ON 17 JUL.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1907	Map Index:	87702	EO Index:	88675	Element Last Seen:	2009-06-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-19
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.38998 / -121.51581				Accuracy:	80 meters	
UTM:	Zone-10 N4250129 E629617				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 11, NW (M)				Acres:	0.0	
Location:	WEST SIDE OF SACRAMENTO RIVER AT RM 40, ABOUT 1.2 MILES S OF CO RD 141 INTERSECTION & 1.5 MILES N OF HOOD.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF 2009 SWAINSON'S HAWK NEST RECORDS. GIVEN DESCRIPTION "IN NE QUADRANT OF SURVEY BLOCK [#1826]. ALONG RIVER ROAD, NORTH OF COUNTY ROAD 142."						
Ecological:	2009: NEST IN 40' COTTONWOOD WITH FALLOW LAND TO THE WEST AND PASTURE TO THE NORTHEAST.						
General:	NEST WITH YOUNG OBSERVED ON 19 JUN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1909	Map Index:	87709	EO Index:	88677	Element Last Seen:	2009-04-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.39775 / -121.53581				Accuracy:	80 meters	
UTM:	Zone-10 N4250962 E627857				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 03, SW (M)				Acres:	0.0	
Location:	WEST SIDE OF ELK SLOUGH, ABOUT 0.2 MILE S OF CO RD 141 AT RD 144 & 1 MILE E OF TULE RD AT CENTRAL AVE.						
Detailed Location:	MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 SWAINSON'S HAWK NEST RECORDS.						
Ecological:	NEST IN 40' VALLEY OAK SURROUNDED BY FALLOW/RUDERAL LAND.						
General:	NEST WITH YOUNG OBSERVED ON 21 APRIL 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1910	Map Index:	87711	EO Index:	88679	Element Last Seen:	2009-07-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-20
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.42920 / -121.59421				Accuracy:	80 meters	
UTM:	Zone-10 N4254373 E622703				Elevation (ft):	5	
PLSS:	T07N, R03E, Sec. 25, NE (M)				Acres:	0.0	
Location:	ALONG WILLOW POINT RD, 0.6 MILE W OF JEFFERSON BLVD & 3.7 MI WNW OF CLARKSBURG.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 25' WILLOW SURROUNDED BY ALFALFA FIELDS WITH OTHER CROPLAND TO THE SOUTHEAST.						
General:	SWAINSON'S HAWK(S) OBSERVED WITH DEFENSIVE BEHAVIOR ON 14 JUL 2009. NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1921	Map Index:	87731	EO Index:	88696	Element Last Seen:	2009-06-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.47360 / -121.59833				Accuracy:	specific area	
UTM:	Zone-10 N4259295 E622269				Elevation (ft):	5	
PLSS:	T07N, R03E, Sec. 12, NW (M)				Acres:	11.0	
Location:	YOLO BYPASS WILDLIFE AREA, ALONG OLD RAILROAD GRADE ABOUT 2 MI N OF TULE CANAL AT BABEL SLOUGH & 2.9 MI SW OF RIVERVIEW.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009 AND COORDINATES FOR SITE YO-84 FROM 2008 ESTEP REPORT.						
Ecological:	2007: NESTING TERRITORY DETECTED IN OAK GROVE ADJACENT TO SEASONAL WETLAND, RICE, AND ALFALFA. SURVEYOR MAY NOT HAVE BEEN ABLE TO DIRECTLY OBSERVE NEST/NEST TREE. 2009: NEST IN 30' WILLOW WITH SEASONAL WETLANDS TO NORTH & PASTURE TO SOUTH.						
General:	NESTING TERRITORY DETECTED DURING 2007 SURVEY; NESTING OUTCOME UNKNOWN/UNCONFIRMED. ACTIVE NEST, INCUBATION OBSERVED ON 11 JUN 2009; NEST SUCCESS UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	1922	Map Index:	87732	EO Index:	88698	Element Last Seen:	2009-04-27
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.48883 / -121.62131				Accuracy:	80 meters	
UTM:	Zone-10 N4260954 E620239				Elevation (ft):	5	
PLSS:	T08N, R03E, Sec. 35, SW (M)				Acres:	0.0	
Location:	YOLO BYPASS WILDLIFE AREA, ABOUT 1.8 MILES SE OF RD 35 AT RD 106A & 2.4 MILES WNW OF ARCADE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 25' WILLOW SURROUNDED BY SEASONAL WETLANDS, WITH CROPLAND TO THE NW.						
General:	NEST-BUILDING OBSERVED ON 27 APR 2009. NEST SUCCESS UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	1923	Map Index:	87736	EO Index:	88702	Element Last Seen:	2009-06-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Clarksburg (3812145), Sacramento West (3812155)						
County Summary:	Yolo						
Lat/Long:	38.50156 / -121.59485				Accuracy:	specific area	
UTM:	Zone-10 N4262402 E622525				Elevation (ft):	10	
PLSS:	T08N, R03E, Sec. 36, NE (M)				Acres:	17.0	
Location:	EAST SIDE OF YOLO BYPASS WILDLIFE AREA, ABOUT 1.1 MI SSW OF S FORK PUTAH CREEK AT TOE DRAIN & 1.8 MI WSW OF RIVERVIEW.						
Detailed Location:	COORDINATES FROM CDFW DATABASE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004, & POINTS FROM CDFW SHAPEFILE OF NEST RECORDS FROM 2009. '02 NEST SITE AT "SE CORNER OF CLOSED ZONE," '03 "NEAR EAST LEVEE, BOTTOM END OF OLD NAGGS PROPERTY."						
Ecological:	2002: NEST IN 50' COTTONWOOD SURROUNDED BY FALLOW/RUDERAL LAND. 2003: NEST IN SAME/ADJACENT TREE AS IN '02; PASTURE TO S. 2004: NEST IN 75' COTTONWOOD; IN PASTURE. 2009: NEST IN 30' WILLOW ABOUT 130M W OF '04 NEST TREE; IN SEASONAL WETLAND.						
General:	2002: NEST WITH 1 PARTIALLY-FEATHERED YOUNG OBSERVED ON 22 APR. 2003: NEST WITH 1 FEATHERED YOUNG OBS 30 MAY. 2004: ACTIVE NEST OBS 27 MAY; NO YOUNG OBS. 2009: NEST WITH YOUNG OBS ON 8 JUN.						
Owner/Manager:	DFG-YOLO BYPASS WA, UNKNOWN						
Occurrence No.	1924	Map Index:	87737	EO Index:	88703	Element Last Seen:	2009-06-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.35568 / -121.64182				Accuracy:	80 meters	
UTM:	Zone-10 N4246152 E618668				Elevation (ft):	10	
PLSS:	T06N, R03E, Sec. 21, NE (M)				Acres:	0.0	
Location:	ALONG TOE DRAIN, ABOUT 0.7 MILE W OF RD 150 AT N COURTLAND RD & 3.3 MILES SW OF GREENDALE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NEST IN 40' COTTONWOOD WITH FALLOW/RUDERAL LANDS TO THE EAST AND SEASONAL WETLANDS TO THE WEST.						
General:	NEST WITH YOUNG OBSERVED ON 10 JUN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1925	Map Index:	87738	EO Index:	88704	Element Last Seen:	2009-05-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-21
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.29243 / -121.63207				Accuracy:	1/10 mile	
UTM:	Zone-10 N4239146 E619624				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 10, E (M)				Acres:	0.0	
Location:	NORTH SIDE OF MINER SLOUGH, JUST SOUTH OF HOLLAND RD AT SR 84, 0.7 MILE E OF FIVE POINTS.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE UNKNOWN.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	1 NESTING SWAINSON'S HAWK OBSERVED ON 18 MAY 2009; NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1927	Map Index:	87748	EO Index:	88712	Element Last Seen:	2009-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-12-26
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.27354 / -121.66060				Accuracy:	1/10 mile	
UTM:	Zone-10 N4237014 E617159				Elevation (ft):	5	
PLSS:	T05N, R03E, Sec. 17, SE (M)				Acres:	0.0	
Location:	WEST SIDE OF PROSPECT ISLAND ON THE SACRAMENTO RIVER, ABOUT 1.5 MI SW OF FIVE POINTS AND 2.7 MI NE OF HASTINGS FERRY.						
Detailed Location:	MAPPED TO 2009 NESTING SITE PER DWR, FROM SHAPEFILE OF BAY DELTA CONSERVATION PLAN 2009-2010 ENVIRONMENTAL SURVEY DATA. EXACT LOCATION OF NEST TREE UNKNOWN.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S).						
General:	1 NESTING SWAINSON'S HAWK OBSERVED ON 13 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1959	Map Index:	87942	EO Index:	88947	Element Last Seen:	2009-04-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-17
Quad Summary:	Saxon (3812146), Davis (3812156)						
County Summary:	Yolo						
Lat/Long:	38.50003 / -121.65859				Accuracy:	80 meters	
UTM:	Zone-10 N4262150 E616969				Elevation (ft):	20	
PLSS:	T08N, R03E, Sec. 33, NW (M)				Acres:	0.0	
Location:	ALONG COUNTY ROAD 106, ABOUT 0.1 MILE SOUTH OF ROAD 35 AND 5 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009.						
Ecological:	NES IN 30' WILLOW, WITH PASTURE TO THE EAST AND ALFALFA TO THE WEST.						
General:	INCUBATION OBSERVED ON 23 APR 2009; NEST SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1969	Map Index:	87994	EO Index:	89036	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.47999 / -121.57849				Accuracy:	80 meters	
UTM:	Zone-10 N4260030 E623989				Elevation (ft):	20	
PLSS:	T07N, R04E, Sec. 06, SE (M)				Acres:	0.0	
Location:	ALONG SACRAMENTO NORTHERN RR, ABOUT 0.3 MILE NNE OF ARCADE, 1.9 MI SW OF RIVERVIEW.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-81 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN VALLEY OAK IN CHANNELIZED RIPARIAN HABITAT, SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1970	Map Index:	87995	EO Index:	89037	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.47316 / -121.57466				Accuracy:	80 meters	
UTM:	Zone-10 N4259277 E624335				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 08, NW (M)				Acres:	0.0	
Location:	ALONG UNNAMED SLOUGH ABOUT 0.3 MI ESE OFARCADE & 2 MI SSW OF GARCIA BEND.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-82 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN VALLEY OAK IN CHANNELIZED RIPARIAN HABITAT, SURROUNDED BY ALFALFA, IRRIGATED CROPLAND AND VINEYARDS.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1971	Map Index:	87996	EO Index:	89038	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.49132 / -121.57282				Accuracy:	80 meters	
UTM:	Zone-10 N4261295 E624464				Elevation (ft):	20	
PLSS:	T07N, R04E, Sec. 05, NW (M)				Acres:	0.0	
Location:	ALONG SACRAMENTO NORTHERN RAILROAD, ABOUT 0.9 MILE SW OF GARCIA BEND AND 1.1 MILES NNE OF ARCADE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-79 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN VALLEY OAK IN CHANNELIZED RIPARIAN HABITAT, SURROUNDED BY IRRIGATED CROPLAND.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1972	Map Index:	87997	EO Index:	89039	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-03-20
Quad Summary:	Clarksburg (3812145), Sacramento West (3812155)						
County Summary:	Yolo						
Lat/Long:	38.50015 / -121.56932				Accuracy:	1/10 mile	
UTM:	Zone-10 N4262279 E624754				Elevation (ft):	20	
PLSS:	T08N, R04E, Sec. 32, NW (M)				Acres:	0.0	
Location:	ALONG SACRAMENTO NORTHERN RAILROAD, ABOUT 0.5 MI W OF GARCIA BEND & 1.7 MI NNE OF ARCADE.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-65 FROM 2008 ESTEP REPORT.						
Ecological:	NEST TREE SPECIES NOT RECORDED: THE SURVEYOR MAY NOT HAVE BEEN ABLE TO DIRECTLY OBSERVE THE NEST OR NEST TREE. SURROUNDING HABITAT WAS CHANNELIZED RIPARIAN HABITAT, ALFALFA AND IRRIGATED CROPLAND.						
General:	NESTING TERRITORY DETECTED DURING 2007 SURVEY; NESTING OUTCOME UNKNOWN/UNCONFIRMED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1973	Map Index:	87998	EO Index:	89040	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-23
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.44432 / -121.57782				Accuracy:	80 meters	
UTM:	Zone-10 N4256074 E624108				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 19, NE (M)				Acres:	0.0	
Location:	JUST NORTH OF REAMER LANE, ABOUT 0.3 MILE SE OF JEFFERSON BLVD AT RD 38B AND 3.1 MILES NW OF CLARKSBURG.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-90 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN VALLEY OAK IN OAK GROVE, ADJACENT TO VINEYARDS, IRRIGATED CROPLANDS, AND ALFALFA.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1974	Map Index:	88000	EO Index:	89042	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.43616 / -121.51232				Accuracy:	80 meters	
UTM:	Zone-10 N4255257 E629839				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 26, NW (M)				Acres:	0.0	
Location:	NORTH SIDE SACRAMENTO RIVER AT RM 45.6, ABOUT 1.2 MI ENE OF CO HWY E9 AT RD 39.						
Detailed Location:	MAPPED TO COORDINATES FOR YO-89 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN RIPARIAN COTTONWOOD SURROUNDED BY IRRIGATED CROPLAND, ALFALFA, AND VINEYARDS.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1975	Map Index:	88001	EO Index:	89043	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-24
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.43216 / -121.54716				Accuracy:	80 meters	
UTM:	Zone-10 N4254765 E626806				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 28, N (M)				Acres:	0.0	
Location:	WINCHESTER LAKE AT RAILROAD CROSSING; ON THE W SIDE OF THE SACRAMENTO RIVER ABOUT 0.5 MI NE OF WILLOW POINT.						
Detailed Location:	MAPPED TO COORDINATES FOR YO-92 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN RIPARIAN WILLOW ADJACENT TO ALFALFA AND IRRIGATED CROPLAND.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY, SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1976	Map Index:	88004	EO Index:	89045	Element Last Seen:	2008-06-06
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-06-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-05-30
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.41761 / -121.53219				Accuracy:	nonspecific area	
UTM:	Zone-10 N4253171 E628138				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 34, NW (M)				Acres:	196.0	
Location:	VICINITY OF ELK SLOUGH, FROM THE SACRAMENTO RIVER CONFLUENCE TO WOOD DUCK LANE, ON THE SOUTH SIDE OF CLARKSBURG.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-94 FROM 2008 ESTEP REPORT, AND VICINITY OF ELK SLOUGH POINT COUNT SITES FROM 2009 BIRD MONITORING REPORT.						
Ecological:	2007 NEST IN VALLEY OAK IN TREE ROW, ADJACENT TO URBAN, ORCHARD, VINEYARD AND IRRIGATED CROPLAND. ADULT OBSERVED FORAGING OVER CROPLAND ABOUT 0.3 MILE NORTH IN 2008.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS NOT RECORDED. "CONFIRMED BREEDER" AT ELK SLOUGH IN 2008 PER PRBO POINT COUNTS; NESTING/FLEDGING DETAILS NOT REPORTED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1977	Map Index:	88005	EO Index:	89047	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-01-24	

Quad Summary: Courtland (3812135)

County Summary: Yolo

Lat/Long:	38.32757 / -121.58637	Accuracy:	80 meters
UTM:	Zone-10 N4243107 E623561	Elevation (ft):	5
PLSS:	T06N, R03E, Sec. 36, NE (M)	Acres:	0.0

Location: ALONG SUTTER SLOUGH, ABOUT 0.4 MI ENE OF MORSE RD AT SUTTER RD & 0.6 MI W OF MORGANS LANDING ON THE SACRAMENTO RIVER.

Detailed Location: MAPPED TO COORDINATES GIVEN FOR SITE YO-99 FROM 2008 ESTEP REPORT. 2003 DETECTION WAS ABOUT 0.3 MILE TO SOUTH.

Ecological: 2003: "DAMAGED NEST" OBSERVED IN 40' COTTONWOOD. 2007: NEST IN RIPARIAN COTTONWOOD SURROUNDED BY ALFALFA AND IRRIGATED AGRICULTURE.

General: ACTIVE NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.

Owner/Manager: UNKNOWN

Occurrence No.	1978	Map Index:	88006	EO Index:	89048	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-03-20	

Quad Summary: Courtland (3812135)

County Summary: Yolo

Lat/Long:	38.33749 / -121.58116	Accuracy:	1/10 mile
UTM:	Zone-10 N4244213 E623999	Elevation (ft):	5
PLSS:	T06N, R04E, Sec. 30, S (M)	Acres:	0.0

Location: EAST SIDE OF ELK SLOUGH ABOUT 0.3 MILE SOUTH OF RD 158 BRIDGE AND 0.8 MILE NW OF THE COURTLAND POST OFFICE.

Detailed Location: MAPPED TO COORDINATES FOR SITE YO-98 FROM 2008 ESTEP REPORT.

Ecological: SURVEYOR WAS UNABLE TO DIRECTLY OBSERVE NEST TREE; NESTING TERRITORY DETECTED WITHIN RIPARIAN HABITAT SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.

General: NESTING TERRITORY DETECTED DURING 2007 SURVEY; NESTING OUTCOME UNKNOWN/UNCONFIRMED.

Owner/Manager: UNKNOWN



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Occurrence No.	1979	Map Index:	88007	EO Index:	89049	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-29
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33933 / -121.65665				Accuracy:	80 meters	
UTM:	Zone-10 N4244319 E617398				Elevation (ft):	10	
PLSS:	T06N, R03E, Sec. 28, NW (M)				Acres:	0.0	
Location:	LIBERTY ISLAND, ABOUT 1.2 MILES WSW OF ROAD 150 AT ROAD 158 & 2.75 MILES NE OF LIBERTY FARMS.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-95 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN WILLOW IN CHANNELIZED RIPARIAN HABITAT SURROUNDED BY SEASONAL WETLAND AND ALFALFA.						
General:	ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1980	Map Index:	88008	EO Index:	89050	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-25
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33441 / -121.63015				Accuracy:	80 meters	
UTM:	Zone-10 N4243808 E619723				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 27, S (M)				Acres:	0.0	
Location:	RYER AVE ABOUT 0.7 MI S OF RD 158 JUNCTION & 1 MI NW OF VALDEZ.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-51 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN COTTONWOOD IN ROADSIDE TREE ROW, SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1981	Map Index:	88009	EO Index:	89051	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-02-27
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.32066 / -121.62916				Accuracy:	1/10 mile	
UTM:	Zone-10 N4242283 E619832				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 34, SE (M)				Acres:	0.0	
Location:	E SIDE OF RYER AVENUE, ABOUT 0.3 MI S OF SUTTER ROAD INTERSECTION AND 1 MI N OF OXFORD RD, 1 MI NE OF MEDORA LAKE.						
Detailed Location:	MAPPED TO COORDINATES FOR SITE YO-96 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN COTTONWOOD IN ROADSIDE TREE ROW, SURROUNDED BY IRRIGATED CROPLAND.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1982	Map Index:	88010	EO Index:	89052	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-25
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.37076 / -121.55369				Accuracy:	80 meters	
UTM:	Zone-10 N4247943 E626343				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 16, NW (M)				Acres:	0.0	
Location:	W SIDE OF ELK SLOUGH, ABOUT 0.4 MI E OF NETHERLANDS RD AT WAUKEENA RD, 2 MI W OF HOOD.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-52 IN 2008 ESTEP REPORT.						
Ecological:	NEST IN RIPARIAN VALLEY OAK SURROUNDED BY VINEYARDS, ALFALFA, AND IRRIGATED CROPLAND.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	1983	Map Index:	88011	EO Index:	89053	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-01-25
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.34277 / -121.64524				Accuracy:	80 meters	
UTM:	Zone-10 N4244716 E618390				Elevation (ft):	15	
PLSS:	T06N, R03E, Sec. 28, NE (M)				Acres:	0.0	
Location:	WEST SIDE OF DEEP WATER SHIP CHANNEL ON LIBERTY ISLAND ABOUT 2 MI NW OF VALDEZ.						
Detailed Location:	MAPPED TO SITE YO-50 FROM 2008 ESTEP REPORT.						
Ecological:	NEST IN COTTONWOOD IN CHANNELIZED RIPARIAN HABITAT, SUROUNDED BY IRRIGATED CROPLAND, ALFALFA, AND SEASONAL WETLAND.						
General:	NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	2236	Map Index:	88702	EO Index:	89719	Element Last Seen:	2009-04-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48508 / -121.63052				Accuracy:	80 meters	
UTM:	Zone-10 N4260526 E619442				Elevation (ft):	10	
PLSS:	T07N, R03E, Sec. 03, N (M)				Acres:	0.0	
Location:	YOLO BYPASS WILDLIFE AREA, ABOUT 1.9 MILES SE OF RD 35 AT RD 106 AND 2.8 MILES WNW OF ARCADE.						
Detailed Location:	MAPPED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NESTS RECORDED IN 2009.						
Ecological:	NEST IN 35' COTTONWOOD SURROUNDED BY SEASONAL WETLANDS WITH CROPLAND TO THE NORTHEAST.						
General:	ACTIVE NEST, INCUBATION OBSERVED ON 23 APR 2009; NESTING OUTCOME UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	2237	Map Index:	88713	EO Index:	89721	Element Last Seen:	2004-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48115 / -121.63952				Accuracy:	80 meters	
UTM:	Zone-10 N4260078 E618663				Elevation (ft):	10	
PLSS:	T07N, R03E, Sec. 04, E (M)				Acres:	0.0	
Location:	ALONG W BOUNDARY OF YOLO BYPASS WA, ABOUT 1 MI ESE OF RD 36 AT RD 106 & 3.3 MI W OF ARCADE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR CDFW NEST RECORD FROM 2004.						
Ecological:	NEST IN 40' COTTONWOOD SURROUNDED BY GRAZED LAND.						
General:	NEST WITH 1 FEATHERED CHICK OBSERVED ON 13 MAY 2004; FLEDGING SUCCESS UNKNOWN.						
Owner/Manager:	DFG-YOLO BYPASS WA, UNKNOWN						

Occurrence No.	2238	Map Index:	88707	EO Index:	89723	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49440 / -121.64012				Accuracy:	80 meters	
UTM:	Zone-10 N4261548 E618589				Elevation (ft):	15	
PLSS:	T08N, R03E, Sec. 34, W (M)				Acres:	0.0	
Location:	WEST OF THE YOLO BYPASS WA, ABOUT 0.7 MI SE OF RD 35 AT RD 106A AND 3.5 MI WNW OF ARCADE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SITE YO-112 FROM ESTEP'S 2008 REPORT.						
Ecological:	NEST IN LONE EUCALYPTUS SURROUNDED BY IRRIGATED CROPLAND AND ALFALFA.						
General:	ACTIVITY AT NEST OBSERVED DURING 2007 SURVEY; NESTING OUTCOME NOT CONFIRMED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	2239	Map Index:	88711	EO Index:	89727	Element Last Seen:	2004-05-13
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-10
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.46589 / -121.64227				Accuracy:	80 meters	
UTM:	Zone-10 N4258381 E618449				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 09, SE (M)				Acres:	0.0	
Location:	GLIDE RANCH, ALONG RD 38, ABOUT 0.8 MI E OF THE RD 106 JUNCTION & 4.8 MI NW OF JEFFERSON BLVD AT CLARKSBURG RD.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR CDFW NEST RECORD FROM 2004.						
Ecological:	NEST IN 75' EUCALYPTUS SURROUNDED BY GRAZING LAND.						
General:	ACTIVE NEST, BUT NO YOUNG OBSERVED ON 13 MAY 2004; NESTING OUTCOME UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	2240	Map Index:	88714	EO Index:	89729	Element Last Seen:	2004-05-13
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2004-05-13	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-04-10	

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.44849 / -121.66644	Accuracy:	80 meters
UTM:	Zone-10 N4256420 E616368	Elevation (ft):	15
PLSS:	T07N, R03E, Sec. 17, SW (M)	Acres:	0.0

Location: YOLO BYPASS WA, ABOUT 0.5 MILE SE OF RD 105 AT RD 38A AND 5.1 MILES NW OF JEFFERSON BLVD AT CLARKSBURG RD.

Detailed Location: MAPPED TO COODINATES GIVEN FOR CDFW NEST RECORD FROM 2004.

Ecological: NEST IN 75' EUCALYPTUS SURROUNDED BY GRAZING LAND.

General: ACTIVE NEST, INCUBATION OBSERVED ON 13 MAY 2004; NEST WAS LATER ABANDONED, POSSIBLY DUE TO WIND DAMAGE.

Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No.	2253	Map Index:	88790	EO Index:	89805	Element Last Seen:	1989-06-06
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1989-06-06	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-04-15	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.43059 / -121.39761	Accuracy:	1/5 mile
UTM:	Zone-10 N4254808 E639862	Elevation (ft):	25
PLSS:	T07N, R05E, Sec. 26, E (M)	Acres:	0.0

Location: ALONG LAGUNA CREEK, JUST EAST OF HWY 99 IN ELK GROVE.

Detailed Location: TERRITORY "SA" (NO # ASSIGNED) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO LOCALITY "HWY 99 AT LAGUNA CK."

Ecological: NEST IN 40' OREGON ASH, 50' EAST OF HIGHWAY BETWEEN SOUTH AND MIDDLE CHANNELS.

General: NESTING PAIR OBSERVED ON 6 JUN 1989; NESTING SUCCESS UNKNOWN.

Owner/Manager: UNKNOWN, SAC COUNTY



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Occurrence No.	2290	Map Index:	88922	EO Index:	89929	Element Last Seen:	2003-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-04-19
Quad Summary:	Lodi North (3812123), Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.13083 / -121.37648			Accuracy:	1/5 mile		
UTM:	Zone-10 N4221576 E642290			Elevation (ft):	20		
PLSS:	T03N, R05E, Sec. 01 (M)			Acres:	0.0		
Location:	VICINITY OF 5111 W SARGENT RD, JUST WEST OF THE RAY RD INTERSECTION, ABOUT 3.75 MILES WEST OF LODI.						
Detailed Location:	MAPPED TO VICINITY OF LOCATION DESCRIPTION FOR SITE SG1 FROM 2004 THESIS, "SYCAMORE LANE KENNELS (OFF SARGENT/RAY RDS)."						
Ecological:	RURAL RESIDENTIAL AREA, SURROUNDING HABITAT INCLUDED IRRIGATED PASTURE USED FOR GRAZING. SUSPECTED NEST TREE WAS AN "OAK IN PASTURE" IN 2003.						
General:	TERRITORIAL PAIR OBSERVED THROUGHOUT SEASON IN 2002; NEST SITE "NARROWED DOWN TO GROVE" BUT NEST NEVER SEEN. TERRITORIAL SWHA OBSERVED AT SAME LOCATION IN 2003, FLYING TO AND FROM THE SAME TREES; NO NEST OR FLEDGLINGS OBSERVED.						
Owner/Manager:	PVT						
Occurrence No.	2678	Map Index:	99867	EO Index:	101413	Element Last Seen:	2015-04-05
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2015-04-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-05-03
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.4328 / -121.6912			Accuracy:	80 meters		
UTM:	Zone-10 N4254648 E614233			Elevation (ft):	23		
PLSS:	T07N, R03E, Sec. 19, SW (M)			Acres:	5.0		
Location:	ABOUT 0.2 MILE NE OF COUNTY RD 104 (HYDE RD) AT THOMSEN RD & 2.4 MILES NE OF YOLANO, WEST OF THE YOLO BYPASS WA.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. ON TULE RANCH PROPERTY.						
Ecological:	NEST IN MID-SIZED DECIDUOUS TREE IN IRRIGATED PASTURE. THE SOUTHERN PORTION OF TULE RANCH IS IN A SWAINSON'S HAWK CONSERVATION EASEMENT. THE NORTHERN PORTION WILL BE PLACED IN A "MITIGATION RECEIVING SITE" UNDER THE YOLO COUNTY HCP.						
General:	PAIR OBSERVED NEST-BUILDING ON 5 APR 2015.						
Owner/Manager:	PVT						



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Occurrence No.	2687	Map Index:	A1670	EO Index:	103261	Element Last Seen:	2015-07-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2015-07-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-08-30
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48202 / -121.43839				Accuracy:	80 meters	
UTM:	Zone-10 N4260454 E636207				Elevation (ft):	21	
PLSS:	T07N, R05E, Sec. 4, SW (M)				Acres:	5.0	
Location:	NE CORNER OF PERSIMMON AVENUE & TANGERINE AVENUE IN SOUTH SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	NEST IN BACKYARD EUCALYPTUS TREE IN SUBURB OF SOUTH SACRAMENTO.						
General:	NESTING PAIR MONITORED IN 2015 SUCCESSFULLY RAISED 1 FLEDGLING.						
Owner/Manager:	PVT						
Occurrence No.	2741	Map Index:	A8257	EO Index:	110038	Element Last Seen:	2017-04-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2017-04-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-26
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.30531 / -121.7301				Accuracy:	1/10 mile	
UTM:	Zone-10 N4240454 E611032				Elevation (ft):	0	
PLSS:	T05N, R02E, Sec. 2, SW (M)				Acres:	18.0	
Location:	ISLAND IN HAAS SLOUGH, ABOUT 0.1 MI SE OF THE DUCK SLOUGH CONFLUENCE & 1.6 MI ESE OF BARTLETT RD AT BUNKER STATION RD.						
Detailed Location:	MAPPED TO PROVIDED MAP.						
Ecological:	NEST IN VALLEY OAK ON ISLAND WITH RIPARIAN VEGETATION. AREA USED FOR AGRICULTURE INCLUDING GRAZING AND FARMING.						
General:	COPULATION, NESTING AND BROODING BEHAVIOR OBSERVED 10-12 APR 2017.						
Owner/Manager:	PVT						



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Buteo regalis

Element Code: ABNKC19120

ferruginous hawk

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G4
State: None **State:** S3S4
Other: CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern
Habitat: **General:** OPEN GRASSLANDS, SAGEBRUSH FLATS, DESERT SCRUB, LOW FOOTHILLS AND FRINGES OF PINYON AND JUNIPER HABITATS.
Micro: EATS MOSTLY LAGOMORPHS, GROUND SQUIRRELS, AND MICE. POPULATION TRENDS MAY FOLLOW LAGOMORPH POPULATION CYCLES.

Occurrence No. 73 **Map Index:** 71225 **EO Index:** 72130 **Element Last Seen:** 2003-09-25
Occ. Rank: Good **Presence:** Presumed Extant **Site Last Seen:** 2003-09-25
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2008-04-30

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.45732 / -121.48871 **Accuracy:** 1/10 mile
UTM: Zone-10 N4257639 E631861 **Elevation (ft):** 15
PLSS: T07N, R04E, Sec. 13, SE (M) **Acres:** 0.0

Location: 0.3 MILE EAST OF I-5, ALONG SERVICE ROAD FOR SACRAMENTO REGIONAL CO. SANITATION DISTRICT BUFFERLANDS, EAST OF FREEPORT.
Detailed Location: MAPPED ACCORDING TO STATED UTM COORDINATES. THIS AREA NOTED AS BEING A TRADITIONAL TRANSIENT/WINTERING SITE.
Ecological: HABITAT: 2,650 ACRE COUNTY PRESERVE MANAGED FOR WILDLIFE; EAST SIDE DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS; WEST SIDE DOMINATED BY SEASONAL WETLANDS, RIPARIAN FORESTS AND GRASSLANDS.
General: 1 ADULT, WINTERING ON 25 SEP 2003. SEEN ON LEVEE.
Owner/Manager: SRCSD-BUFFERLANDS

Occurrence No. 74 **Map Index:** 71226 **EO Index:** 72132 **Element Last Seen:** 2003-09-22
Occ. Rank: Good **Presence:** Presumed Extant **Site Last Seen:** 2003-09-22
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2008-04-30

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.44805 / -121.46538 **Accuracy:** 1/10 mile
UTM: Zone-10 N4256644 E633915 **Elevation (ft):** 15
PLSS: T07N, R05E, Sec. 19, NE (M) **Acres:** 0.0

Location: SAC CO WASTEWATER TREATMENT PLANT, 1.3 MILES NW OF INTERSECTION OF SIMS RD & FRANKLIN BLVD (CO HWY J8), ELK GROVE.
Detailed Location: MAPPED ACCORDING TO STATED UTM COORDINATES.
Ecological: WASTEWATER TREATMENT PLANT SURROUNDED BY 2650 ACRE PRESERVE MANAGED FOR WIDLIFE; EAST: ANNUAL GRASSLANDS WITH VERNAL POOLS & SEASONAL WETLANDS; WEST: SEASONAL WETLANDS, RIPARIAN FORESTS & GRASSLANDS.
General: 1 ADULT, WINTERING ON 22 SEP 2003. OBSERVED FLYING OVER SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT.
Owner/Manager: SRCSD

Falco columbarius

Element Code: ABNKD06030

merlin

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G5
State: None **State:** S3S4



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Habitat:	Other:	CDFW_WL-Watch List, IUCN_LC-Least Concern					
	General:	SEACOAST, TIDAL ESTUARIES, OPEN WOODLANDS, SAVANNAHS, EDGES OF GRASSLANDS & DESERTS, FARMS & RANCHES.					
	Micro:	CLUMPS OF TREES OR WINDBREAKS ARE REQUIRED FOR ROOSTING IN OPEN COUNTRY.					
Occurrence No.	13	Map Index:	71836	EO Index:	72717	Element Last Seen:	2004-12-13
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-12-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-07-30
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45412 / -121.48350			Accuracy:	80 meters		
UTM:	Zone-10 N4257292 E632322			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 13, SE (M)			Acres:	0.0		
Location:	JUST NORTHEAST OF MORRISON CREEK & EAST OF HWY 5, ABOUT 1 MILE ESE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT'S UPPER BEACH LAKE PRESERVE (STONE LAKES NWP). MAPPED TO PROVIDED COORDINATES.						
Ecological:	SEASONAL WETLANDS W/ GRASSLANDS TO WEST & RIPARIAN FOREST ALONG LAGUNA CREEK TO THE EAST. WASTEWATER TREATMENT PONDS TO EAST OF OBSERVATION HARBOR HUNDREDS/THOUSANDS OF SHOREBIRDS; MERLINS SEEN HUNTING THERE IN THE PAST.						
General:	1 WINTERING ADULT OBSERVED 13 DEC 2004 (USUALLY ANYWHERE FROM 1-5 OBSERVATIONS EACH FALL TO EARLY SPRING).						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	19	Map Index:	71863	EO Index:	72736	Element Last Seen:	2004-01-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-01-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45313 / -121.47096			Accuracy:	80 meters		
UTM:	Zone-10 N4257200 E633418			Elevation (ft):			
PLSS:	T07N, R05E, Sec. 18 (M)			Acres:	0.0		
Location:	SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT, 1.7 MILES ESE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. NORTHWEST PORTION OF SAC REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	THE EAST SIDE OF THE BUFFERLANDS IS DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS. THE WEST SIDE OF THE PROPERTY IS DOMINATED BY SEASONAL WETLANDS, RIPARIAN FOREST AND GRASSLANDS.						
General:	1 OVER-WINTERING ADULT (F. C. COLUMBARIUS) OBSERVED ON FENCE ON 12 JAN 2004.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	20	Map Index:	71866	EO Index:	72737	Element Last Seen:	2004-02-17
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2004-02-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2008-11-05	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44829 / -121.45501			Accuracy:	80 meters		
UTM:	Zone-10 N4256687 E634819			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 20, N (M)			Acres:	0.0		
Location:	SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT, NEAR LAGUNA CRK, 2.8 MILES ESE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. AT "FISH HEAD LAKE" MITIGATION WETLAND, SAC REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	THE EAST SIDE OF THE BUFFERLANDS IS DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS. THE WEST SIDE OF THE PROPERTY IS DOMINATED BY SEASONAL WETLANDS, RIPARIAN FOREST AND GRASSLANDS.						
General:	1 OVER-WINTERING ADULT OBSERVED ON 17 FEB 2004.						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	21	Map Index:	71867	EO Index:	72738	Element Last Seen:	2004-03-20
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2004-03-20	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2008-08-01	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43849 / -121.44823			Accuracy:	80 meters		
UTM:	Zone-10 N4255608 E635429			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 20, SE (M)			Acres:	0.0		
Location:	SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT, 3.2 MILES SE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. SEEN AT EASTERN ENTRANCE ROAD (SIMS RD) TO SAC REGIONAL WASTEWATER TREATMENT PLANT.						
Ecological:	THE EAST SIDE OF THE BUFFERLANDS IS DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS. THE WEST SIDE OF THE PROPERTY IS DOMINATED BY SEASONAL WETLANDS, RIPARIAN FOREST AND GRASSLANDS.						
General:	1 OVER-WINTERING MALE ADULT (F. C. SUCKLEYI) OBSERVED PERCHED ON SMALL OAK ON 20 MAR 2004.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	22	Map Index:	71868	EO Index:	72739	Element Last Seen:	2004-03-22
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-03-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-08-01
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43386 / -121.47964				Accuracy:	80 meters	
UTM:	Zone-10 N4255049 E632696				Elevation (ft):	10	
PLSS:	T07N, R05E, Sec. 30, NW (M)				Acres:	0.0	
Location:	SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT, 2 MILES SE OF BENCH MARK 27 (FREEPORT), SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. SEEN AT THE SOUTHWEST PORTION OF SAC REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.						
Ecological:	THE EAST SIDE OF THE BUFFERLANDS IS DOMINATED BY ANNUAL GRASSLANDS WITH VERNAL POOLS AND SEASONAL WETLANDS. THE WEST SIDE OF THE PROPERTY IS DOMINATED BY SEASONAL WETLANDS, RIPARIAN FOREST AND GRASSLANDS.						
General:	1 OVER-WINTERING FEMALE ADULT OBSERVED ON 22 MAR 2004.						
Owner/Manager:	SRCSD-BUFFERLANDS						

<i>Falco peregrinus anatum</i>				Element Code: ABNKD06071			
American peregrine falcon							
Listing Status:	Federal:	Delisted			CNDDB Element Ranks:	Global:	G4T4
	State:	Delisted				State:	S3S4
	Other:	CDF_S-Sensitive, CDFW_FP-Fully Protected, USFWS_BCC-Birds of Conservation Concern					
Habitat:	General:	NEAR WETLANDS, LAKES, RIVERS, OR OTHER WATER; ON CLIFFS, BANKS, DUNES, MOUNDS; ALSO, HUMAN-MADE STRUCTURES.					
	Micro:	NEST CONSISTS OF A SCRAPE OR A DEPRESSION OR LEDGE IN AN OPEN SITE.					

* SENSITIVE *

Occurrence No.	48	Map Index:	A0630	EO Index:	102187	Element Last Seen:	2015-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2015-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-06-17
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:					Accuracy:	1/10 mile	
UTM:					Elevation (ft):	10	
PLSS:					Acres:	18.0	
Location:	*SENSITIVE* LOCATION INFORMATION SUPPRESSED.						
Detailed Location:	PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493						
Ecological:	URBAN STRUCTURE - DRAWBRIDGE OVER RIVER, ADJACENT TO AGRICULTURAL LAND.						
General:							
Owner/Manager:							



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Laterallus jamaicensis coturniculus

Element Code: ABNME03041

California black rail

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G3G4T1
State: Threatened **State:** S1
Other: BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_NT-Near Threatened, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern
Habitat: **General:** INHABITS FRESHWATER MARSHES, WET MEADOWS AND SHALLOW MARGINS OF SALTWATER MARSHES BORDERING LARGER BAYS.
Micro: NEEDS WATER DEPTHS OF ABOUT 1 INCH THAT DO NOT FLUCTUATE DURING THE YEAR AND DENSE VEGETATION FOR NESTING HABITAT.

Occurrence No. 329 **Map Index:** A5589 **EO Index:** 107327 **Element Last Seen:** 2015-03-27
Occ. Rank: Good **Presence:** Presumed Extant **Site Last Seen:** 2015-03-27
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2017-07-31

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long: 38.36993 / -121.49398 **Accuracy:** 80 meters
UTM: Zone-10 N4247934 E631561 **Elevation (ft):** 10
PLSS: T06N, R04E, Sec. 13, SW (M) **Acres:** 5.0

Location: BLUE HERON TRAILS, SOUTH SIDE OF HOOD FRANKLIN ROAD, 1 MILE WEST OF INTERSTATE 5, STONE LAKES NATIONAL WILDLIFE REFUGE.

Detailed Location: DETECTED IN THE MARSH THAT IS BISECTED BY TWO BRIDGES.

Ecological: FORMERLY THE SITE OF AGRICULTURE / VINEYARD UNTIL AROUND 2006 WHEN RESTORATION EFFORTS CONSTRUCTED SEASONAL WETLANDS AND MANAGED GRASSLANDS PRIMARILY FOR ENVIRONMENTAL EDUCATION AND NATIVE HABITATS.

General: ONE OR MORE OBSERVED AND HEARD THROUGHOUT MAR 2015 BY SEVERAL BIRDERS. ONE OBSERVER WHO ORIGINALLY NOTED THE SPECIES AND ALSO LAST REPORTED THE SPECIES HYPOTHESIZED THAT MORE THAN ONE WAS PRESENT AND MAY REPRESENT A MIGRATION STOPOVER SITE.

Owner/Manager: USFWS-STONE LAKES NWR



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Coccyzus americanus occidentalis

Element Code: ABNRB02022

western yellow-billed cuckoo

Listing Status: **Federal:** Threatened

CNDDB Element Ranks: **Global:** G5T2T3

State: Endangered

State: S1

Other: BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern

Habitat: **General:** RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS.

Micro: NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, WITH LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.

Occurrence No.	95	Map Index:	11194	EO Index:	25585	Element Last Seen:	1896-06-05
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:			1896-06-05
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2019-06-04

Quad Summary: Clarksburg (3812145)

County Summary: Sacramento, Yolo

Lat/Long: 38.41796 / -121.53385 **Accuracy:** 1 mile

UTM: Zone-10 N4253208 E627993 **Elevation (ft):** 5

PLSS: T07N, R04E, Sec. 34, NW (M) **Acres:** 0.0

Location: CLARKSBURG.

Detailed Location:

Ecological:

General: ADULT FEMALE MVZ SPECIMEN #6157 FROM CLARKSBURG INDICATES THAT CUCKOOS ONCE OCCURRED IN THE SACRAMENTO-SAN JOAQUIN DELTA.

Owner/Manager: UNKNOWN

Occurrence No.	195	Map Index:	95826	EO Index:	96967	Element Last Seen:	2009-07-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			2010-08-15
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2015-04-27

Quad Summary: Bruceville (3812134), Courtland (3812135)

County Summary: Sacramento

Lat/Long: 38.25589 / -121.49819 **Accuracy:** 1/5 mile

UTM: Zone-10 N4235274 E631398 **Elevation (ft):** 1

PLSS: T05N, R04E, Sec. 25, N (M) **Acres:** 0.0

Location: ALONG SNODGRASS SLOUGH, ABOUT 0.7 MILE NE OF LOCKE.

Detailed Location: MAPPED ACCORDING TO POINTS FOR 2009 DETECTIONS PROVIDED BY DWR. 2010 DETECTION ABOUT 0.4 MILE TO NNW (NOT MAPPED).

Ecological: HABITAT WAS DENSE WILLOW, OAK, COTTONWOOD, DOGWOOD, ALDER, AND WILD GRAPE. AT A MINIMUM, THE SITE APPEARS TO SUPPORT A MIGRATORY CORRIDOR, AND COULD POTENTIALLY SUPPORT NESTING IN THE FUTURE.

General: 1 BIRD HEARD (COOING) ON 24 JUN 2009. 1 HEARD RESPONDING TO TAPED "KOWLP" CALL ON 1 JUL 2009. 1 HEARD 15 AUG 2010 WAS PRESUMED TO BE MIGRATING THROUGH AREA. MORE FIELDWORK NECESSARY TO CONFIRM BREEDING STATUS.

Owner/Manager: DPR, TNC

Athene cunicularia

Element Code: ABNSB10010

burrowing owl

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** G4

State: None

State: S3

Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern



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Habitat:	General:	OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.					
	Micro:	SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.					
Occurrence No.	32	Map Index:	10886	EO Index:	9970	Element Last Seen:	2003-05-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-06
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.41582 / -121.67981			Accuracy:	nonspecific area		
UTM:	Zone-10 N4252778 E615254			Elevation (ft):	15		
PLSS:	T07N, R03E, Sec. 31, NE (M)			Acres:	28.5		
Location:	VICINITY OF THE VAUGHN RANCH, ALONG MIDWAY ROAD (AKA ROAD 152), ABOUT 12 MILES ESE OF DIXON.						
Detailed Location:	2003: OWL SPOTTED PERCHED ON A WOOD FENCE POST JUST NORTH OF THE DITCH THAT RUNS ALONG THE NORTH SIDE OF MIDWAY ROAD, EAST OF THE MOBILE HOME & CABOOSE & WEST OF THE POWER LINES.						
Ecological:	SURROUNDING LAND USE IS AGRICULTURE. 2003: GRASSLANDS TO THE NORTH AND SOUTH OF MIDWAY ROAD. A FEW RODENT BURROWS OBSERVED ALONG THE FENCELINE AT THE TOP OF THE DITCH.						
General:	ONE OBSERVATION IN 1987. ONE OBSERVED IN 1989; PRESUMED BURROW SITE NEARBY. ONE OBSERVED 5 MAY 2003.						
Owner/Manager:	PVT						
Occurrence No.	33	Map Index:	10823	EO Index:	19677	Element Last Seen:	2004-05-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-05-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-18
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40133 / -121.71376			Accuracy:	nonspecific area		
UTM:	Zone-10 N4251128 E612312			Elevation (ft):	20		
PLSS:	T06N, R02E, Sec. 02, NE (M)			Acres:	16.4		
Location:	IN THE VICINITY OF THE INTERSECTION OF YOLANO ROAD, KING ROAD, AND LIBERTY ISLAND ROAD, 11 MILES SE OF DIXON.						
Detailed Location:	1987: OWLS USING MASONRY BLOCKS. 1990: OWLS ON FENCE NEXT TO CEMENT FOUNDATION. 2001: OWLS USING METAL CULVERT & CONCRETE FOUNDATION. 2002: OWLS ON RR GRADE SOUTH OF KING RD. 2003: OWL IN BURROW JUST WEST OF FOUNDATION.						
Ecological:	BURROWS CONSIST OF ABANDONED MASONRY BLOCKS, CULVERTS AND OTHER MAN-MADE STRUCTURES; SURROUNDED BY A MIX OF GRAZED ANNUAL GRASSLAND AND AGRICULTURE.						
General:	LARGE COLONY, 1987. 2 ADULTS OBS/DOR FLEDGLING FOUND, 2 JUL 1989. 2 AD OBS, 30 JUN 1990. 2 AD/3 JUV OBS, 12 DEC 2001. 1 AD OBS AT BURROW AT RR GRADE, 24 JAN 2002. 1 AD FLUSHED FROM BURROW, 5 MAY 2003. 2 AD/2 JUV OBS AT BURROW, MAY 2004.						
Owner/Manager:	PVT						



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Occurrence No.	121	Map Index:	17357	EO Index:	11951	Element Last Seen:	1982-02-12
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.41619 / -121.69328			Accuracy:	1/5 mile		
UTM:	Zone-10 N4252802 E614077			Elevation (ft):	20		
PLSS:	T07N, R03E, Sec. 30, SW (M)			Acres:	0.0		
Location:	200 YDS EAST OF THE INTERSECTION OF MIDWAY RD (152) AND LEVEE RD, APPROXIMATELY 12.5 MI SOUTH OF DAVIS.						
Detailed Location:	TWO ADULTS AND THREE JUVENILES OBSERVED ON 30 JAN 1982 OCCUPYING GOPHER HOLES ALONG THE FENCE LINE NORTH OF THE DITCH; ALSO OBSERVED ON 12 FEB 1982. 5/5/2003 NO BIRDS SEEN.						
Ecological:	SURROUNDING HABITAT IS FARMLAND WITH SOME CATTLE GRAZING. 5/5/2003- HEAVY VEGETATION COVER ON THE DITCH LINE.						
General:	ON SUBSEQUENT TRIPS TO THIS SITE IN 1986, 1987, AND 1989, NO BIRDS WERE FOUND, AND IT APPEARED THAT THE BURROWS HAD BEEN DISTURBED. 5/5/2003- NO BIRDS OBSERVED, HIGH GREEN GRASS FROM LATE RAINS MAYBE HIDING BURROWS.						
Owner/Manager:	PVT-VAUGHN RANCH						

Occurrence No.	128	Map Index:	20687	EO Index:	9481	Element Last Seen:	1994-09-13
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1994-09-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-26
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44835 / -121.45989			Accuracy:	specific area		
UTM:	Zone-10 N4256685 E634393			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 20 (M)			Acres:	20.3		
Location:	EAST SIDE OF SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, BETWEEN HWY 99 AND I-5, 5 MI NORTH OF FRANKLIN.						
Detailed Location:	BURROWS A, B, C, D, & L ARE LOCATED WEST OF THE UNION PACIFIC RAILROAD TRACKS. BURROWS (ARTIFICIAL, INACTIVE) G, H, I, J & K ARE LOCATED EAST OF RAILROAD TRACKS. BURROW F (INACTIVE) & E (ELIMINATED) ARE 1200 FT & 1600 FT WSW OF BURROW B.						
Ecological:	HABITAT ADJACENT TO BURROW SITE IS GRASSLAND. SURROUNDING AREA TO WEST CONSISTS OF A WASTEWATER TREATMENT PLANT.						
General:	NESTING OCCURRED AT BURROW B (1 PAIR & 7 JUV, JUL & AUG 1992) & BURROW L (1991). 1 INDIVIDUAL OBS 30 JUNE TO 13 SEPT 1994 AT BURROW B. BURROW L ELIMINATED MARCH 1994; BURROW C ELIMINATED MARCH 1993. BURROWS A & D USED INTERMITTENTLY.						
Owner/Manager:	SRCSD						



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Occurrence No.	131	Map Index:	21012	EO Index:	9167	Element Last Seen:	1992-04-04
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.47465 / -121.69828				Accuracy:	80 meters	
UTM:	Zone-10 N4259283 E613549				Elevation (ft):	25	
PLSS:	T07N, R02E, Sec. 01, SE (M)				Acres:	0.0	
Location:	JUST NW OF THE JUNCTION OF MAXWELL LANE AND ROAD 104, APPROXIMATELY 8 MI SOUTH OF DAVIS.						
Detailed Location:							
Ecological:	HABITAT IS AN OPEN, GRASSY FIELD DOMINATED BY WEEDY SPECIES. ALTHOUGH SOMEWHAT DISTURBED, IT IS FAR LESS SO THAN SURROUNDING AGRICULTURAL FIELDS. 5/5/2003 ALFALFA SOUTH, GRASS NORTH, A FEW CATTLE SEEN, DRY RAISED AREA NEAR TROUGH.						
General:	ALTHOUGH FAIRLY UNDISTURBED, LAND AT THIS SITE MAY BE LIGHTLY GRAZED. IN 1990, TWO FAMILY GROUPS, EACH WITH TWO ADULTS AND AT LEAST TWO YOUNG EACH OBSERVED. IN 1992, THREE ADULT OWLS OBSERVED AT BURROW ENTRANCE. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	PVT						

Occurrence No.	133	Map Index:	21534	EO Index:	19692	Element Last Seen:	1989-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.38207 / -121.73024				Accuracy:	80 meters	
UTM:	Zone-10 N4248971 E610902				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 11, NW (M)				Acres:	0.0	
Location:	JUST SOUTH OF ETZEL ROAD JUNCTION WITH OLD SACRAMENTO NORTHERN RR TRACKS, APPROXIMATELY 6 MI NORTH OF LIBERTY FARMS.						
Detailed Location:	BURROW SITE LOCATED IN A PILE OF OLD PIPES UNDER THE POWERLINES, NEXT TO A POWER POLE.						
Ecological:	SURROUNDING HABITAT CONSISTS OF AGRICULTURE, CANALS, PONDS, AND WATER PIPE STORAGE.						
General:	7/2/1989-TWO BURROWING OWLS OBSERVED; ONE ADULT AND ONE OF UNKNOWN AGE. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	134	Map Index:	21528	EO Index:	9597	Element Last Seen:	1989-07-02
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2003-05-05	Record Last Updated:	2003-05-07
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.44687 / -121.70719	Accuracy:	3/5 mile				
UTM:	Zone-10 N4256189 E612815	Elevation (ft):	25				
PLSS:	T07N, R02E, Sec. 13, SW (M)	Acres:	0.0				
Location:	NORTH HALF OF THE BLOCK OF LAND DEFINED BY HACKMAN RD (NORTH), BUCKLEY RD (WEST), THOMSEN RD (SOUTH), AND RD 104 (EAST).						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF AGRICULTURAL FIELDS. 5/5/2003 AGRICULTURE IS STILL PRESENT, TALL GRAIN AND ALFALFA CROPS. DITCH ON THE N SIDE OF HACKMAN ROAD POTENTIAL BURROW SITE.						
General:	7/2/1989 - 4 ADULTS OBSERVED HOVER-FORAGING OVER A FLOODED, LOW CROP (ALFALFA?); ONE OR MORE BURROWS PRESUMED TO BE IN THE VICINITY. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	135	Map Index:	21529	EO Index:	19658	Element Last Seen:	1989-07-02
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2003-05-05	Record Last Updated:	2003-05-07
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.43183 / -121.71686	Accuracy:	1/5 mile				
UTM:	Zone-10 N4254509 E611994	Elevation (ft):	25				
PLSS:	T07N, R02E, Sec. 23, SE (M)	Acres:	0.0				
Location:	ALONG THE WESTERN THIRD OF THOMSEN ROAD, ON THE NORTH SIDE, APPROXIMATELY 10 MI EAST OF DIXON.						
Detailed Location:							
Ecological:	SURROUNDING HABITAT CONSISTS OF FALLOW FIELDS AND LOW CROPS. 5/5/2003 HABITAT STILL PRESENT.						
General:	A SINGLE ADULT OBSERVED PERCHING ON A TELEPHONE POLE; BURROW SITE PRESUMED NEARBY. 5/5/2003- 0 BIRDS OBSERVED, PROBABLY DUE TO HIGH GREEN GRASS FROM LATE RAINS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	136	Map Index:	21530	EO Index:	19657	Element Last Seen:	1989-07-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.42421 / -121.71969				Accuracy:	1/5 mile	
UTM:	Zone-10 N4253660 E611759				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 26, NE (M)				Acres:	0.0	
Location:	ON THE EAST SIDE OF BUCKLEY ROAD, BETWEEN MIDWAY RRAD & THOMSEN ROADS, 10 MI EAST OF DIXON.						
Detailed Location:	OWLS UTILIZE AREA BEHIND HOUSES FOR PERCHING AND FORAGING.						
Ecological:	SURROUNDING HABITAT CONSISTS OF AGRICULTURAL/FALLOW FIELDS. 5/5/2003 SITE IS STILL AGRICULTURAL LAND, HOUSES ARE STILL PRESENT.						
General:	TWO ADULTS OBSERVED PERCHED ON FENCES; BURROW SITE PRESUMED TO BE NEARBY. 5/5/2003- 0 BIRDS OBSERVED, PROBABLY DUE TO HIGH GREEN GRASS FROM LATE RAINS HIDING BURROWS.						
Owner/Manager:	UNKNOWN						

Occurrence No.	137	Map Index:	21533	EO Index:	5305	Element Last Seen:	1996-07-19
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1996-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Stable	Record Last Updated:	1996-09-11
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.38743 / -121.69300				Accuracy:	80 meters	
UTM:	Zone-10 N4249611 E614147				Elevation (ft):	15	
PLSS:	T06N, R03E, Sec. 06, SW (M)				Acres:	0.0	
Location:	NORTH SIDE OF ROAD 155, EAST OF WEST LEVEE ROAD, APPROXIMATELY 13 MILES SE OF DIXON.						
Detailed Location:							
Ecological:	SURROUNDING HABITAT CONSISTS MOSTLY OF FALLOW FIELDS AND IRRIGATED PASTURELAND.						
General:	HISTORICAL LOCATION. 1 ADULT OBSERVED IN THE CORRAL VICINITY IN 1989. IN 1990, 3 ADULTS OBSERVED PERCHED ON FENCES NEAR BURROW; 5 YOUNG AND 2 OF UNKNOWN-AGE PERCHED AT BURROW. 2 ADULTS OBSERVED IN 1993 AND ON 19 JULY 1996.						
Owner/Manager:	PVT						



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Occurrence No.	138	Map Index:	21531	EO Index:	8351	Element Last Seen:	1996-07-23
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.42196 / -121.68992				Accuracy:	specific area	
UTM:	Zone-10 N4253446 E614361				Elevation (ft):	20	
PLSS:	T07N, R03E, Sec. 30, SW (M)				Acres:	22.4	
Location:	EAST SIDE OF ROAD 104, BETWEEN THOMSEN ROAD AND MIDWAY ROAD, 12 MI EAST OF DIXON. 2003- POSTED WITH NO TRESPASSING.						
Detailed Location:	OWLS INHABIT FENCELINE BETWEEN DITCH AND PASTURE. NUMEROUS BURROWS ARE FOUND IN BOTH THE NORTH AND SOUTH LEVEES OF THE IRRIGATION DITCH WHICH RUNS WEST-EAST ACROSS THE FIELD.						
Ecological:	HABITAT IS SHORT, DRY GRASSLAND, SURROUNDED BY DRY PASTURE AND AN AGRICULTURAL DITCH. IN 2003 HARVESTED ALFALFA AND GRAZED GRASS NEARBY.						
General:	TWO FAMILY GROUPINGS OBSERVED (2 ADULTS, 8 JUVENILES, AND 1 UNKNOWN-AGE) ON 30 JUNE 1990. 3 BIRDS OF UNKNOWN-AGE OBSERVED ON 23 JULY 1996. 0 BIRDS OBSERVED, HIGH GREEN GRASS FROM LATE RAINS MAYBE HIDING BURROWS 5/5/2003.						
Owner/Manager:	PVT						

Occurrence No.	139	Map Index:	21532	EO Index:	9969	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.41916 / -121.66267				Accuracy:	1/5 mile	
UTM:	Zone-10 N4253170 E616745				Elevation (ft):	10	
PLSS:	T07N, R03E, Sec. 29, SE (M)				Acres:	0.0	
Location:	NORTH SIDE OF ROAD 152, EAST OF VAUGHN RANCH, 14 MI EAST OF DIXON.						
Detailed Location:	OWLS INHABIT GRASSY DITCH ADJACENT TO SHEEP PASTURE.						
Ecological:	SURROUNDING LAND USE IS AGRICULTURE/GRAZING. 5/5/2003 GRASSLAND WITH POWER LINES OVER HEAD WERE OBSERVED.						
General:	6/30/1990 - TWO ADULTS AND FOUR JUVENILES OBSERVED. 5/5/2003- 0 BIRDS OBSERVED, PROBABLY DUE TO HIGH GREEN GRASS FROM LATE RAINS HIDING BURROWS.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	140	Map Index:	21527	EO Index:	9598	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.45632 / -121.71817				Accuracy:	1/5 mile	
UTM:	Zone-10 N4257225 E611842				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 14, NE (M)				Acres:	0.0	
Location:	EAST SIDE OF BUCKLEY ROAD, JUST NORTH OF ROAD 38A (HACKMAN), APPROXIMATELY 9 MI ENE OF DIXON.						
Detailed Location:	6/30/1990 OWL LOCATED IN AN OVERGROWN AREA AROUND AN OLD BARN, WITH A NEARBY DITCH FULL OF RUNNING WATER. 5/5/2003 GRAIN CROPS AND TALL GRASS NEARBY, BARN APPEARS TO BE GONE, OR IS HIDDEN BEHIND THE HOUSE.						
Ecological:	SURROUNDING HABITAT IS AGRICULTURE.						
General:	6/30/1990 ONE ADULT OBSERVED; BURROW SITE PRESUMED TO BE NEARBY. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	141	Map Index:	21535	EO Index:	19691	Element Last Seen:	1990-06-30
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1990-06-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-23
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.37869 / -121.74563				Accuracy:	1/5 mile	
UTM:	Zone-10 N4248577 E609563				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 10, SW (M)				Acres:	0.0	
Location:	ALONG THE EAST SIDE OF SIKES ROAD, BETWEEN TREFOIL ROAD AND DELHI ROAD, 12 MI SE OF DIXON.						
Detailed Location:	INHABITING AN AREA WITH LARGE CHUNKS OF CONCRETE AND RUSTED PIPES.						
Ecological:	SURROUNDING FORAGING HABITAT CONSISTS OF IRRIGATED PASTURE.						
General:	HISTORICAL LOCATION. ONE OWL OBSERVED ON 30 JUN 1990. ONE OWL OBSERVED ON 29 NOV 1999, BUT NO OWLS WERE PRESENT AFTER 1 FEB 2000.						
Owner/Manager:	PVT						

Occurrence No.	173	Map Index:	23878	EO Index:	7349	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-06-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-26
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.35874 / -121.74585				Accuracy:	1/10 mile	
UTM:	Zone-10 N4246363 E609574				Elevation (ft):	15	
PLSS:	T06N, R02E, Sec. 15, SW (M)				Acres:	0.0	
Location:	NORTH SIDE OF SWAN ROAD, 1.3 MILES WEST OF WINSHIP ROAD, WEST OF THE YOLO BYPASS.						
Detailed Location:	BURROWS ARE LOCATED IN A GRAVEL PILE IN THE VICINITY OF NATURAL GAS TANKS.						
Ecological:	SURROUNDING FORAGING HABITAT CONSISTS OF SHEEP AND CATTLE PASTURE.						
General:	BURROW WITH LOTS OF WHITEWASH AND 2 ADULT OWLS OBSERVED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	174	Map Index:	24512	EO Index:	6652	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-06-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1993-07-29
Quad Summary:	Liberty Island (3812136), Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.37670 / -121.69457				Accuracy:	1/5 mile	
UTM:	Zone-10 N4248418 E614026				Elevation (ft):	15	
PLSS:	T06N, R02E, Sec. 12, SE (M)				Acres:	0.0	
Location:	WEST SIDE OF WEST LEVEE ROAD, 0.3 MILE NORTH OF DELHI ROAD, WEST OF THE YOLO BYPASS.						
Detailed Location:	SEVERAL BURROWS LOCATED IN THE WEST SLOPE OF THE LEVEE ROAD.						
Ecological:							
General:	SEVERAL BURROWS, ONE WITH PELLETS, AN OWL WING, NESTING MATERIAL, AND SMALL MAMMAL BONES OUT FRONT, AND ONE ADULT OWL OBSERVED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	175	Map Index:	24511	EO Index:	6655	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-09
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.38595 / -121.72879				Accuracy:	1/5 mile	
UTM:	Zone-10 N4249403 E611023				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 11, NW (M)				Acres:	0.0	
Location:	NW OF THE NORTHERN PACIFIC RAILROAD TRACKS, ABOUT 0.35 MI NE OF ETZEL ROAD AND RR INTERSECTION, 15 MILES S OF DAVIS.						
Detailed Location:	BURROWS WERE LOCATED ON A SMALL LEVEE BANK, ON THE WEST SIDE OF THE ROW OF TRANSMISSION LINES.						
Ecological:							
General:	APPROXIMATELY 10 INDIVIDUALS OBSERVED, CONSISTING OF AT LEAST 2 FAMILY GROUPS, DURING A 1990 SURVEY. 5/5/2000 HABITAT APPEARS INTACT, HIGH GREEN GRASS DUE TO LATE RAINS MAY HAVE HIDDEN BURROWS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	177	Map Index:	24514	EO Index:	6657	Element Last Seen:	1993-08-09
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-03-03
Quad Summary:	Saxon (3812146), Davis (3812156)						
County Summary:	Solano, Yolo						
Lat/Long:	38.49418 / -121.68648				Accuracy:	nonspecific area	
UTM:	Zone-10 N4261465 E614547				Elevation (ft):	25	
PLSS:	T08N, R03E, Sec. 31 (M)				Acres:	607.3	
Location:	GLOBAL COMMUNICATIONS STATION, AT THE N END OF RD 105 & RD 36, 6.5 MI S OF DAVIS. YOLO REGIONAL GRASSLANDS PRK ON WEST.						
Detailed Location:	BURROWS SPREAD THROUGHOUT THE ONE SQUARE MILE COMMUNICATIONS FACILITY. WESTERN ACCESS IS OFF MACE RD. - YOLO REGIONAL GRASSLANDS PARK, SACRAMENTO VALLEY SOARING SOCIETY (SVSS) PARKING AREA.						
Ecological:	HABITAT CONSISTS OF DISTURBED ANNUAL GRASSLAND WITH VERNAL POOLS. OTHER SENSITIVE TAXA: TUCTORIA MUCRONATA & NEOSTAPFIA COLUSANA. 2003: SITE IS SIGNED AS "FEDERALLY PROTECTED HABITAT AREA" GRASS WAS HIGH WITH NO SIGN OF DISKING. AG TO EAST.						
General:	AT LEAST 4 FAMILY GROUPINGS OBS IN 1989, MOSTLY ALONG THE ENTRY ROAD. 1990: 3 GROUPS; 3 ADULTS & 6 JUV OBS, W SIDE OF ENTRY RD. 1993, SEVERAL BURROWS & OWLS OBS. 2003: 0 BIRDS AT SE ENTRANCE RD. 2-PRS SEEN AT BURROWS, E OF SVSS- PARKING.						
Owner/Manager:	DOD-MCCLELLAN AFB						
Occurrence No.	178	Map Index:	24513	EO Index:	6656	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.47654 / -121.65226				Accuracy:	2/5 mile	
UTM:	Zone-10 N4259550 E617560				Elevation (ft):	20	
PLSS:	T07N, R03E, Sec. 04, SW (M)				Acres:	0.0	
Location:	EAST SIDE OF ROAD 106, 0.75 MI N OF GLIDE TULE RANCH, 9 MILES SOUTH OF DAVIS. ACCESS ROAD, SIGN TO HOSSELKUS & KEARNY.						
Detailed Location:	BURROWS LOCATED WHERE THE MARSH CROSSES THE ROAD, SOUTH OF THE BARN. 5/5/2003 MARSH ON THE EAST SIDE OF THE ROAD NOT VISIBLE.						
Ecological:	HABITAT CONSISTS OF SHORT, DRY GRASSLAND/PASTURE. 5/5/2003 SURROUNDING AREA IS GRAIN FIELD (ABOUT 2 FEET TALL) AND ALFALFA TO THE SOUTH.						
General:	22 INDIVIDUALS OBSERVED, AT LEAST 10 OF WHICH WERE YOUNG, IN 4 FAMILY GROUPINGS. 5/5/2003- 0 BIRDS OBSERVED, PROBABLY DUE TO HIGH GREEN GRASS FROM LATE RAINS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	179	Map Index:	24515	EO Index:	6653	Element Last Seen:	1990-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-06-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1993-12-27
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.38763 / -121.6875				Accuracy:	1/5 mile	
UTM:	Zone-10 N4249640 E614627				Elevation (ft):	15	
PLSS:	T06N, R03E, Sec. 06, SW (M)				Acres:	0.0	
Location:	NORTH SIDE OF ROAD 155, 0.9 MILE EAST OF WEST LEVEE ROAD, 13 MILES SE OF DIXON.						
Detailed Location:	OWLS PERCHED ON FENCEPOSTS IN THE VICINITY OF THE BURROW.						
Ecological:	HABITAT SURROUNDING BURROW CONSISTS OF FALLOW FIELDS, ADJACENT TO A WATER-FILLED DITCH.						
General:	IN 1990, 2 ADULTS AND 4 JUVENILES WERE OBSERVED.						
Owner/Manager:	UNKNOWN						
Occurrence No.	210	Map Index:	25473	EO Index:	6907	Element Last Seen:	2016-08-18
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2016-08-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-03-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45542 / -121.42348				Accuracy:	nonspecific area	
UTM:	Zone-10 N4257524 E637558				Elevation (ft):	27	
PLSS:	T07N, R05E, Sec. 15, SW (M)				Acres:	138.0	
Location:	BETWEEN CENTER PKY & BRUCEVILLE RD JUST S OF COSUMNES RIVER BLVD, COSUMNES RIVER COLLEGE, SACRAMENTO.						
Detailed Location:	MAPPED TO INCLUDE LOCATIONS MARKED ON PROVIDED MAP (GUS) & PROVIDED COORDINATES (WIL, CON) & LOCATIONS FROM 1991-1993 CENSUS. MOST BURROWS IN BERMS AROUND THE TRACK/FOOTBALL FIELD.						
Ecological:	HABITAT SURROUNDING THE BURROWS CONSISTS OF INTRODUCED, ANNUAL GRASSLAND. DEVELOPMENT OF KAISER SOUTH & ADJ FIELDS LIKELY LED TO DECLINE/EXTIRPATION OF NEARBY UNION HOUSE CREEK (AKA BEACON CREEK) POPULATION.						
General:	PRESENT SINCE 1991. 12 BURROWS & 18+ ADULTS (6-12 PAIRS) OBSERVED IN 1994. 2 PERCHED ADULTS OBS IN 2002. 1 OWL OBS IN 2004. 3 PAIRS, 8 JUVENILES OBS IN 2007. PRESENT THROUGH 2009. FAMILY GROUP OF 2 ADULTS & 3 JUVS OBS, 2016.						
Owner/Manager:	COSUMNES RIVER COLLEGE						



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Occurrence No.	229	Map Index:	33164	EO Index:	20284	Element Last Seen:	2007-07-06
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-07-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-09
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47748 / -121.46032			Accuracy:	specific area		
UTM:	Zone-10 N4259918 E634302			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 08 (M)			Acres:	95.0		
Location:	VICINITY OF MORRISON, ELDER & FLORIN CRKS, W OF FRANKLIN BLVD, S OF WEYMOUTH LN & N OF DEER CROSS WAY, SOUTH SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES (LOW, CON, WIL, JON) & TO LOCATIONS MARKED ON PROVIDED MAPS (NOS, BAR). EAST FEATURE = S1, CENTER FEATURE = S2, NW FEATURE = S3, SW FEATURES = S4. S4 IS ALSO KNOWN AS "COMMUNITY GARDENS."						
Ecological:	CHANNELIZED STREAM LEVEES WITH ANNUAL GRASSES OR NO VEG. SURROUNDED BY FIELDS & RESIDENTIAL DEVELOPMENT. SITE QUALITY MARKED AS FAIR TO POOR. 2007: LEVEE CONSTRUCTION FROM RR TO FRANKLIN BLVD PLANNED IN SUMMER, CAUSING BURROW CLOSURES.						
General:	1995: 3 BURROWS AT S1. 2001: 3 OWLS AT 2 BURROWS IN S1. 2002: 15 AT 19 BURROWS IN S3&4. 2005: 17 AT 3 BURROWS IN S1 & 5 AT 1 BURROW IN S2. 2006: 15 AT 11 BURROWS IN S1. 2007: 1 AT 1 BURROW IN S3 & 15 AT 8 BURROWS IN S1. YOUNG IN 2001 & '07.						
Owner/Manager:	SAC COUNTY						

Occurrence No.	239	Map Index:	33492	EO Index:	8347	Element Last Seen:	1996-07-19
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1996-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-09-11
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.37309 / -121.72563			Accuracy:	specific area		
UTM:	Zone-10 N4247980 E611319			Elevation (ft):	15		
PLSS:	T06N, R02E, Sec. 11, SW (M)			Acres:	30.3		
Location:	JUST NORTH OF DELHI ROAD, BETWEEN ETZEL ROAD AND WINSHIP ROAD, 2 MILES SE OF LIBFARM.						
Detailed Location:							
Ecological:	LAND USE ON BOTH SIDES OF DELHI ROAD CONSISTS OF IRRIGATED PASTURELAND, PREDOMINANTLY GRASSES.						
General:	2 PAIRS OF ADULTS, ONE WITH 4 JUVNENILES, WERE OBSERVED ON 19 JULY 1996.						
Owner/Manager:	PVT						



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Occurrence No.	240	Map Index:	33493	EO Index:	8346	Element Last Seen:	2004-05-XX
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2004-05-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2004-11-29	

Quad Summary: Liberty Island (3812136), Saxon (3812146)

County Summary: Solano

Lat/Long:	38.37727 / -121.73441	Accuracy:	nonspecific area
UTM:	Zone-10 N4248433 E610545	Elevation (ft):	15
PLSS:	T06N, R02E, Sec. 10, SE (M)	Acres:	46.6

Location: OLD RAILROAD GRADE, BETWEEN ETZEL ROAD AND DELHI ROAD, 2 MILES SE OF LIBFARM.

Detailed Location: BURROWS ARE LOCATED IN THE EAST AND WEST LEVEES (BANKS) OF A LARGE CANAL WHICH TRAVERSES SW-NE FROM DELHI ROAD; OCCUPIED BURROWS BEGIN ABOUT 300 FEET NORTH OF DELHI ROAD, EXTENDING TO AT LEAST 1000 FEET NORTH OF DELHI ROAD.

Ecological: HABITAT CONSISTS OF A CANAL BANK SURROUNDED BY PASTURELAND TO THE SW (ACROSS DELHI ROAD) AND IRRIGATED CROPLAND TO THE WEST AND SE. 5/5/2003 HABITAT APPEARS AS DESCRIBED.

General: 5 ADULTS AND 8 JUVENILES OBSERVED ON 23 JULY 1996. AT LEAST ONE ADULT OWL FLUSHED FROM BURROWS ON 20 FEB 2002 AND AGAIN ON 7 MAY 2002. 5 MAY 2003, NO OWLS WERE SEEN. 6 ACTIVE BURROWS OBSERVED DURING MAY 2004.

Owner/Manager: PVT

Occurrence No.	241	Map Index:	33494	EO Index:	5306	Element Last Seen:	1996-07-19
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		1996-07-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1996-09-12	

Quad Summary: Saxon (3812146)

County Summary: Solano

Lat/Long:	38.38286 / -121.71286	Accuracy:	specific area
UTM:	Zone-10 N4249079 E612419	Elevation (ft):	20
PLSS:	T06N, R02E, Sec. 11, NE (M)	Acres:	17.7

Location: WEST SIDE OF LIBERTY ISLAND ROAD, 1.3 MILES SOUTH OF KING ROAD, 11 MILES EAST OF DIXON.

Detailed Location: BURROWS ARE LOCATED IN THE WEST BANK OF A DITCH THAT PARALLELS LIBERTY ISLAND ROAD.

Ecological: SURROUNDING HABITAT CONSISTS OF IRRIGATED PASTURELANDS.

General: 2 ADULTS OBSERVED ON 19 JULY 1996.

Owner/Manager: PVT



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Occurrence No.	242	Map Index:	33495	EO Index:	25508	Element Last Seen:	1996-07-19
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.44332 / -121.72058				Accuracy:	80 meters	
UTM:	Zone-10 N4255779 E611652				Elevation (ft):	30	
PLSS:	T07N, R02E, Sec. 23, NE (M)				Acres:	0.0	
Location:	JUST EAST OF BULKLEY ROAD, 0.6 MILE SOUTH OF HACKMAN ROAD, 9 MILES EAST OF DIXON.						
Detailed Location:	BURROW SITE IS LOCATED 200 FEET EAST OF BULKLEY ROAD, ALONG THE SOUTH EDGE OF AN IRRIGATION DITCH. 5/5/2003 BROKEN CONCRETE RUBBLE PRESENT NEAR THE CULVERT, POSSIBLE BURROW AREAS.						
Ecological:	SURROUNDING LAND USE IS PRIMARILY IRRIGATED AGRICULTURE.						
General:	4 OWLS OF UNKNOWN-AGE OBSERVED ON 19 JULY 1996. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	PVT						
Occurrence No.	243	Map Index:	33496	EO Index:	8350	Element Last Seen:	1996-07-23
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.44083 / -121.69427				Accuracy:	specific area	
UTM:	Zone-10 N4255535 E613952				Elevation (ft):	20	
PLSS:	T07N, R02E, Sec. 24, NE (M)				Acres:	31.0	
Location:	JUST WEST OF COUNTY ROAD 104, 0.6 MILE SOUTH OF HACKMAN ROAD, 10.5 MILES EAST OF DIXON.						
Detailed Location:	BURROW SITE IS LOCATED ALONG THE WEST BANK OF A DITCH THAT RUNS PARALLEL TO COUNTY ROAD 104; ONE ACTIVE BURROW IS LOCATED ADJACENT TO THE NE CORNER OF A CORRAL. 5/5/2003- HABITAT APPEARED THE SAME, CORRAL STILL PRESENT.						
Ecological:	SURROUNDING HABITAT CONSISTS OF IRRIGATED PASTURE/AGRICULTURE.						
General:	3 ADULTS AND 2 JUVENILES OBSERVED ON 23 JULY 1996. 5/5/2003- 0 BIRDS OBSERVED, HIGH GREEN GRASS DUE TO LATE RAINS MAYBE HIDING BURROWS.						
Owner/Manager:	PVT						



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Occurrence No.	369	Map Index:	43953	EO Index:	43953	Element Last Seen:	2000-04-28
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2000-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-03
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.17784 / -121.74166				Accuracy:	specific area	
UTM:	Zone-10 N4226295 E610213				Elevation (ft):	90	
PLSS:	T04N, R02E, Sec. 22 (M)				Acres:	11.0	
Location:	AZEVEDO ROAD, 0.9 MILE SOUTH OF THE CARTWRIGHT ROAD JUNCTION, NW OF RIO VISTA.						
Detailed Location:	5+ BURROWS LOCATED ALONG BOTH SIDES (MOST ACTIVITY FOUND ON THE EAST SIDE) OF AZEVEDO ROAD, AT LEAST SEVERAL OF WHICH SHOWED SIGNS OF OWL USE.						
Ecological:	HABITAT SURROUNDING BURROWS CONSISTS OF RUDERAL GRASS AND FORBS.						
General:	1 ADULT OBSERVED ON 28 APR 2000 AT THE BURROW SITE; LATER, SAME OWL (PRESUMABLY) FOUND DEAD ON THE ROAD.						
Owner/Manager:	SOL COUNTY						

Occurrence No.	370	Map Index:	43955	EO Index:	43955	Element Last Seen:	2000-05-20
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2000-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-03
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.16119 / -121.74842				Accuracy:	80 meters	
UTM:	Zone-10 N4224439 E609646				Elevation (ft):	100	
PLSS:	T04N, R02E, Sec. 27, SW (M)				Acres:	0.0	
Location:	ALONG EMIGH ROAD, 0.35 MILE WEST OF THE AZEVEDO ROAD JUNCTION, WEST OF RIO VISTA.						
Detailed Location:	OWL OBSERVED OCCUPYING A BURROW SOUTH OF THE ROAD, JUST OVER THE FENCE LINE, ON THE MARGINS OF A GRAIN FARM.						
Ecological:	HABITAT CONSISTS OF A SOUTH-FACING BURROW ON THE SOUTH SIDE OF THE ROAD AND A SECOND, LESS-USED BURROW ON THE NORTH SIDE OF THE ROAD.						
General:	1 ADULT FIRST OBSERVED ON 21 JAN 2000 AT THE SOUTH BURROW.						
Owner/Manager:	PVT						



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Occurrence No.	375	Map Index:	43974	EO Index:	43974	Element Last Seen:	2002-02-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-02-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-06-19
Quad Summary:	Liberty Island (3812136), Dozier (3812137)						
County Summary:	Solano						
Lat/Long:	38.35974 / -121.74964				Accuracy:	specific area	
UTM:	Zone-10 N4246470 E609241				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 16, SW (M)				Acres:	20.8	
Location:	EAST SIDE OF SIKES ROAD, JUST NORTH OF SWAN ROAD, AND SW OF SIKES ROAD ALONG THE RR GRADE, NNE OF DOZIER.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF CONCRETE IRRIGATION PIPES USED AS BURROWS; SURROUNDED BY IRRIGATED PASTURE AND GRASSLAND USED FOR GRAZING GOATS.						
General:	A SINGLE OWL WAS OBSERVED USING TWO DIFFERENT PIPES ON 29 NOV 1999; DITCH WAS FLOODED OUT BY 1 FEB 2000. AT LEAST ONE OWL OBSERVED USING A RUSTY PIPE AS A BURROW ON 7 FEB 2002.						
Owner/Manager:	PVT						
Occurrence No.	376	Map Index:	43979	EO Index:	43979	Element Last Seen:	2000-02-01
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-02-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-04
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.37342 / -121.74926				Accuracy:	80 meters	
UTM:	Zone-10 N4247988 E609254				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 10, SW (M)				Acres:	0.0	
Location:	EAST SIDE OF SIKES ROAD, 7 MILES SE OF DIXON.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF SEVERAL CONCRETE IRRIGATION PIPES IN AN IRRIGATION DITCH; SURROUNDED BY IRRIGATED PASTURE.						
General:	1 OWL OBSERVED AT BURROW ON 29 NOV 1999. POSSIBLY A WINTERING SITE; OWL NOT OBSERVED AFTER 1 FEB 2000.						
Owner/Manager:	PVT						



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Occurrence No.	385	Map Index:	44099	EO Index:	44099	Element Last Seen:	2000-05-20
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2000-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-24
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.38755 / -121.74942			Accuracy:	80 meters		
UTM:	Zone-10 N4249556 E609219			Elevation (ft):	25		
PLSS:	T06N, R02E, Sec. 03, SE (M)			Acres:	0.0		
Location:	WEST SIDE OF SIKES ROAD, 0.5 MILE SOUTH OF TREFOIL ROAD, SE OF DIXON.						
Detailed Location:	BURROW ENTRANCE IS NEARLY VERTICAL AND IS LOCATED ABOUT 20 FEET WEST OF SIKES ROAD.						
Ecological:	BURROW SITE CONSISTS OF AN OLD GROUND SQUIRREL BURROW, LOCATED AT THE EDGE OF A GUNITE-LINED CULVERT CROSSING AN IRRIGATION CANAL.						
General:	1 OWL FIRST OBSERVED AT THE BURROW SITE ON 24 NOV 1999.						
Owner/Manager:	PVT						
Occurrence No.	386	Map Index:	44101	EO Index:	44101	Element Last Seen:	2000-05-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2000-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-24
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.39422 / -121.74898			Accuracy:	80 meters		
UTM:	Zone-10 N4250296 E609247			Elevation (ft):	25		
PLSS:	T06N, R02E, Sec. 03, SW (M)			Acres:	0.0		
Location:	EAST SIDE OF SIKES ROAD, JUST SOUTH OF TREFOIL ROAD, ESE OF DIXON.						
Detailed Location:	BURROW IS LOCATED ABOUT 30 FEET EAST OF SIKES ROAD.						
Ecological:	BURROW CONSISTS OF A 4-INCH IRRIGATION PIPE IN A DITCH ADJACENT TO IRRIGATED PASTURE.						
General:	1 OWL FIRST OBSERVED AT THE BURROW ON 13 JAN 2000.						
Owner/Manager:	PVT						
Occurrence No.	387	Map Index:	44102	EO Index:	44102	Element Last Seen:	2000-05-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2000-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-24
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.39446 / -121.74393			Accuracy:	80 meters		
UTM:	Zone-10 N4250329 E609688			Elevation (ft):	20		
PLSS:	T06N, R02E, Sec. 03, NW (M)			Acres:	0.0		
Location:	TREFOIL ROAD, 0.3 MILE EAST OF SIKES ROAD, ESE OF DIXON.						
Detailed Location:	BURROWS OPEN TO THE SOUTH, FACING THE ROAD.						
Ecological:	BURROWS CONSIST OF TWO 4-INCH PVC IRRIGATION PIPES IN AN IRRIGATION DITCH.						
General:	1 OWL FIRST OBSERVED USING BOTH BURROWS ON 17 JAN 2000.						
Owner/Manager:	PVT						



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Occurrence No.	388	Map Index:	44122	EO Index:	44122	Element Last Seen:	2003-05-05
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.40059 / -121.72126			Accuracy:	80 meters		
UTM:	Zone-10 N4251037 E611658			Elevation (ft):	25		
PLSS:	T06N, R02E, Sec. 02, NE (M)			Acres:	0.0		
Location:	EAST SIDE OF BULKLEY ROAD, JUST SOUTH OF KING ROAD, ESE OF DIXON.						
Detailed Location:	1989 BURROW LOCATED IN A BARNYARD CORRAL. 1999 BURROW OBSERVED IN EQUIPMENT/LUMBER STORED ON A PRIVATE LOT; BURROW FACES EAST, AWAY FROM THE ROAD. 5/5/2003 2 BIRDS OBSERVED USING CENTRAL WOOD POLE (S. CLOTHES LINE POLE) FOR PERCH.						
Ecological:	BURROW SURROUNDED BY RANCH BUILDINGS AND AGRICULTURAL FIELDS. 5/5/2003 ALFALFA TO THE SOUTH AND SHEEP GRAZING NEARBY.						
General:	1 ADULT OWL OBSERVED AT THE BURROW ON 2 JUL 1989. 1 OWL OBSERVED AT THE BURROW ON 18 NOV 1999. 5/5/2003 2 BIRDS SEEN, BURROW ASSUMED NEARBY.						
Owner/Manager:	PVT						
Occurrence No.	389	Map Index:	44131	EO Index:	44131	Element Last Seen:	2000-05-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-18
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.47758 / -121.72194			Accuracy:	80 meters		
UTM:	Zone-10 N4259579 E611480			Elevation (ft):	35		
PLSS:	T07N, R02E, Sec. 02, SW (M)			Acres:	0.0		
Location:	WEST SIDE OF BULKLEY ROAD, 1.25 MILES SOUTH OF TREMONT ROAD, 8 MILES SOUTH OF DAVIS.						
Detailed Location:	OWL USES TWO BURROWS ON THE WEST SIDE OF BULKLEY ROAD.						
Ecological:	HABITAT CONSISTS OF A BURROW AT THE BASE OF A CULVERT AND A BURROW AT THE BERM OF AN IRRIGATION DITCH. 5 MAY 2003 DITCH AND CULVERT STILL PRESENT, HOLES WERE NOTED, UNSURE IF THEY WERE BURROWS. SURROUNDING AREA IS CULTIVATED AGRICULTURE.						
General:	SINGLE OWL OBSERVED SEVERAL TIMES; FIRST OBSERVED AT BURROW AT THE BASE OF CULVERT ON 13 JAN 2000 AND AT BERM OF IRRIGATION DITCH BURROW ON 11 FEB 2000. 5 MAY 2003 NO OWLS SEEN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	455	Map Index:	48023	EO Index:	48023	Element Last Seen:	2002-05-07
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.38828 / -121.72473				Accuracy:	80 meters	
UTM:	Zone-10 N4249666 E611374				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 02, SW (M)				Acres:	0.0	
Location:	SACRAMENTO NORTHERN RAILROAD GRADE, 0.5 MILE NE OF THE ETZEL ROAD INTERSECTION, 5/5/2003 ACCESS IS LOCKED.						
Detailed Location:	BURROW IS LOCATED ON THE SIDE OF THE OLD RAILROAD GRADE, WHICH IS USED INFREQUENTLY AS AN ACCESS ROAD.						
Ecological:	HABITAT SURROUNDING THE BURROW SITE CONSISTS OF GRAZED GRASSLAND AND AGRICULTURE. 5/5/2003 HABITAT APPEARS THE SAME.						
General:	AT LEAST 1 ADULT OWL WAS FLUSHED FROM THE BURROW ON 7 MAY 2002. 5/5/2003 NO OWLS WERE SEEN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	459	Map Index:	48143	EO Index:	48143	Element Last Seen:	2016-04-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2016-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-09-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45528 / -121.67322				Accuracy:	nonspecific area	
UTM:	Zone-10 N4257165 E615766				Elevation (ft):	18	
PLSS:	T07N, R03E, Sec. 17, W (M)				Acres:	106.0	
Location:	ALONG THE SACRAMENTO NORTHERN RR FROM ROAD 38 TO 1 MI SW & ALONG RD 105 BETWEEN RD 38 & RD 38A, SW OF SAXON.						
Detailed Location:	2002-2003: BURROWS IN OLD RR GRADE AND IN BERMS THAT BORDER SOME DITCHES; FENCE POSTS & OLD RAILROAD DETRITUS PROVIDE PERCHES. 2006: DETECTIONS ADJACENT TO RD 105. 2011: SOUTH SIDE OF RD 38. 2016: FOUND WHILE WALKING COVER BOARD TRANSECTS.						
Ecological:	2002-2003: BURROWS IN GRAZED NON-NATIVE GRASSLAND, WITH SOME VERNAL POOLS; CATTLE GRAZING ON THE SITE. 2006: GRASSLAND, PASTURE, & ALFALFA CROP. 2011: BURROW INSIDE OLD TIRE. 2016: FALLOW FIELD WITH NEARBY VERNAL POOLS.						
General:	4+ OWLS OBSERVED AT BURROW SITES, FEB-MAY 2002. 0 BIRDS OBSERVED 5 MAY 2003; HIGH GRASS MAY HAVE HIDDEN BURROWS. AN ESTIMATED 6 PAIRS OBSERVED IN 2006. 1 PAIR OBSERVED ON 4 APR 2011. 1 ADULT FLUSHED FROM BURROW ON 2 APR 2016.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	490	Map Index:	48680	EO Index:	48680	Element Last Seen:	1989-01-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-05-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-05-07
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.41539 / -121.72042			Accuracy:	1/5 mile		
UTM:	Zone-10 N4252680 E611709			Elevation (ft):	30		
PLSS:	T07N, R02E, Sec. 35, NE (M)			Acres:	0.0		
Location:	SE CORNER OF MIDWAY ROAD AND BUCKLEY ROAD; 1 MILE NNW LIBFARM.						
Detailed Location:							
Ecological:	AREA PRIMARILY IN FARMING. 5/5/2003 DITCH AREA SOUTH OF ROAD HAS LITTLE VEGETATION, PROBABLY NEWLY CUT. AGRICULTURE ON SE RECENTLY PLOWED. SEVERAL HOLES SPOTTED IN THE DITCH EDGE.						
General:	2 INDIVIDUALS OBSERVED ROOSTING IN CULVERTS ON 30 JAN 1982. NOT SEEN IN 1987 OR 1988. SEEN AGAIN 7 JAN 1989. 5/5/2003 NO BIRDS SEEN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	551	Map Index:	49290	EO Index:	49290	Element Last Seen:	2002-06-10
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-11-06
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45728 / -121.40609			Accuracy:	80 meters		
UTM:	Zone-10 N4257756 E639071			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 14 (M)			Acres:	0.0		
Location:	NORTH OF COSUMNES RIVER COLLEGE BOULEVARD, EAST OF POWER INN ROAD AND EAST OF HIGHWAY 99, SOUTH SACRAMENTO.						
Detailed Location:	A WELL-KNOWN COLONY OF BUOW EXISTS ABOUT A MILE FROM THIS SITE, AT COSUMNES RIVER COLLEGE.						
Ecological:	HABITAT CONSISTS OF A VACANT LOT (~10 ACRES IN SIZE), DOMINATED BY EXOTIC ANNUAL PLANT SPECIES; SURROUNDED BY AN AREA OF RAPIDLY DEVELOPING COMMERCIAL AND APARTMENTS.						
General:	4 ADULTS OBSERVED AT THIS ACTIVE BURROW SITE ON 10 JUN 2002.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	558	Map Index:	50990	EO Index:	50990	Element Last Seen:	2010-02-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2010-02-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43834 / -121.45161				Accuracy:	specific area	
UTM:	Zone-10 N4255587 E635134				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 20, SE (M)				Acres:	16.0	
Location:	ALONG SIMS ROAD ABOUT 0.2 TO 0.4 MI W OF FRANKLIN BLVD, & AT "SIMS WELL RD" ABOUT 0.5 MI NW OF SIMS RD AT FRANKLIN BLVD.						
Detailed Location:	2002: MAPPED TO PROVIDED COORDINATES; SITE CONSISTS OF 2 BURROWS, LOCATED ABOUT 500 FEET APART. 2009-10: MAPPED TO PROVIDED COORDINATES; DESCRIBED AS "MOSTLY ALONG SIMS WELL RD, IN ARTIFICIAL MOUNDS OR ALONG A BROKEN IRRIGATION LINE."						
Ecological:	HABITAT SURROUNDING BURROWS CONSISTS OF ANNUAL GRASSLAND.						
General:	2 ADULTS & 1 JUVENILE OBS AT BURROW ON W END OF S FEATURE & 1 ADULT OBS AT BURROW ON E END OF S FEATURE, 3 SEP '02. 4 WINTERING OWLS OBS AT N FEATURE (& 1 OCCATIONALLY AT S FEATURE) FROM 4 SEP '09 TO 1 FEB '10; NONE OBS 20 APR TO 4 SEP '09.						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	665	Map Index:	54632	EO Index:	54632	Element Last Seen:	2007-06-28
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-06-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-01-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47086 / -121.49378				Accuracy:	nonspecific area	
UTM:	Zone-10 N4259134 E631395				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 12, S (M)				Acres:	34.0	
Location:	ALONG CANAL SOUTH OF AMHERST ST & E OF I-5, & IN FIELD NEAR STONECREST AVE AT BEACH LAKE RD, SACRAMENTO.						
Detailed Location:	SPECIMEN: "FREEPORT 1 MI N." MAPPED TO COORDS (NW, SW & CENTER FEATURE). WIL COORDS APPEAR TO HAVE WRONG DATUM; MAPPED TO CON COORDS (CENTER FEATURE) OR OFFSET AS PER CON COORDS & BASED ON DESCRIPTION OF "IRRIGATION CANAL BANK" (W FEATURE).						
Ecological:	HABITAT SURROUNDING BURROW SITE CONSISTS OF AGRICULTURE/URBAN. SW BURROW IS NEAR EDGE OF ASPHALT. NW BURROW IS NEAR TOP OF DRAINAGE CANAL (NORTH SLOPE) ABOUT 30' FROM HWY FENCE.						
General:	MVZ EGG SET #5954 COLL 29 APR 1899. 2 ADULTS & 4 JUV OBS AT NW BURROW 6 JUN 2002; NOT OBS IN 2004. 1 AD OBS AT SW BURROW 10 FEB 2004; USUALLY 1-2 OBS PER YEAR. 3 PAIRS OBS IN E FEATURE & 1 PAIR WITH 4 JUV OBS AT CENTER BURROW 28 JUN 2007.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	696	Map Index:	55870	EO Index:	55886	Element Last Seen:	2007-07-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2007-07-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-10
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49494 / -121.47011			Accuracy:	specific area		
UTM:	Zone-10 N4261841 E633415			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 06, NE (M)			Acres:	11.0		
Location:	TO THE NW AND SW OF THE LUTHER BURBANK HIGH SCHOOL TRACK, JUST E OF THE RAILROAD & SOUTH OF FLORIN ROAD, SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. N: DIRT BERM BESIDE TRACK/PRCTICE FIELD; BURROW IS ON THE SCHOOL SIDE OF THE CHAIN LINK FENCE THAT SEPARATES THE SCHOOL FROM THE RR & FLORIN RD. S: RAILROAD EMBARKMENT.						
Ecological:	SURROUNDING HABITAT CONSISTS OF A DIRT BERM; AREA APPEARS TO BE MOWED AT SOME TIME OF THE YEAR, CREATING THE SHORT, DRY ANNUAL GRASS THE BIRDS PREFER.						
General:	2 ADULTS OBSERVED AT N BURROW SITE ON 15 JUN 2004. 5+ OBSERVED AT N BURROW SITE ON 25 OCT 2004. SEVERAL NESTING PAIRS OBS IN THE AREA BY J. MENTZER (PER CON07) AT UNKNOWN DATE(S) PRIOR TO 2007. 3 ADULTS OBS AT S BURROW SITE ON 11 JUL 2007.						
Owner/Manager:	SACRAMENTO CITY SCHOOL DIST						
Occurrence No.	720	Map Index:	58227	EO Index:	58263	Element Last Seen:	2004-05-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-05-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-11-29
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.46625 / -121.65433			Accuracy:	80 meters		
UTM:	Zone-10 N4258406 E617396			Elevation (ft):	15		
PLSS:	T07N, R03E, Sec. 09, SW (M)			Acres:	0.0		
Location:	ALONG THE ROAD TO GLIDE RANCH, ON THE EAST SIDE OF ROAD 106, 0.5 MILE NORTH OF ROAD 38 JUNCTION, WEST OF SACRAMENTO.						
Detailed Location:							
Ecological:	HABITAT SURROUNDING BURROWS CONSISTS OF GRAZED GRASSLAND.						
General:	2 ADULTS AND 4 JUVENILES WERE OBSERVED AT A SERIES OF BURROWS UNDERNEATH POWERLINES DURING MAY 2004.						
Owner/Manager:	DFG-YOLO BYPASS WA, PVT						



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Occurrence No.	970	Map Index:	69475	EO Index:	70254	Element Last Seen:	2006-XX-XX
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2009-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-17
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.46222 / -121.45696				Accuracy:	nonspecific area	
UTM:	Zone-10 N4258230 E634623				Elevation (ft):	10	
PLSS:	T07N, R05E, Sec. 17, N (M)				Acres:	23.0	
Location:	ALONG BEACON CREEK LEVEE, BETWEEN MORRISON CREEK & FRANKLIN BOULEVARD, NORTH END OF SACRAMENTO TREATMENT PLANT PROPERTY.						
Detailed Location:	2005 BURROWS WERE LOCATED ALONG THE SOUTH FACE OF THE SOUTHERN LEVEE. BIRDS HAVE ALSO WINTERED AT THIS SITE IN 2007 (UP TO 9) AND IN 2009/2010 (UP TO 4).						
Ecological:	HABITAT CONSISTS OF A MAINTAINED LEVEE, WITH MOSTLY-BARREN SOIL AND SOME PERENNIAL PEPPERWEED ALONG THE TOP AND INSIDE CHANNEL. SURROUNDED BY RESIDENTIAL DEVELOPMENT TO THE NORTH AND THE SACRAMENTO BUFFERLANDS TO THE SOUTH.						
General:	REGULAR ON E SIDE OF PROPERTY WITH DECLINING #S SINCE 1995. NO BREEDING IN 2003 OR 2004, BUT EVERY YR PRIOR. 3 SINGLE OWLS & 1 FAMILY OF 4 BIRDS OBS ON 13 OCT 2005 (2 BURROWS IN EACH FEATURE). BREEDING IN 2006, NONE IN 2007-09.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	1255	Map Index:	78075	EO Index:	78948	Element Last Seen:	2007-07-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-07-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-04
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39124 / -121.45572				Accuracy:	80 meters	
UTM:	Zone-10 N4250354 E634863				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 08, NW (M)				Acres:	0.0	
Location:	ABOUT 0.16 MI WEST OF FRANKLIN BLVD AT RR, & ABOUT 0.9 MI N OF FRANKLIN (TOWN), STONE LAKES NWR.						
Detailed Location:	MAPPED TO PROVIDED COORINATES. DESCRIBED AS WEST SIDE OF FRANKLIN BLVD, NORTH OF HOOD-FRANKLIN RD AND TOWN OF FRANKLIN.						
Ecological:	NATURAL GRASSLAND.						
General:	1 PAIR WITH 1-3 JUVENILES OBSERVED DURING THE STATEWIDE SURVEY IN JUL 2007; ALL PREVIOUS STONE LAKE NWR DETECTIONS WERE WEST OF I-5 & ONLY IN THE NON-BREEDING SEASON.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	1256	Map Index:	78068	EO Index:	78950	Element Last Seen:	2009-07-09
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-09
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.33361 / -121.45201				Accuracy:	specific area	
UTM:	Zone-10 N4243964 E635295				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 32, NE (M)				Acres:	25.0	
Location:	PASTURES SOUTH OF POINT PLEASANT ROAD & WEST OF FRANKLIN BLVD, ABOUT 6.3 TO 6.9 MI SW OF ELK GROVE PO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES (WIL09D03). LOCATION CODES: A (NE FEATURE), B (SE FEATURE), C (SW FEATURE), D (CENTER-W FEATURE), & E (NW FEATURE).						
Ecological:	OVER-GRAZED CATTLE PASTURE.						
General:	1 PAIR FOUND OR ESTIMATED AT EACH OF THE 5 SITES ON 15 JUN 2006 (A-B) & 9 JUL 2006 (C-E); PAIR & 3 JUVENILES AT SITE C. BUOW PRESENT HERE YEAR-ROUND.						
Owner/Manager:	PVT						

Occurrence No.	1257	Map Index:	78069	EO Index:	78952	Element Last Seen:	2007-07-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-07-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-09
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35387 / -121.45276				Accuracy:	80 meters	
UTM:	Zone-10 N4246212 E635191				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 20, SE (M)				Acres:	0.0	
Location:	ABOUT 0.24 MI SSW OF CORE ROAD AT FRANKLIN BLVD, ABOUT 1.75 MI SOUTH OF FRANKLIN & ABOUT 5.7 MI SW OF ELK GROVE (PO).						
Detailed Location:	MAPPED TO PROVIDED UTM COORDINATES.						
Ecological:	WIL09: NATURAL GRASSLAND. GRAZED.						
General:	1 PAIR AND THREE JUVENILES OBSERVED ON 11 JUL 2007, DURING THE STATEWIDE SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1258	Map Index:	78071	EO Index:	78953	Element Last Seen:	2007-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-07-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-09
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42337 / -121.39686			Accuracy:	80 meters		
UTM:	Zone-10 N4254007 E639942			Elevation (ft):	40		
PLSS:	T07N, R05E, Sec. 35, NE (M)			Acres:	0.0		
Location:	VICINITY OF LAGUNA BLVD HWY 99-S ON-RAMP, NW ELK GROVE.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES (CON10U0001). DESCRIBED AS "ELK GROVE AT LAGUNA BLVD AND ONRAMP TO HWY 99."						
Ecological:	WIL09D03: PARKING LOT & IRRIGATION CANAL. CON: ADDITIONAL DEVELOPMENT HAS OCCURRED IN THIS AREA SINCE 2007.						
General:	2 ADULTS WITH 7 JUVENILES OBSERVED ON 29 JUN 2007 (CON), AND 2 ADULTS WITH 2 JUVENILES OBS ON 7 JUL 2007 (WIL), DURING THE STATEWIDE SURVEY.						
Owner/Manager:	UNKNOWN						
Occurrence No.	1259	Map Index:	78086	EO Index:	78964	Element Last Seen:	2004-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-08
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34176 / -121.39882			Accuracy:	80 meters		
UTM:	Zone-10 N4244948 E639928			Elevation (ft):	30		
PLSS:	T06N, R05E, Sec. 26, S (M)			Acres:	0.0		
Location:	CARROLL RD ABOUT 0.6 MI SOUTH OF ESCHINGER RD, ABOUT 1.1 MI ENE OF BRUCEVILLE & ABOUT 4 MI SE OF FRANKLIN.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:							
General:	A REGULAR OBSERVATION LOCATION, INCL WINTER. A. ENGILIS NOTED POSSIBILITY OF SEVERAL COLONIES, HAVING FOUND MANY FLEDGLINGS HIT BY CARS ALONG THE ROAD. BREEDING IN 2004 AT THIS SITE, W/ FORAGING OWLS OBSERVED IN LATE OCT OF SAME YEAR.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	1260	Map Index:	78088	EO Index:	78968	Element Last Seen:	2008-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-01-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-17
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.30261 / -121.42922			Accuracy:	specific area		
UTM:	Zone-10 N4240558 E637345			Elevation (ft):	20		
PLSS:	T05N, R05E, Sec. 10, NW (M)			Acres:	17.0		
Location:	FRANKLIN AIRFIELD WEST OF BRUCEVILLE RD NEAR CAMP RD, ABOUT 6.4 MI NEOF WALNUT GROVE.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	BREEDING SITE IN 2008; WINTERING BIRDS OBSERVED THROUGH JAN 2010.						
General:	A. ENGIIS (CON07) NOTED BUOW AT SE FEATURE THROUGH 2004. 3 BREEDING LOCATIONS FOUND ON 4 JUL 2006, AS PER IBP SURVEY. 1 PAIR WITH CONFIRMED BREEDING STATUS FOUND AT SE FEATURE IN 2007 & 2008. BUOW OBS BY CONARD IN WINTER SEASON, 5 JAN 2010.						
Owner/Manager:	SAC COUNTY						
Occurrence No.	1266	Map Index:	78103	EO Index:	78985	Element Last Seen:	2004-10-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-10-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-02-09
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.37383 / -121.39026			Accuracy:	80 meters		
UTM:	Zone-10 N4248520 E640613			Elevation (ft):	40		
PLSS:	T06N, R05E, Sec. 14, NE (M)			Acres:	0.0		
Location:	ALONG CANAL NORTH OF KAMMERER RD ABOUT 0.5 MI EAST OF MCMILLAN RD, ABOUT 2.6 MI SSW OF ELK GROVE PO.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	AGRICULTURAL.						
General:	2 WINTERING BUOW OBS ON 26 OCT 2004 IN BERM ALONG CANAL ON NORTH SIDE OF ROAD.						
Owner/Manager:	PVT						



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Occurrence No.	1631	Map Index:	81420	EO Index:	82397	Element Last Seen:	2010-08-10
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2010-08-10	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-01-24	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.37099 / -121.38529	Accuracy:	1/10 mile
UTM:	Zone-10 N4248213 E641053	Elevation (ft):	40
PLSS:	T06N, R05E, Sec. 13, SW (M)	Acres:	0.0

Location: 0.75 MI ESE MCMILLAN RD AT KAMMERER RD, ABOUT 2.75 MI SSW ELK GROVE PO.

Detailed Location: LOCATION DESCRIBED AS "APPROXIMATELY 600 FT SOUTH OF KAMMERER ROAD, APPROXIMATELY 3,900 FT WEST OF LENT ROAD" [LENT RANCH PARKWAY?].

Ecological: SITE AND SURROUNDING PROPERTIES ARE USED FOR ROW CROPS AND VINEYARDS.

General: 2 ADULT OBSERVED FLYING OUT OF A DITCH ON 10 AUG 2010. BURROWS LOCATED IN DITCH ALONG EASTERN SIDE OF DIRT ROAD SEPARATING 2 AGRICULTURAL FIELDS. ONE INDIVIDUAL RETURNED TO THE BURROWS, WHICH HAD FRESH DIRT AND WHITEWASH AT THE ENTRANCE.

Owner/Manager: PVT

Occurrence No.	1966	Map Index:	A1785	EO Index:	103377	Element Last Seen:	2006-06-06
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2006-06-06	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-09-26	

Quad Summary: Saxon (3812146)

County Summary: Solano, Yolo

Lat/Long:	38.46512 / -121.69186	Accuracy:	nonspecific area
UTM:	Zone-10 N4258234 E614125	Elevation (ft):	26
PLSS:	T07N, R03E, Sec. 7, SW (M)	Acres:	22.0

Location: FROM ABOUT 0.7-1.1 MILES NW OF RD 38 AT RD 105 AND 1.8 MILES SW-2.0 MILES W OF SAXON, W OF YOLO BYPASS WILDLIFE AREA.

Detailed Location: MAPPED TO PROVIDED COORDINATES. 1992-1993 DATA MAPPED TO NW POLYGON, AND IS LOWER ACCURACY THAN 2006 DATA MAPPED TO SE POLYGON.

Ecological: 2006: IRRIGATION CANAL.

General: 1 PAIR OBSERVED IN 1992 AND 1 IN 1993. PAIR WITH AT LEAST 2 JUVENILES OBSERVED ON 6 JUN 2006.

Owner/Manager: PVT



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<i>Ammodramus savannarum</i>				Element Code: ABPBXA0020	
grasshopper sparrow					
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G5
	State:	None		State:	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	General:	DENSE GRASSLANDS ON ROLLING HILLS, LOWLAND PLAINS, IN VALLEYS AND ON HILLSIDES ON LOWER MOUNTAIN SLOPES.			
	Micro:	FAVORS NATIVE GRASSLANDS WITH A MIX OF GRASSES, FORBS AND SCATTERED SHRUBS. LOOSELY COLONIAL WHEN NESTING.			
Occurrence No.	16	Map Index: 69694	EO Index:	70479	Element Last Seen: 2007-06-19
Occ. Rank:	Fair		Presence:	Presumed Extant	Site Last Seen: 2007-06-19
Occ. Type:	Natural/Native occurrence		Trend:	Unknown	Record Last Updated: 2007-07-26
Quad Summary:	Saxon (3812146)				
County Summary:	Solano				
Lat/Long:	38.37841 / -121.73067		Accuracy:	80 meters	
UTM:	Zone-10 N4248565 E610870		Elevation (ft):	240	
PLSS:	T06N, R02E, Sec. 11, SW (M)		Acres:	0.0	
Location:	WEST SIDE OF ETZEL ROAD, 0.4 MILE NORTH OF DELHI ROAD, SE OF DIXON.				
Detailed Location:					
Ecological:	HABITAT CONSISTS OF NON-NATIVE GRASSLAND/AGRICULTURE.				
General:	1 ADULT OBSERVED ON 19 JUN 2007. THIS SPECIES HAS BEEN OBSERVED BY SEVERAL PEOPLE IN THIS AREA WITHIN THE PAST WEEK, WHILE SEARCHING FOR A LARK BUNTING REPORTED HERE.				
Owner/Manager:	UNKNOWN				
Occurrence No.	19	Map Index: 99864	EO Index:	101410	Element Last Seen: 2015-06-20
Occ. Rank:	Good		Presence:	Presumed Extant	Site Last Seen: 2015-06-20
Occ. Type:	Natural/Native occurrence		Trend:	Unknown	Record Last Updated: 2016-05-03
Quad Summary:	Saxon (3812146)				
County Summary:	Solano, Yolo				
Lat/Long:	38.4434 / -121.6935		Accuracy:	80 meters	
UTM:	Zone-10 N4255821 E614015		Elevation (ft):	25	
PLSS:	T07N, R03E, Sec. 19, NW (M)		Acres:	5.0	
Location:	E SIDE OF COUNTY RD 104 (HYDE RD) ABOUT 0.6 MI S OF THE RD 38A (HACKMAN RD) INTERSECTION, W OF THE YOLO BYPASS.				
Detailed Location:	MAPPED TO PROVIDED COORDINATES. ON TULE RANCH PROPERTY.				
Ecological:	IRRIGATED PASTURE. SOUTH PART OF RANCH IS IN A SWAINSON'S HAWK CONSERVATION EASEMENT, THE NORTHERN PART WILL BE PLACED IN A "MITIGATION RECEIVING SITE" UNDER THE YOLO COUNTY HCP.				
General:	PAIR WITH TWO FLEDGLINGS OBSERVED FLYING ALONG ROAD ON 20 JUN 2015.				
Owner/Manager:	PVT				
<i>Melospiza melodia</i>				Element Code: ABPBXA3010	
song sparrow ("Modesto" population)					
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G5
	State:	None		State:	S3?
	Other:	CDFW_SSC-Species of Special Concern			
Habitat:	General:	☐			



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Micro: <input type="checkbox"/>							
Occurrence No.	29	Map Index:	89839	EO Index:	90849	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-01
Quad Summary:	Terminous (3812114), Bouldin Island (3812115), Thornton (3812124), Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.12439 / -121.49923			Accuracy:	nonspecific area		
UTM:	Zone-10 N4220680 E631544			Elevation (ft):	0		
PLSS:	T03N, R04E, Sec. 12 (M)			Acres:	276.0		
Location:	ALONG MOKELUMNE RIVER JUST NORTH OF HWY 12, N AND W OF TERMINOUS, AND SE OF STATEN ISLAND.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH & RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	16-26 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR-26 MAY 2009. 25 & 19 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 14 & 26 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	44	Map Index:	89873	EO Index:	90883	Element Last Seen:	2009-05-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-02
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.13759 / -121.41809			Accuracy:	1/5 mile		
UTM:	Zone-10 N4222263 E638631			Elevation (ft):	5		
PLSS:	T03N, R05E, Sec. 03, W (M)			Acres:	0.0		
Location:	AT INTERSECTION OF UPLAND CANAL AND VICTOR RD (COTTA RD), 2.5 MI WSW OF VILLINGER.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	4 DETECTED AND DETERMINED TO BE NESTING IN AREA 21 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	45	Map Index:	89876	EO Index:	90886	Element Last Seen:	2009-06-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-02
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16800 / -121.43233				Accuracy:	nonspecific area	
UTM:	Zone-10 N4225616 E637326				Elevation (ft):	5	
PLSS:	T04N, R05E, Sec. 28, W (M)				Acres:	177.0	
Location:	BETWEEN HOG SLOUGH AND W WOODBRIDGE RD, ABOUT 1.5 MI W OF I-5.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED MID-BREEDING SEASON OR WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	7 DETECTED DURING MID-BREEDING SEASON ON 12 JUN; 11 DETECTED AND DETERMINED TO BE NESTING IN AREA 26 JUN 2009. 29 & 19 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 16 APR & 7 MAY 2009.						
Owner/Manager:	DFG, DWR						

Occurrence No.	46	Map Index:	89878	EO Index:	90888	Element Last Seen:	2009-06-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.15447 / -121.44391				Accuracy:	nonspecific area	
UTM:	Zone-10 N4224098 E636336				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 33, NW (M)				Acres:	193.0	
Location:	S OF W WOODBRIDGE RD, ABOUT 2.2 MI W OF I-5.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED MID-BREEDING SEASON OR WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS GRASSLAND & SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	12 OF 21 & 10 OF 13 DETECTED DURING MID-BREEDING SEASON AND DETERMINED TO BE NESTING IN AREA 12 & 26 JUN 2009.						
Owner/Manager:	DFG-WOODBRIDGE ER						



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Occurrence No.	47	Map Index:	89879	EO Index:	90889	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14221 / -121.47498				Accuracy:	nonspecific area	
UTM:	Zone-10 N4222692 E633636				Elevation (ft):	0	
PLSS:	T03N, R05E, Sec. 06, NW (M)				Acres:	32.0	
Location:	ALONG SYCAMORE SLOUGH, ABOUT 1.5 MI E OF SOUTH MOKELUMNE RIVER, 5.5 MI W OF VILLINGER.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	5 & 3 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 & 22 APR 2009. 4 & 1 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 14 & 26 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	48	Map Index:	89880	EO Index:	90890	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14241 / -121.49115				Accuracy:	nonspecific area	
UTM:	Zone-10 N4222691 E632219				Elevation (ft):	0	
PLSS:	T03N, R04E, Sec. 01, NE (M)				Acres:	118.0	
Location:	ALONG SYCAMORE SLOUGH, ABOUT 0.25-1 MI E OF SOUTH MOKELUMNE RIVER, 6-6.75 MI W OF VILLINGER.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	8-14 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR-26 MAY 2009. 8 & 3 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 14 & 26 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	49	Map Index:	89882	EO Index:	90892	Element Last Seen:	2009-04-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Thornton (3812124), Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.16141 / -121.50043				Accuracy:	nonspecific area	
UTM:	Zone-10 N4224787 E631372				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 25, SW (M)				Acres:	28.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, 0.5 MI S OF HOG SLOUGH, E SIDE OF STATEN ISLAND, 6.25 MILES NE OF I-5 AT HWY 12.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	3 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR 2009. 8 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	50	Map Index:	89883	EO Index:	90893	Element Last Seen:	2009-04-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16859 / -121.46869				Accuracy:	1/10 mile	
UTM:	Zone-10 N4225629 E634140				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 30, NE (M)				Acres:	0.0	
Location:	ALONG HOG SLOUGH, 1.3 MI E OF S MOKELUMNE RIVER, 3.75 MI WSW OF I-5 AT W PELTIER RD.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	51	Map Index:	89923	EO Index:	90934	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.17947 / -121.49429				Accuracy:	nonspecific area	
UTM:	Zone-10 N4226800 E631877				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 24, SE (M)				Acres:	62.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, E SIDE OF STATEN ISLAND, ABOUT 4.5 MI SW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	4 & 1 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR & 26 MAY 2009. 4-5 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR-26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	52	Map Index:	89925	EO Index:	90936	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18981 / -121.48377				Accuracy:	nonspecific area	
UTM:	Zone-10 N4227962 E632780				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, SW (M)				Acres:	48.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, NE SIDE OF STATEN ISLAND, ABOUT 4 MI SW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	6 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR 2009. 2-7 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR-26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	53	Map Index:	89926	EO Index:	90937	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19520 / -121.47401				Accuracy:	nonspecific area	
UTM:	Zone-10 N4228573 E633625				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, NE (M)				Acres:	52.0	
Location:	BEAVER SLOUGH AT SOUTH MOKELUMNE RIVER, NE SIDE OF STATEN ISLAND, ABOUT 3.5 MI SW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1-2 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR & 14 MAY 2009. 1-5 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR-26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	54	Map Index:	89929	EO Index:	90939	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20409 / -121.47819				Accuracy:	1/10 mile	
UTM:	Zone-10 N4229554 E633242				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 07, SW (M)				Acres:	0.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, NE SIDE OF STATEN ISLAND, ABOUT 3.3 MI WSW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 SONG SPARROW (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR 2009. 1 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	55	Map Index:	89931	EO Index:	90943	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20957 / -121.49069				Accuracy:	nonspecific area	
UTM:	Zone-10 N4230144 E632138				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 12, NE (M)				Acres:	73.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, N END OF STATEN ISLAND, ABOUT 4 MI WSW OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	3 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR & 14 MAY 2009. 6 & 3 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR & 26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	56	Map Index:	89932	EO Index:	90946	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21779 / -121.49849				Accuracy:	1/10 mile	
UTM:	Zone-10 N4231046 E631440				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 01, SW (M)				Acres:	0.0	
Location:	ALONG SOUTH MOKELUMNE RIVER, N END OF STATEN ISLAND, ABOUT 4 MI W OF THORNTON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR 2009. 1-6 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR-26 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	57	Map Index:	89935	EO Index:	90947	Element Last Seen:	2009-05-14	
Occ. Rank:	Unknown			Presence:	Presumed Extant		Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown		Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)							
County Summary:	San Joaquin							
Lat/Long:	38.20421 / -121.43617				Accuracy:	nonspecific area		
UTM:	Zone-10 N4229628 E636921				Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 09, S (M)				Acres:	67.0		
Location:	ALONG BEAVER SLOUGH, ABOUT 1.5 MI S OF FOUR CORNERS, 1.5 MI SSW OF THORNTON.							
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.							
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."							
General:	6 DETECTED AND DETERMINED TO BE NESTING IN AREA 14 MAY 2009. 7 & 3 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR & 26 MAY 2009.							
Owner/Manager:	UNKNOWN							

Occurrence No.	58	Map Index:	89936	EO Index:	90948	Element Last Seen:	2009-06-17	
Occ. Rank:	Unknown			Presence:	Presumed Extant		Site Last Seen:	2009-06-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown		Record Last Updated:	2013-08-07
Quad Summary:	Thornton (3812124)							
County Summary:	San Joaquin							
Lat/Long:	38.20831 / -121.45361				Accuracy:	nonspecific area		
UTM:	Zone-10 N4230058 E635387				Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 08 (M)				Acres:	52.0		
Location:	N OF BEAVER SLOUGH ALONG WHITE SLOUGH WILDLIFE AREA, 1-1.5 MI SSW OF FOUR CORNERS, HOPE TRACT.							
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.							
Ecological:	HABITAT DESCRIBED AS SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."							
General:	1 & 7 DETECTED AND DETERMINED TO BE NESTING IN AREA 14 MAY & 17 JUN 2009. 1 SONG SPARROW (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR 2009.							
Owner/Manager:	DWR							



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Occurrence No.	59	Map Index:	89939	EO Index:	90951	Element Last Seen:	2009-06-17
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-06-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-07	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.22228 / -121.45516			Accuracy:	nonspecific area		
UTM:	Zone-10 N4231606 E635225			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 05 (M)			Acres:	44.0		
Location:	S OF W WALNUT GROVE RD ALONG WHITE SLOUGH WA, 0.5 MI W OF N BLOSSOM RD, HOPE TRACT.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	15 & 8 DETECTED AND DETERMINED TO BE NESTING IN AREA 26 MAY & 17 JUN 2009.						
Owner/Manager:	DWR						

Occurrence No.	60	Map Index:	89941	EO Index:	90954	Element Last Seen:	2009-04-22
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-04-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-07	
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.24379 / -121.48229			Accuracy:	1/10 mile		
UTM:	Zone-10 N4233953 E632812			Elevation (ft):	0		
PLSS:	T05N, R05E, Sec. 31, NW (M)			Acres:	0.0		
Location:	ALONG MOKELUMNE RIVER, 1.6 MI E OF WALNUT GROVE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 22 APR 2009. 1 SONG SPARROW (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR & 26 MAY 2009.						
Owner/Manager:	TNC						



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Occurrence No.	61	Map Index:	89942	EO Index:	90955	Element Last Seen:	2009-05-26
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-05-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-07	
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.14566 / -121.50922			Accuracy:	nonspecific area		
UTM:	Zone-10 N4223027 E630630			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 35, SE (M)			Acres:	82.0		
Location:	SE END OF STATEN ISLAND, JUST NW OF SOUTH MOKELUMNE RIVER AT SYCAMORE SLOUGH.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	2-13 DETECTED AND DETERMINED TO BE NESTING IN AREA 8 APR-26 MAY 2009. 11 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 14 MAY 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						

Occurrence No.	62	Map Index:	89943	EO Index:	90956	Element Last Seen:	2002-08-22
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2002-08-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-07	
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.13296 / -121.52318			Accuracy:	1/10 mile		
UTM:	Zone-10 N4221598 E629429			Elevation (ft):	-10		
PLSS:	T03N, R04E, Sec. 03, SE (M)			Acres:	0.0		
Location:	SOUTH END OF STATEN ISLAND, ALONG N STATEN ISLAND RD, 2 MI NW OF TERMINOUS.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	FRESHWATER MARSH IN THE NORTH-SOUTH DRAINAGE CANAL OF THE CONSUMNES RIVER PRESERVE. SURROUNDING LAND USE INCLUDED AGRICULTURE. MODESTO SONG SPARROWS WERE COMMON ALONG THE INTERIOR DITCHES AND THE ISLANDS/WETLANDS IN ADJACENT RIVERS.						
General:	2 ADULTS COUNTER SINGING AND FORAGING IN AREA 22 AUG 2002.						
Owner/Manager:	TNC						



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Occurrence No.	63	Map Index:	89950	EO Index:	90964	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.17536 / -121.66193				Accuracy:	nonspecific area	
UTM:	Zone-10 N4226118 E617200				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 20, SE (M)				Acres:	157.0	
Location:	ALONG SACRAMENTO RIVER, JUST S OF CONFLUENCE WITH STEAMBOAT SLOUGH AND CACHE SLOUGH, 2 MILES NE OF RIO VISTA.						
Detailed Location:	1910 SPECIMENS COLLECTED AT "RIO VISTA" & 1921 SPECIMENS COLLECTED AT "1 MI NE RIO VISTA." MAPPED TO 2009 COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED AS NESTING WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN & MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNII; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	7 SPECIMENS (CAS #82048-54) COLLECTED IN 1910. 3 SPECIMENS (MVZ #43165-7) COLLECTED 22 DEC 1921. 1 & 17 DETECTED AND DETERMINED TO BE NESTING IN AREA 13 APR & 28 MAY 2009. 16 SONG SPARROWS PERCHED IN AREA 28 APR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	64	Map Index:	89954	EO Index:	90968	Element Last Seen:	2009-05-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.18419 / -121.65339				Accuracy:	1/10 mile	
UTM:	Zone-10 N4227108 E617934				Elevation (ft):	10	
PLSS:	T04N, R03E, Sec. 21, NW (M)				Acres:	0.0	
Location:	ALONG STEAMBOAT SLOUGH, JUST E OF CACHE SLOUGH, 2.75 MI WNW OF ISLETON AND ABOUT 2.75 MI NE OF RIO VISTA.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS NON-RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNII; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 18 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	65	Map Index:	89958	EO Index:	90970	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-07
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.18871 / -121.65959				Accuracy:	nonspecific area	
UTM:	Zone-10 N4227602 E617384				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 16, SW (M)				Acres:	58.0	
Location:	ALONG CACHE SLOUGH, JUST N OF CONFLUENCE WITH SACRAMENTO RIVER AND STEAMBOAT SLOUGH, 3.4 MI NW OF ISLETON.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1-3 DETECTED AND DETERMINED TO BE NESTING IN AREA 13 APR-28 MAY 2009. 5 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 28 APR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	66	Map Index:	90003	EO Index:	91015	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-12
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25569 / -121.44058				Accuracy:	1/10 mile	
UTM:	Zone-10 N4235335 E636439				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 28, NW (M)				Acres:	0.0	
Location:	ALONG SACRAMENTO RIVER, JUST W OF COUNTY RD J8, JUST N OF MOKELUMNE CITY.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S). GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 14 MAY 2009. 1 & 4 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 8 APR & 26 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	67	Map Index:	90004	EO Index:	91016	Element Last Seen:	2009-05-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25559 / -121.47699			Accuracy:	1/10 mile		
UTM:	Zone-10 N4235271 E633253			Elevation (ft):	0		
PLSS:	T05N, R05E, Sec. 30, N (M)			Acres:	0.0		
Location:	ALONG SACRAMENTO RIVER, 2 MI W OF MOKELUMNE CITY AND 2 MI NE OF WALNUT GROVE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREE(S). GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 14 MAY 2009. 1 SONG SPARROW (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 26 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	68	Map Index:	90011	EO Index:	91023	Element Last Seen:	2009-06-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-12
Quad Summary:	Thornton (3812124), Isleton (3812125), Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.26935 / -121.49695			Accuracy:	nonspecific area		
UTM:	Zone-10 N4236769 E631482			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 24 (M)			Acres:	1985.0		
Location:	ALONG SNODGRASS SLOUGH AND MOKELUMNE RIVER, FROM DEAD HORSE ISLAND NORTH TO LAMBERT RD, AND E TO COSUMNES RIVER.						
Detailed Location:	MAPPED TO 2009 DETECTIONS OF BIRDS WITH NESTING BEHAVIOR. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. PRUETT (2008) ANALYZED SAMPLES FROM "SF BAY, COSUMNES RIVER;" EXACT LOCATION UNKNOWN.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN AND MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	22 BIRDS COLLECTED 1995-2002 GENETICALLY ANALYZED AS HEERMANNI (=MAILLIARDI). UP TO 177 DETECTED & DETERMINED TO BE NESTING 2 APR-29 JUN 2009. 3-76 SONG SPARROWS (ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN VICINITY 2 APR-27 MAY 2009.						
Owner/Manager:	UNKNOWN, TNC, DPR, SAC COUNTY						



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Occurrence No.	69	Map Index:	90014	EO Index:	91026	Element Last Seen:	2009-06-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28736 / -121.46276				Accuracy:	nonspecific area	
UTM:	Zone-10 N4238817 E634440				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 17, NW (M)				Acres:	73.0	
Location:	NW OF TWIN CITIES RD AT I-5, ABOUT 2 MI SW OF FRANKLIN FIELD, 4 MILES NE OF WALNUT GROVE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	HABITAT DESCRIBED AS SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	16 DETECTED IN AREA 10 JUN 2009. AT LEAST 3 DETECTED AND DETERMINED TO BE NESTING IN AREA 24 JUN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	70	Map Index:	90015	EO Index:	91027	Element Last Seen:	2009-04-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28909 / -121.47609				Accuracy:	1/10 mile	
UTM:	Zone-10 N4238989 E633271				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 18, N (M)				Acres:	0.0	
Location:	1 MI WNW OF TWIN CITIES RD AT I-5, ABOUT 3 MI SSW OF POINT PLEASANT (TOWN), 3.6 MI ENE OF VORDEN.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 28 APR 2009; 6 ADDITIONAL SONG SPARROWS (ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	71	Map Index:	90016	EO Index:	91028	Element Last Seen:	2009-06-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36109 / -121.48700			Accuracy:	nonspecific area		
UTM:	Zone-10 N4246963 E632186			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 24, NE (M)			Acres:	122.0		
Location:	ABOUT 1 MI SW OF HOOD FRANKLIN RD AT I-5, 1.75 MI ESE OF HOOD PO, NE OF SOUTH STONE LAKE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	HABITAT DESCRIBED AS MARSH AND RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	2 & 29 DETECTED IN AREA 2 & 18 JUN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	72	Map Index:	90017	EO Index:	91029	Element Last Seen:	2009-06-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31617 / -121.50280			Accuracy:	nonspecific area		
UTM:	Zone-10 N4241956 E630886			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 02, NE (M)			Acres:	32.0		
Location:	SOUTH OF SOUTH STONE LAKE, ABOUT 2 MI WSW OF LAMBERT RD AT I-5, 3.7 MI ESE OF COURTLAND.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	3-4 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 9 & 28 APR 2009. 1-5 DETECTED AND DETERMINED TO BE NESTING IN AREA 30 APR-27 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	73	Map Index:	90018	EO Index:	91030	Element Last Seen:	2009-06-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32470 / -121.51968				Accuracy:	nonspecific area	
UTM:	Zone-10 N4242878 E629395				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 34, SE (M)				Acres:	28.0	
Location:	JUST N OF LAMBERT RD AT HERZOG RD, ABOUT 2.7 MI E OF COURTLAND, 5.5 MI N OF WALNUT GROVE.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	6 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 20 MAY 2009. 8 DETECTED AND DETERMINED TO BE NESTING IN AREA 11 JUN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	74	Map Index:	90019	EO Index:	91031	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.28950 / -121.64543				Accuracy:	nonspecific area	
UTM:	Zone-10 N4238805 E618460				Elevation (ft):	10	
PLSS:	T05N, R03E, Sec. 09, SE (M)				Acres:	61.0	
Location:	ALONG MINER SLOUGH AT FIVE POINTS, NE END OF PROSPECT ISLAND, ABOUT 1.5 MI S OF MEDORA LAKE & 5 MI SW OF COURTLAND.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1-10 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 27 APR-18 MAY 2009. 1 & 3 DETECTED AND DETERMINED TO BE NESTING IN AREA 8-28 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	75	Map Index:	90020	EO Index:	91032	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.27393 / -121.64157			Accuracy:	nonspecific area		
UTM:	Zone-10 N4237081 E618824			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 15, W (M)			Acres:	112.0		
Location:	ALONG MINER SLOUGH, SR 84 AT ELEVATOR RD, E SIDE OF PROSPECT ISLAND, 2-3 MI S OF MEDORA LAKE, 5.5 MI SW OF COURTLAND.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB AND TREES. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1-15 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 22 APR-13 MAY 2009. 2-7 DETECTED AND DETERMINED TO BE NESTING IN AREA 13 APR-28 MAY 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	76	Map Index:	90025	EO Index:	91033	Element Last Seen:	2009-05-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Rio Vista (3812126), Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.26233 / -121.66326			Accuracy:	nonspecific area		
UTM:	Zone-10 N4235767 E616944			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 20 (M)			Acres:	1082.0		
Location:	ALONG PROSPECT AND MINER SLOUGH, FROM CONFLUENCE N TO FIVE POINTS, W AND S SIDES OF PROSPECT ISLAND.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN AND MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	17-140 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 22 APR-28 MAY 2009. UP TO 93 DETECTED AND DETERMINED TO BE NESTING IN AREA 13 APR-28 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	77	Map Index:	90027	EO Index:	91040	Element Last Seen:	2009-04-03
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42326 / -121.49372				Accuracy:	nonspecific area	
UTM:	Zone-10 N4253852 E631486				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 36 (M)				Acres:	40.0	
Location:	STONE LAKES NWR, JUST W OF I-5 AT LAGUNA BLVD, 1.75-2 MI E OF CLARKSBURG.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN SHRUB-SCRUB AND TREES. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	7 DETECTED AND DETERMINED TO BE NESTING IN AREA 3 APR 2009. 2 & 21 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 3 & 30 APR 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	78	Map Index:	90029	EO Index:	91042	Element Last Seen:	2009-06-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-06-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.43640 / -121.49558				Accuracy:	nonspecific area	
UTM:	Zone-10 N4255308 E631300				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 25 (M)				Acres:	87.0	
Location:	JUST NW OF I-5 AT LAGUNA BLVD, 2 MI NE OF CLARKSBURG.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH AND RIPARIAN TREES. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	7-33 DETECTED AND DETERMINED TO BE NESTING IN AREA 19 MAY & 11 JUN 2009. 2-27 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 20 APR-19 MAY 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	79	Map Index:	90030	EO Index:	91043	Element Last Seen:	2009-05-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.42899 / -121.50119				Accuracy:	1/10 mile	
UTM:	Zone-10 N4254478 E630824				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 26, SE (M)				Acres:	0.0	
Location:	0.75 MI W OF I-5 AT LAGUNA BLVD, 1.5 MI NE OF CLARKSBURG.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS RIPARIAN TREES. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	4 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 30 APR 2009. 3 DETECTED AND DETERMINED TO BE NESTING IN AREA 19 MAY 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	80	Map Index:	90031	EO Index:	91044	Element Last Seen:	2009-04-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-19
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.41219 / -121.50349				Accuracy:	1/10 mile	
UTM:	Zone-10 N4252610 E630654				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 35, SE (M)				Acres:	0.0	
Location:	ABOUT 1 MI E OF ELK SLOUGH AT SACRAMENTO RIVER, 1 MI W OF I-5 AT ELK GROVE BLVD, 1.4 MI ESE OF CLARKSBURG.						
Detailed Location:	MAPPED TO 2009 COORDINATES FOR "NESTING" BIRDS. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	3 DETECTED & DETERMINED AS NESTING IN AREA 21 APR 2009. 1-8 SONG SPARROWS (ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 3 APR-14 MAY 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	81	Map Index:	90032	EO Index:	91045	Element Last Seen:	2009-04-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-04-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.40419 / -121.50488				Accuracy:	1/10 mile	
UTM:	Zone-10 N4251721 E630546				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 02, NE (M)				Acres:	0.0	
Location:	ABOUT 1.2 MI SE OF ELK SLOUGH AT SACRAMENTO RIVER, 1.2 MI WSW OF I-5 AT ELK GROVE BLVD, 1.6 MI SE OF CLARKSBURG.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	2 DETECTED AND DETERMINED TO BE NESTING IN AREA 21 APR 2009. 3 SONG SPARROWS (UNCERTAIN SUBSPECIES, BUT ASSUMED TO BE OF "MODESTO" POPULATION) PERCHED IN THE AREA 1 & 28 APR 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	82	Map Index:	90033	EO Index:	91046	Element Last Seen:	2009-05-20
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-13
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.37949 / -121.50989				Accuracy:	1/10 mile	
UTM:	Zone-10 N4248972 E630153				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 11, S (M)				Acres:	0.0	
Location:	ABOUT 1.8 MI WNW OF I-5 AT HOOD FRANKLIN RD, 2.5 MI SSE OF ELK SLOUGH AT SACRAMENTO RIVER.						
Detailed Location:	MAPPED TO INCLUDE PROVIDED COORDINATES. DWR DETERMINED DETECTIONS WERE FOR "MODESTO" POPULATION BASED ON LOCATION. ONLY BIRDS DETECTED WITH NESTING BEHAVIOR WERE MAPPED.						
Ecological:	GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE "INDISTINGUISHABLE FROM...HEERMANNII."						
General:	1 DETECTED AND DETERMINED TO BE NESTING IN AREA 20 MAY 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	92	Map Index:	90115	EO Index:	91127	Element Last Seen:	1927-10-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1927-10-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-19
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.41797 / -121.54329				Accuracy:	1 mile	
UTM:	Zone-10 N4253196 E627168				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 33 (M)				Acres:	0.0	
Location:	VICINITY OF CLARKSBURG; BOUNDED BY WINCHESTER LAKE (N), SACRAMENTO RIVER (E), ELK SLOUGH (S), AND MAIN CANAL (W).						
Detailed Location:	MAPPED GENERALLY TO SPECIMEN LOCATIONS DESCRIBED AS FOLLOWS: 1912 SPECIMEN COLLECTED AT "CLARKSBURG" & 1927 SPECIMEN COLLECTED AT "6-7.5 MI N COURTLAND." EXACT LOCATIONS UNKNOWN.						
Ecological:	THIS AREA IS NOW AGRICULTURAL FIELDS. HISTORIC TOPOGRAPHIC MAP FROM 1914 INDICATES THE AREA MORE AS A WETLAND WITH HISTORIC BIG LAKE, NOW CENTRAL AVE.						
General:	1 COLLECTED (MVZ #46049) 30 DEC 1912. 5 COLLECTED (MVZ #51637-41) 7 & 8 SEP1927.						
Owner/Manager:	UNKNOWN						

Agelaius tricolor		Element Code: ABPBXB0020	
tricolored blackbird			
Listing Status:	Federal:	None	CNDDDB Element Ranks: Global: G2G3
	State:	Threatened	State: S1S2
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	
Habitat:	General:	HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.	
	Micro:	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, AND FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.	

Occurrence No.	6	Map Index:	11515	EO Index:	7319	Element Last Seen:	1998-04-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2015-04-18
Occ. Type:	Natural/Native occurrence			Trend:	Fluctuating	Record Last Updated:	2016-02-01
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44805 / -121.37896				Accuracy:	nonspecific area	
UTM:	Zone-10 N4256773 E641456				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 24, NE (M)				Acres:	51.0	
Location:	NEAR STRAWBERRY CREEK, W OF ELK GROVE FLORIN RD, ABOUT 0.5 MI SW OF CALVIN RD, 0.7 MI NNW OF SHELDON RD.						
Detailed Location:	MAPPED TO PROVIDED MAPS & LOCATION DESCRIPTION OF "ALONG SOUTHERN PACIFIC RR TRACKS S OF CALVINE RD." DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "CALVINE ROAD." AREA INCLUDES PORTIONS OF STRAWBERRY CRK & AREA ADJ TO RR.						
Ecological:	NESTING SUBSTRATE CONSISTS OF BLACKBERRIES; REMOVED BY 1993. DOMINANTS INCLUDE BLACKBERRY AND SANFORD'S ARROWHEAD. ASSOCIATES INCLUDE WATER PLANTAIN. SURROUNDING AREA IS HEAVILY DEVELOPED (2002 -2013 AERIAL PHOTOS).						
General:	320 NESTED IN 1981. 40 TO SEVERAL HUNDRED NESTED IN 1990-1993. 1000+ ADS NESTED IN 1993. ~250-3000 NESTED IN 1994. ~2300 OBS IN 1995; FORAGING. NESTING OCCURRED IN 1998; COLONY SIZE UNDETERMINED. NONE OBS IN 1997, 1999, 2011, 2015.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	7	Map Index:	11446	EO Index:	24793	Element Last Seen:	1981-05-11
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2011-04-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-02-01
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45599 / -121.40529			Accuracy:	2/5 mile		
UTM:	Zone-10 N4257615 E639143			Elevation (ft):	25		
PLSS:	T07N, R05E, Sec. 14, SW (M)			Acres:	0.0		
Location:	VICINITY OF CALVINE RD AND HWY 99 INTERSECTION, 3.1 MI SW OF FLORIN POST OFFICE, SE OF SACRAMENTO.						
Detailed Location:	MAPPED GENERALLY TO PROVIDED COORDINATES AND LOCATION DESCRIPTIONS OF "HIGHWAY 99 & CALVINE RD." DATA ADDITIONALLY STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME WAS "CALVINE ROAD AT HIGHWAY 99."						
Ecological:	BLACKBERRIES AND CATTAILS IN 1981. PASTURE IN 1982. 2008-2014 AERIAL PHOTOS SHOW THAT THIS AREA HAS BEEN HEAVILY DEVELOPED. MINIMAL VEGETATION VISIBLE ALONG DRAINAGE.						
General:	ABOUT 50 ADULTS WITH FLEDGLING YOUNG NESTING ON 11 MAY 1981; SITE ABANDONED AFTER FLEDGING. A FEEDING FLOCK OF ABOUT 75 BIRDS OBS ON 7 JUN 1982. SEVERAL HUNDRED OBS IN 1991. UNK NUMBER OBS IN 1992. 0 OBS IN 1993-1994, 1997-1999, & IN 2011.						
Owner/Manager:	PVT						

Occurrence No.	9	Map Index:	11420	EO Index:	24792	Element Last Seen:	1981-05-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1981-05-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-01-13
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37249 / -121.41758			Accuracy:	3/5 mile		
UTM:	Zone-10 N4248330 E638229			Elevation (ft):	25		
PLSS:	T06N, R05E, Sec. 15 (M)			Acres:	0.0		
Location:	NEAR INTERSECTION OF KAMMERER RD & BRUCEVILLE RD, ~0.7 MI W OF RAU RD, 4.3 MI N OF FRANKLIN FIELD, 5.2 MI E OF HOOD PO.						
Detailed Location:	MAPPED TO PROVIDED LOCATION DESCRIPTION. LOCATION DESCRIBED AS "NEAR INTERSECTION OF KAMMERER RD & BRUCEVILLE RD, 4 MI N OF FRANKLIN FIELD." PROVIDED TRS WAS T 6N, R 5E, S15.						
Ecological:	NESTING OCCURRED IN BLACKBERRY. SIZE OF COLONY APPROXIMATELY 0.25 ACRE.						
General:	APPROXIMATELY 100 ADULTS OBSERVED NESTING ON 15 MAY 1981.						
Owner/Manager:	PVT						



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Occurrence No.	19	Map Index:	11473	EO Index:	24784	Element Last Seen:	1982-06-07
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2014-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-01-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43579 / -121.39079				Accuracy:	2/5 mile	
UTM:	Zone-10 N4255395 E640447				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 26 (M)				Acres:	0.0	
Location:	VICINITY OF SHELDON RD & POWER INN RD INTERSECTION, ABOUT 0.5 MI E OF HWY 99, ELK GROVE.						
Detailed Location:	1982 LOCATION DESCRIPTION WAS "ALONG SHELDON ROAD, 0.5 MI E OF HWY 99 (FLORIN, T 7N, R 5E, S26 NNE)." STATEWIDE SURVEY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME IN PORTAL WAS "SHELDON ROAD AT HIGHWAY 99."						
Ecological:	NESTING SUBSTRATE IN 1982 WERE CATTAILS ALONG CULVERT. AREA DESCRIBED IN 2011 AND 2014 AS FULLY DEVELOPED AND SHOULD BE REMOVED FROM FUTURE STATEWIDE SURVEYS. PRIVATE LAKE (SHORTLINE LAKE) EXISTS S OF SHELDON RD.						
General:	ABOUT 130 NESTING PAIRS OBSERVED ON 7 JUN 1982; NESTING STAGE UNKNOWN. NONE OBSERVED ON 16 JUN 1992. NONE OBSERVED ON 16 APR 2011 AND 20 APR 2014 DURING TRIENNIAL STATEWIDE SURVEYS.						
Owner/Manager:	PVT						

Occurrence No.	156	Map Index:	11521	EO Index:	24687	Element Last Seen:	1972-06-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1972-06-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-04-03
Quad Summary:	Galt (3812133), Bruceville (3812134), Elk Grove (3812143), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37739 / -121.37569				Accuracy:	4/5 mile	
UTM:	Zone-10 N4248938 E641879				Elevation (ft):	40	
PLSS:	T06N, R05E, Sec. 13 (M)				Acres:	0.0	
Location:	ABOUT 1.3 MI WSW OF WATERMAN RD & GRANT LINE RD INTERSECTION, 2.3 MI SSE OF HWY 99 AT ELK GROVE BLVD, ELK GROVE.						
Detailed Location:	MAPPED TO PROVIDED LOCATION DESCRIPTIONS. 1972 LOCATION DESCRIBED AS "JUST WEST OF HWY 99 NEAR GRANT LINE EXIT; 12 MILES SOUTH OF SACRAMENTO." ADDITIONALLY DESCRIBED AS "0.5 MI W OF GRANT LINE EXIT."						
Ecological:	NESTING SUBSTRATE CONSISTED OF CATTAILS AND BULRUSH.						
General:	ABOUT 10,000 INDIVIDUALS OBSERVED ON 7 JUN 1972; PROBABLY NESTING BUT NOT CONFIRMED (DEHAVEN UNPUB. FIELD DATA).						
Owner/Manager:	UNKNOWN						



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Occurrence No.	159	Map Index:	11454	EO Index:	24684	Element Last Seen:	2014-04-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2015-04-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-02-03
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35459 / -121.39509				Accuracy:	4/5 mile	
UTM:	Zone-10 N4246377 E640229				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 23 (M)				Acres:	0.0	
Location:	ABOUT 1.3 MI E OF ESCHINGER RD & BRUCEVILLE RD INTERSECTION, 2.3 MI SW OF HWY 99 AT GRANT LINE RD, S OF ELK GROVE.						
Detailed Location:	1969-74 LOCATION DESCRIBED AS "2 MI SW OF HWY 99 & ELK GROVE BLVD JUNCTION." 2014 LOCATION WAS "S OF ESCHINGER ROAD, E OF ITS INTERSECTION W/ CARROLL ROAD." 2014 DATA PART OF UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "ESCHINGER RD."						
Ecological:	NESTING IN CATTAILS AND BULRUSH IN 1969-74. BULK OF THE BIRDS IN 2014 WERE PERCHED IN A TALL COTTONWOOD OVER THE BLACKBERRY THICKET. SEVERAL OTHER BIRDS NOTED IN WHEAT FIELD TO THE N OF THE BLACKBERRY. ADJACENT TO ACTIVE FERTILIZER PLANT.						
General:	NESTING COLONY REPORTED BETWEEN 1969 & 1974; EXACT NUMBERS UNKNOWN. ABOUT 1500 BIRDS OBSERVED (BREEDING COLONY) ON 21 APR 2014; REPORTED AS "COLONY BEGINNING TO FORM WITH MANY NOISY MALES SINGING." 0 OBSERVED ON 23 MAY 2014 & 19 APR 2015.						
Owner/Manager:	UNKNOWN						

Occurrence No.	174	Map Index:	17173	EO Index:	9704	Element Last Seen:	1992-06-16
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	2014-04-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-03-04
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39249 / -121.42216				Accuracy:	specific area	
UTM:	Zone-10 N4250542 E637792				Elevation (ft):	25	
PLSS:	T06N, R05E, Sec. 10, NW (M)				Acres:	10.5	
Location:	ALONG FRANKLIN HIGH RD, BETWEEN QUAIL RUN LN AND WHITELOCK PARKWAY, ABOUT 0.2 MILE W OF BRUCEVILLE RD, W OF ELK GROVE.						
Detailed Location:	MAPPED TO PROVIDED MAPS AND LOCATION DESCRIPTION OF NORTH OF QUAIL RUN ROAD, WEST OF BRUCEVILLE ROAD. BLACKBERRY BRAMBLE APPEARS TO HAVE RAN ALONG WHAT IS NOW FRANKLIN HIGH RD. HIGH SCHOOL TO THE W, RESIDENTAIL BUILDINGS TO THE E.						
Ecological:	NESTING IN BLACKBERRY BRAMBLE (1990), ALONG BOUNDARY TO A CULTIVATED FIELD, RUNNING N FROM QUAIL RUN LN, BIRDS RANGE A DISTANCE W FOR FORAGING. AREA DESCRIBED AS "FULLY DEVELOPED WITH HOUSES, NO LONGER A VIABLE SITE" IN 2014.						
General:	ABOUT 500 ADULTS OBSERVED NESTING ON 29 MAY 1990; FEMALES WERE INCUBATING. ABOUT 100 BIRDS OBSERVED ON 16 JUN 1992; NOTED AS BREEDING INDIVIDUALS. NONE OBSERVED ON 19 APR 2014 DURING STATEWIDE SURVEYS.						
Owner/Manager:	PVT						



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Occurrence No.	204	Map Index:	21602	EO Index:	18952	Element Last Seen:	1992-06-18
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2014-04-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-02-11
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43594 / -121.43579			Accuracy:	specific area		
UTM:	Zone-10 N4255343 E636519			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 28, N (M)			Acres:	52.0		
Location:	LAGUNA CREEK, BOTH SIDES OF BIG HORN BLVD, 1 MI W OF BRUCEVILLE ROAD, SACRAMENTO.						
Detailed Location:	MAPPED TO PROVIDED MAP LOCATIONS. PROVIDED LOCATION DESCRIPTION FOR 1992 WAS "0.5-1 MI W OF BRUCEVILLE... ALONG LAGUNA CREEK." DATA COLLECTED BY UC DAVIS TRICOLORED BLACKBIRD PORTAL, SITE NAME WAS "LAGUNA CREEK AT FRANKLIN BOULEVARD."						
Ecological:	NESTING SUBSTRATE WAS BLACKBERRIES ALONG THE CREEK. 2014 SURVEY NOTED SITE AS A HISTORICAL LOCATION NOW ENTIRELY SURROUNDED BY HOUSING/URBANIZATION; SHOULD BE REMOVED FROM STATEWIDE SURVEYS.						
General:	100-200 NESTING BIRDS OBSERVED NESTING ON 16 & 18 JUN 1992. NONE DETECTED ON 19 APR 2014.						
Owner/Manager:	UNKNOWN						
Occurrence No.	479	Map Index:	95756	EO Index:	96894	Element Last Seen:	2005-06-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2014-04-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-03-26
Quad Summary:	Clarksburg (3812145), Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48119 / -121.63259			Accuracy:	2/5 mile		
UTM:	Zone-10 N4260092 E619268			Elevation (ft):	15		
PLSS:	T07N, R03E, Sec. 03, W (M)			Acres:	0.0		
Location:	ABOUT 1.5 MI ESE OF COUNTY RD 36 & COUNTY RD 106 INTERSECTION, SE OF DAVIS, YOLO BYPASS WILDLIFE AREA.						
Detailed Location:	MAPPED GENERALLY TO PROVIDED COORDINATES. SURVEYS CONDUCTED AS PART OF TRIENNIAL STATEWIDE SURVEYS. COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME WAS "GLIDE TULE RANCH."						
Ecological:	"A LOT OF TRICOLORED HABITAT" NOTED IN 2011. NO NESTING SUBSTRATE REPORTED IN 2014.						
General:	APPROXIMATELY 100 OBSERVED ON 30 JUN 2005; OBSERVATION NOTES WERE "SINGING," "CARRYING NEST MATERIAL," AND "FLEDGLINGS OUT OF NEST." NONE DETECTED DURING 17 APR 2011 AND 20 APR 2014 SURVEYS.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	480	Map Index:	95759	EO Index:	96896	Element Last Seen:	1989-05-16
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2015-04-18	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-12-14	
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.39178 / -121.50108			Accuracy:	3/5 mile		
UTM:	Zone-10 N4250349 E630901			Elevation (ft):	15		
PLSS:	T06N, R04E, Sec. 11 (M)			Acres:	0.0		
Location:	ABOUT 1.5 MI SW OF I-5 & ELK GROVE BLVD INTERSECTION, 1.7 MI NW OF I-5 AT HOOD FRANKLIN RD, NORTH STONE LAKE.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES AND LOCATION DESCRIPTION OF "NORTH STONE LAKE AT WESTERN EDGE WHERE BORROW CHANNEL MEETS THE LAKE." TRS WAS T 6N, R 4E, S11 NE. UC DAVIS TRICOLORED BLACKBIRD PORTAL SITE NAME WAS "NORTH STONE LAKE."						
Ecological:	BLACKBERRY THICKET AT INTERFACE OF BORROW CHANNEL, UPLANDS, BULRUSH MARSH, AND LAKE.						
General:	ABOUT 50-75 BIRDS OBSERVED ON 16 MAY 1989; COLONY SUCCESSFULLY NESTED, INDICATED BY OBSERVATION OF FLEDGED YOUNG. NONE DETECTED ON 20 APR 2014 AND 18 APR 2015.						
Owner/Manager:	DPR-STONE LAKE PARK						

Xanthocephalus xanthocephalus

Element Code: ABPBXB3010

yellow-headed blackbird

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G5
	State:	None		State:	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	General:	NESTS IN FRESHWATER EMERGENT WETLANDS WITH DENSE VEGETATION AND DEEP WATER. OFTEN ALONG BORDERS OF LAKES OR PONDS.			
	Micro:	NESTS ONLY WHERE LARGE INSECTS SUCH AS ODONATA ARE ABUNDANT, NESTING TIMED WITH MAXIMUM EMERGENCE OF AQUATIC INSECTS.			

Occurrence No.	9	Map Index:	63557	EO Index:	63652	Element Last Seen:	1899-06-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1899-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-12-29
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.45140 / -121.50133				Accuracy:	1/5 mile	
UTM:	Zone-10 N4256965 E630771				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 23 (M)				Acres:	0.0	
Location:	0.5 MI SOUTH OF FREEPORT.						
Detailed Location:							
Ecological:							
General:	MVZ #954-957 (EGG SETS) COLLECTED 10 JUN 1899 BY R. H. ELLIOTT.						
Owner/Manager:	UNKNOWN						

Oncorhynchus mykiss irideus pop. 11

Element Code: AFCHA0209K

steelhead - Central Valley DPS

Listing Status:	Federal:	Threatened	CNDDDB Element Ranks:	Global:	G5T2Q
	State:	None		State:	S2
	Other:	AFS_TH-Threatened			



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Habitat:	General:	POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.					
	Micro:	<input type="checkbox"/>					
Occurrence No.	19	Map Index:	91287	EO Index:	92339	Element Last Seen:	2012-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-03-28
Quad Summary:	Clements (3812121), Lockeford (3812122), Lodi North (3812123), Thornton (3812124), Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.19129 / -121.11651			Accuracy:	nonspecific area		
UTM:	Zone-10 N4228716 E664941			Elevation (ft):			
PLSS:	T04N, R08E, Sec. 20 (M)			Acres:	4969.0		
Location:	MOKELUMNE RIVER, FROM THE SAN JOAQUIN DELTA NEAR WALNUT GROVE TO MOKELUMNE R FISH HATCHERY (MRH) AT CAMANCHE DAM (RM64).						
Detailed Location:	MAPPED TO EXTENT OF RIVER NAVIGABLE BY STEELHEAD (SH); CAMANCHE DAM (CD) (BUILT 1963) IS MIGRATION BARRIER. FISH HATCHERY JUST BELOW CD. RSTS LOCATED D/S OF WOODBRIDGE DAM (WID) (~RM39.6). SPAWNING AREA FROM ELLIOTT RD TO CD.						
Ecological:	RUN HEAVILY INFLUENCED BY MRH; DEBATED IF IT EXISTED PRIOR TO STOCKING. EGGS IMPORTED FROM NIMBUS, BATTLE CK & FEATHER R HATCHERIES RECENTLY AS 2008. GRAVEL AUGMENTATION SINCE 1990. SAC R WATER FROM DELTA CROSS CHANNEL MAY CAUSE STRAYING.						
General:	AVG# FROM RSTS 1993-2010=410; FROM VIDEO WEIR 1998-2005=489; SKEWED BY HATCHERY RELEASES. HATCHERY RETURNS ROSE 1999-2008; 93% HATCHERY ORIGIN, '08. REDD COUNT ROSE 1995-2010(AVG 39); IN-RIVER SPAWNERS MOSTLY WILD, BELIEVED MOSTLY RESIDENT.						
Owner/Manager:	UNKNOWN						
Occurrence No.	24	Map Index:	91514	EO Index:	92591	Element Last Seen:	2013-01-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2013-01-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-02-10
Quad Summary:	Galt (3812133), Bruceville (3812134), Carbondale (3812141), Sloughhouse (3812142), Elk Grove (3812143), Folsom SE (3812151)						
County Summary:	Amador, El Dorado, Sacramento, San Joaquin						
Lat/Long:	38.49658 / -121.06664			Accuracy:	nonspecific area		
UTM:	Zone-10 N4262685 E668600			Elevation (ft):			
PLSS:	T08N, R08E, Sec. 35 (M)			Acres:	4344.0		
Location:	COSUMNES RIVER, FROM ITS MOUTH IN THE MOKELUMNE RIVER TO LATROBE FALLS (NEAR RM37.25).						
Detailed Location:	MAPPED TO RIVER REACH CURRENTLY ACCESSIBLE BY STEELHEAD (SH); LATROBE FALLS IS A NATURAL BARRIER TO ANADROMY. RECENT JUVENILE DETECTIONS BELOW LOW-WATER CROSSING AT ~RM6.75, THOUGH ADULTS SEEN ABOVE IT; IT MAY BE A BARRIER TO JUVENILE SH.						
Ecological:	COSUMNES MAY HOST NON-NATAL REARING HABITAT FOR SH FROM MOKELUMNE, OTHER NEARBY RIVERS. AVAILABLE HABITAT LOW-ELEVATION, LIKELY ONLY SUITABLE FOR SPAWNING IN WET YEARS. SH SEEN RECENTLY PRESUMED HATCHERY STRAYS. UNK IF HISTORIC RUN EXISTED.						
General:	1 PRESUMED "STEELHEAD" CAUGHT IN GILL NET SAMPLES, 5-6 FEB 1974. 0 TROUT CAUGHT IN 2000, 1 IN 2001, & 12 IN 2002 IN QUARTERLY ELECTROFISHING SAMPLES. 7 AD-CLIPPED SH, 16-27", RECORDED PAST CAMERA TRAP AT GRANLEES DAM 6 DEC 2012-7 JAN 2013.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	27	Map Index:	91603	EO Index:	92687	Element Last Seen:	2012-05-07
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2012-05-07	
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:		2014-02-27	
Quad Summary:	Lathrop (3712173), Stockton West (3712183), Holt (3712184), Woodward Island (3712185), Terminous (3812114), Bouldin Island (3812115), Jersey Island (3812116), Antioch North (3812117), Honker Bay (3812118), Thornton (3812124), Isleton (3812125), Rio Vista (3812126), Courtland (3812135), Liberty Island (3812136), Florin (3812144), Clarksburg (3812145)						
County Summary:	Contra Costa, Sacramento, San Joaquin, Solano, Yolo						
Lat/Long:	38.10457 / -121.59990			Accuracy:	nonspecific area		
UTM:	Zone-10 N4218343 E622752			Elevation (ft):			
PLSS:	T03N, R03E, Sec. 13 (M)			Acres:	55159.0		
Location:	SACRAMENTO-SAN JOAQUIN DELTA, FROM CHIPPS ISLAND TO SAN JOAQUIN R AT DOS REIS(RM51) & SACRAMENTO R AT GARCIA BEND(RM49).						
Detailed Location:	AREA OF DELTA MAPPED INCLUDES 19 BEACH SEINE SITES AT WHICH STEELHEAD WERE REGULARLY DETECTED, 1976-2012; VARIOUS MIDWATER TRAWL SITES SAMPLED 1968-2005; AND THE CHIPPS ISLAND TRAWL SITE, OPERATED SINCE 1976.						
Ecological:	LOWER RIVERS & DELTA MOSTLY UNSUITABLE FOR REARING DUE TO HIGH WATER TEMPS; FUNCTION MAINLY AS MIGRATORY CORRIDOR. 2012 TELEMETRY STUDY SHOWED MAIN JUVENILE EMIGRATION ROUTE THROUGH MAINSTEM SACRAMENTO R; & MIGRATORY SUCCESS LESS THAN 25%.						
General:	ANNUAL SEINE CATCH 1-136 (HIGH IN 1995) SINCE 1976; OVER 90% HATCHERY-ORIGIN (HO) FROM 2000-2012. CHIPPS TRAWL CATCH 9-488 (HIGH IN '95); %HO INCREASED FROM 2000-12. ANALYSIS SUGGESTS PRODUCTION OF 100-300K WILD SMOLTS/YR; MAY BE DECLINING.						
Owner/Manager:	UNKNOWN, DFG, TNC						

Occurrence No.	30	Map Index:	91663	EO Index:	92737	Element Last Seen:	2011-04-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2011-04-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-02-21	
Quad Summary:	Rio Vista (3812126), Courtland (3812135), Liberty Island (3812136), Clarksburg (3812145), Saxon (3812146), Sacramento West (3812155)						
County Summary:	Sacramento, Solano, Yolo						
Lat/Long:	38.51671 / -121.58429			Accuracy:	nonspecific area		
UTM:	Zone-10 N4264097 E623420			Elevation (ft):			
PLSS:	T08N, R04E, Sec. 30 (M)			Acres:	10025.0		
Location:	EASTERN EDGE OF YOLO BYPASS; INCLUDING TOE DRAIN, SACRAMENTO DEEP WATER SHIP CHANNEL (DWSC), AND SACRAMENTO BYPASS.						
Detailed Location:	USFWS & DWR FYKE TRAPS & SCREW TRAPS (RSTS) LOCATED IN TOE DRAIN (TD). SACRAMENTO RIVER FLOOD FLOWS CONNECT TD WITH YOLO BYPASS (YB) & PUTAH CREEK (PC), ENABLING FURTHER MIGRATION (NOT MAPPED). DWSC IS A DEAD END FOR STEELHEAD.						
Ecological:	ADULTS MIGRATE UP CHANNELS INTO YB (& OCCASIONALLY PC), BUT BARRIERS INCL. FREMONT WEIR BLOCK RIVER ACCESS. STUDIES SHOW JUVENILE SH USE YB AS REARING HABITAT, BUT ADULTS & JUVS STRANDED AS FLOODS RECEDE. PC TROUT INFLUENCED BY STOCKING.						
General:	ANALYSIS OF OTOLITHS FROM 40 PC TROUT SHOWED 0 SH PROGENY. TD FYKE TRAPS CAUGHT 15 MIGRATING SH, 2001-2006. TD RST CAUGHT 91 SH, 1998-2006. STRANDED SH SEINED FROM SACRAMENTO BYPASS 1998-99 & FROM BELOW FREMONT WEIR IN 1998-99 & 2011.						
Owner/Manager:	UNKNOWN						

Hypomesus transpacificus				Element Code: AFCHB01040			
Delta smelt							
Listing Status:	Federal:	Threatened		CNDDB Element Ranks:	Global:	G1	
	State:	Endangered			State:	S1	
	Other:	AFS_TH-Threatened, IUCN_EN-Endangered					
Habitat:	General:	SACRAMENTO-SAN JOAQUIN DELTA. SEASONALLY IN SUISUN BAY, CARQUINEZ STRAIT & SAN PABLO BAY.					
	Micro:	SELDOM FOUND AT SALINITIES > 10 PPT. MOST OFTEN AT SALINITIES < 2PPT.					



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Occurrence No.	6	Map Index:	66770	EO Index:	66919	Element Last Seen:	2006-05-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2006-05-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-10-17
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.20316 / -121.51747				Accuracy:	80 meters	
UTM:	Zone-10 N4229395 E629805				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 11, SW (M)				Acres:	0.0	
Location:	NORTH FORK MOKELUMNE RIVER, PUMPING STATION.						
Detailed Location:							
Ecological:	RIPRAPPED BANKS. CAPTURED AT 1350 HRS. WATER TEMP = 17.1 C, DISSOLVED OXYGEN = 9.15 MG/L.						
General:	1 ADULT (75 MM) CAPTURED BY ELECTROFISHING, RELEASED IN HEALTHY CONDITION ON 2 MAY 2006.						
Owner/Manager:	UNKNOWN						
Occurrence No.	7	Map Index:	66772	EO Index:	66921	Element Last Seen:	2017-11-14
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2017-11-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-08-30
Quad Summary:	Jersey Island (3812116), Antioch North (3812117), Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.09181 / -121.73612				Accuracy:	nonspecific area	
UTM:	Zone-10 N4216755 E610829				Elevation (ft):	0	
PLSS:	T03N, R02E, Sec. 22 (M)				Acres:	4853.0	
Location:	LOWER SACRAMENTO RIVER BETWEEN SHERMAN ISLAND AND RIO VISTA.						
Detailed Location:	ROUGHLY CORRESPONDS TO "LOWER SACRAMENTO RIVER" ESTUARY REGION FROM INTERAGENCY ECOLOGICAL PROGRAM MONITORING (MER11A0001). HIGHEST DENSITIES OF SUB-ADULTS & JUVS FOUND HERE. SUMMARIES OF IEP/DFG ANNUAL SURVEYS IN ECOLOGICAL COMMENTS BELOW.						
Ecological:	SEINE: AVG CATCH 195, 1976-89; 20, 1992-99; 15, 2000-11. SPRING KODIAK TRAWL: AVG OF 98, 2002-12. LARVAL: AVG OF 27, 2009-12. 20MM TOWNET: AVG OF 31, 1995-2012. FALL MIDWATER TRAWL: AVG 69, 1967-78; 149, 1980-99; 58, 2000-16. SPAWNING AREA.						
General:	1129 CAUGHT IN NOV-DEC 2000. 842 IN NOV 02. 1420 IN NOV 2003. 1803 IN NOV-DEC 2004. 11, JAN-MAR 2005. 24 JUVENILES, AUG-SEP 2008. 75, DEC 2009. 103, NOV 2016. 100, NOV 2017. OVERALL DECLINE OF CPUE SINCE 2000 MAY BE EVIDENCE OF POP DECLINE.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	9	Map Index:	79760	EO Index:	80753	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2010-08-30		
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33314 / -121.64774			Accuracy:	80 meters		
UTM:	Zone-10 N4243643 E618188			Elevation (ft):	0		
PLSS:	T06N, R03E, Sec. 28, SE (M)			Acres:	0.0		
Location:	SACRAMENTO DEEP WATER CHANNEL BETWEEN LIGHTS 59 AND 60.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 719.						
Ecological:	MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. STATION 719 ADDED IN 2005. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT DETECTED HERE IN 2005, 2006 & 2007.						
Owner/Manager:	UNKNOWN						

Occurrence No.	10	Map Index:	79761	EO Index:	80755	Element Last Seen:	2005-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2005-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2010-08-30		
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.23603 / -121.55888			Accuracy:	80 meters		
UTM:	Zone-10 N4232986 E626122			Elevation (ft):	2		
PLSS:	T05N, R04E, Sec. 33, SW (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER AT THE RYDE HOTEL.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 724.						
Ecological:	MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT DETECTED HERE IN 2005. NOT DETECTED IN 2002, 2003, 2004 OR 2006 & 2007.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	11	Map Index:	79762	EO Index:	80756	Element Last Seen:	2006-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-09-03	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19435 / -121.47811			Accuracy:	80 meters		
UTM:	Zone-10 N4228474 E633267			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 18 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER AT THE MOUTH OF BEAVER SLOUGH.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 922.						
Ecological:	SURVEY MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT DETECTED HERE IN 2002, 2003, 2004 & TWICE IN 2006. NOT DETECTED IN 2005 OR 2007.						
Owner/Manager:	UNKNOWN						

Occurrence No.	12	Map Index:	79767	EO Index:	80761	Element Last Seen:	2002-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-08-31	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16469 / -121.49272			Accuracy:	80 meters		
UTM:	Zone-10 N4225161 E632042			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 25, SE (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER AT THE MOUTH OF HOG SLOUGH.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 921. COORDINATES GIVEN ARE ON LAND ON BRACK TRACT. MAPPED TO THE STATED LOCATION AT THE MOUTH OF HOG SLOUGH.						
Ecological:	SURVEY MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT DETECTED HERE IN 2002. NOT DETECTED IN 2003, 2004, 2005, 2006 OR 2007.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	13	Map Index:	79768	EO Index:	80762	Element Last Seen:	2006-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.14158 / -121.50401				Accuracy:	80 meters	
UTM:	Zone-10 N4222581 E631094				Elevation (ft):	1	
PLSS:	T03N, R04E, Sec. 02, NE (M)				Acres:	0.0	
Location:	SOUTH MOKELUMNE RIVER AT SYCAMORE SLOUGH.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 920. COORDINATES GIVEN ARE ON LAND ON TERMINOUS TRACT. MAPPED TO THE STATED LOCATION AT THE MOUTH OF SYCAMORE SLOUGH.						
Ecological:	SURVEY MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT DETECTED HERE IN 2004, 2005 & 2006. NOT DETECTED IN 2002, 2003 OR 2007.						
Owner/Manager:	UNKNOWN						
Occurrence No.	15	Map Index:	79770	EO Index:	80771	Element Last Seen:	2003-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.13707 / -121.55802				Accuracy:	80 meters	
UTM:	Zone-10 N4222005 E626368				Elevation (ft):	0	
PLSS:	T03N, R04E, Sec. 05, NE (M)				Acres:	0.0	
Location:	MOKELUMNE RIVER IN BEND ABOVE SOUTH MODELUMNE RIVER.						
Detailed Location:	SPRING KODIAK TRAWL SURVEY STATION 923.						
Ecological:	SURVEY MONITORS PRESPAWNING & SPAWNING DELTA SMELT DISTRIBUTION. TRAWL FISHES TOP 1.8 M OF WATER COLUMN. SAMPLING DONE EVERY OTHER WEEK FROM EARLY JAN UNTIL LATE SPRING OR UNTIL DETECTABLE SPAWNING HAS ENDED.						
General:	SMELT TAKEN TWICE IN 2003. NOT TAKEN IN 2002 OR 2004 - 2007.						
Owner/Manager:	UNKNOWN						

Spirinchus thaleichthys

Element Code: AFCHB03010

longfin smelt

Listing Status: **Federal:** Candidate
State: Threatened
Other:

CNDDDB Element Ranks: **Global:** G5
State: S1

Habitat: **General:** EURYHALINE, NEKTONIC & ANADROMOUS. FOUND IN OPEN WATERS OF ESTUARIES, MOSTLY IN MIDDLE OR BOTTOM OF WATER COLUMN.
Micro: PREFER SALINITIES OF 15-30 PPT, BUT CAN BE FOUND IN COMPLETELY FRESHWATER TO ALMOST PURE SEAWATER.



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Occurrence No.	14	Map Index:	89689	EO Index:	90689	Element Last Seen:	2004-01-05
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2012-09-27	
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:		2013-08-05	
Quad Summary:	Courtland (3812135), Florin (3812144), Clarksburg (3812145), Sacramento West (3812155), Taylor Monument (3812165), Grays Bend (3812166)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.53243 / -121.52712			Accuracy:	nonspecific area		
UTM:	Zone-10 N4265920 E628376			Elevation (ft):	20		
PLSS:	T08N, R04E, Sec. 22 (M)			Acres:	7834.0		
Location:	ABOUT 31 MILES OF THE SACRAMENTO RIVER FROM THE I-5 CROSSING (RM70.5) NEAR SACRAMENTO AIRPORT, SOUTH TO HOOD (RM38).						
Detailed Location:	1973 DETECTIONS FROM DFG TRAWLS AT CLARKSBURG & HOOD. DETECTED AT USFWS SITES, N TO S: SR071E (ELKHORN) SR060E (DISCOVERY PARK), SR055M (SHERWOOD HARBOR), SR049E (GARCIA BEND) & SR043W (CLARKSBURG); ALL BEACH SEINE SITES EXCEPT SR055M.						
Ecological:	USFWS BEACH SEINES BEGUN 1976-81, WEEKLY SINCE '90S. SR055M: KODIAK TRAWLS OCT-MAR, MIDWATER TRAWLS APR-SEP, 2-3/WK. CATCH INTERMITTENT & AT LOW LEVELS; MAX WAS 10 IN 1 TRAWL. WELL UPSTREAM OF MAIN SAC RIVER SPAWNING AREA, BELOW RIO VISTA.						
General:	COLLECTED IN 1940. UP TO 9 ADULTS(A) & 3 YOY CAUGHT IN TRAWLS, '73. ADULTS CAUGHT AT SR060E IN '84, '87. 1A IN '88 TRAWLS. 12A AT 3 STATIONS, '93. 3A & 1 JUV AT 3 STNS, '94. 1A IN '97 TRAWLS. 8A & 1 JUV AT 2 STNS, 2002. 1A IN 2004 TRAWLS.						
Owner/Manager:	UNKNOWN, STATE						

Occurrence No.	15	Map Index:	89692	EO Index:	90690	Element Last Seen:	2002-05-20
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2012-09-25	
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:		2016-07-29	
Quad Summary:	Isleton (3812125), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.23960 / -121.55477			Accuracy:	specific area		
UTM:	Zone-10 N4233387 E626476			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 33 (M)			Acres:	782.0		
Location:	SACRAMENTO RIVER, FROM LOCKE (RM27.3) TO RYDE (RM 24.4).						
Detailed Location:	MAPPED TO 1973-1974 CDFW TRAWL LOCATION AT WALNUT GROVE AND USFWS BEACH SEINE STATION SR024E (KOKET).						
Ecological:	BEACH SEINES AT USFWS SITE BEGUN IN MAR 1976, PERFORMED WEEKLY SINCE THE 1990S. THIS AREA IS WELL UPSTREAM OF THE MAIN SACRAMENTO RIVER SPAWNING GROUNDS, BELOW RIO VISTA.						
General:	ADULTS & JUVENILES CAUGHT IN TRAWLS IN 1973, NONE IN 1974. 6 ADULTS CAUGHT IN APR 1996. 1 JUVENILE (25 MM FL) CAUGHT ON 20 MAY 2002. SUBSEQUENT EFFORTS DETECTED NO LONGFIN SMELT.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	16	Map Index:	89693	EO Index:	90692	Element Last Seen:	2002-05-10
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2012-09-25		
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:	2013-07-25		
Quad Summary:	Isleton (3812125), Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16300 / -121.61158			Accuracy:	1 mile		
UTM:	Zone-10 N4224811 E621631			Elevation (ft):	0		
PLSS:	T04N, R03E, Sec. 26 (M)			Acres:	0.0		
Location:	SACRAMENTO RIVER AT ISLETON (RM 17.4).						
Detailed Location:	SPECIMEN LOCALITY "SACRAMENTO RIVER, ISLETON BRIDGE." USFWS BEACH SEINE SITE SR017E.						
Ecological:	USFWS BEACH SEINING SINCE 1976, WEEKLY SINCE THE '90S. A FEW MILES UPSTREAM OF THE CENTRAL SPAWNING GROUNDS AS CURRENTLY UNDERSTOOD, BELOW RIO VISTA. LONGFIN SMELT SPAWN FURTHER UPSTREAM IN YEARS WITH LOW INFLOWS FROM RIVERS TO DELTA.						
General:	1 COLLECTED IN 1949 (CAS #212385). 3 ADULTS CAUGHT IN SEINES, MAR 1979. 1 JUVENILE (28 MM FL) CAUGHT IN MAY 2002. SUBSEQUENT EFFORTS DETECTED NO LONGFIN SMELT.						
Owner/Manager:	UNKNOWN						

Occurrence No.	17	Map Index:	89700	EO Index:	90695	Element Last Seen:	2012-04-11
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2012-09-27		
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:	2013-08-05		
Quad Summary:	Jersey Island (3812116), Antioch North (3812117), Honker Bay (3812118), Rio Vista (3812126)						
County Summary:	Contra Costa, Sacramento, Solano						
Lat/Long:	38.11975 / -121.69699			Accuracy:	nonspecific area		
UTM:	Zone-10 N4219903 E614216			Elevation (ft):	0		
PLSS:	T03N, R02E, Sec. 12 (M)			Acres:	12111.0		
Location:	SACRAMENTO RIVER FROM CACHE SLOUGH (RIO VISTA) DOWNSTREAM TO UPPER SUISUN BAY NEAR PITTSBURG.						
Detailed Location:	6 USFWS BEACH SEINE SITES, N TO S: SR014W (RIO VISTA), SR012E&W (STUMP/SANDY BEACH), TM001N (BRANNAN ISLAND), & MS001N (SHERMAN ISLAND). 10 MULTI-STUDY CDFW MONITORING STATIONS #513, 520, 703, 704, 705, 706, 707, 711, 801, 804.						
Ecological:	A KEY SPAWNING GROUNDS FOR THE BAY-DELTA POPULATION. SURVEYS IN AREA (& START YEAR): CDFW SPRING [=SPAWNING] KODIAK TRAWL (2002), 20MM [=LARVA] (1995), SMELT LARVAL SURVEY[SLS] (2009); USFWS BEACH SEINES (1979); DREDGE MONITORING (2006-08).						
General:	396 COLLECTED 1946-48, 4 IN 1974. LOW #S CAUGHT IN FWS SEINES. 20MM(SLS) CATCH/YR: 232/'96 7650/'97 409/'99 3022/'00 2636/'01 9278/'02 2040/'03 2305/'04 361/'05 0/'06 753/'07 3956/'08 2270(3214)/'09 1160(3586)/'10 4(4195)/'11 501 (5412)/'12.						
Owner/Manager:	UNKNOWN, DPR, DFG, STATE						



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Occurrence No.	19	Map Index:	89710	EO Index:	90714	Element Last Seen:	2012-06-04
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-06-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Liberty Island (3812136), Dozier (3812137)						
County Summary:	Solano						
Lat/Long:	38.25938 / -121.76674			Accuracy:	nonspecific area		
UTM:	Zone-10 N4235314 E607896			Elevation (ft):	0		
PLSS:	T05N, R02E, Sec. 21 (M)			Acres:	1589.0		
Location:	LINDSEY SLOUGH FROM ABOUT 1 MILE WEST OF THE CACHE SLOUGH CONFLUENCE TO THE BARKER SLOUGH CONFLUENCE.						
Detailed Location:	INCLUDES CDFW 20 MM ICHTHYOPLANKTON MONITORING STATIONS 718 AND 720.						
Ecological:	SAMPLING STARTED HERE IN 2008; CONDUCTED BI-WEEKLY MAR/APR-JUL/AUG. POSSIBLE RISK OF ENTRAINMENT FROM BARKER SLOUGH PUMPING PLANT ABOUT 1 MILE UPSTREAM.						
General:	20 MM SURVEY CATCH/YEAR: 19/2008, 20/2009, 18/2010, 126/2011, 130/2012.						
Owner/Manager:	UNKNOWN, DFG						

Occurrence No.	20	Map Index:	89715	EO Index:	90717	Element Last Seen:	2012-03-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-06-04
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2013-07-25
Quad Summary:	Rio Vista (3812126), Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.26941 / -121.64108			Accuracy:	nonspecific area		
UTM:	Zone-10 N4236581 E618873			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 15 (M)			Acres:	779.0		
Location:	MINER SLOUGH, FROM THE VICINITY OF THE CACHE SLOUGH CONFLUENCE NORTH TO THE VICINITY OF ELEVATOR ROAD, WEST RYER ISLAND.						
Detailed Location:	MAPPED TO VICINITY OF COORDINATES GIVEN FOR CDFW 20 MM SAMPLING STATIONS 724 AND 726.						
Ecological:	CDFW 20 MM LARVAL SURVEY STARTED IN 1995; SAMPLING AT THE MINER SLOUGH STATIONS STARTED IN 2008. SAMPLING CONDUCTED WITH PLANKTON NETS, BI-WEEKLY FROM MAR-AUG EVERY YEAR. DELTA SMELT AND SPLITTAIL LARVAE ALSO FOUND.						
General:	LOW NUMBERS OF SMELT LARVAE CAUGHT IN 2008 (4), 2009 (2), AND 2012 (1).						
Owner/Manager:	UNKNOWN, USBOR						



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Occurrence No.	21	Map Index:	89716	EO Index:	90718	Element Last Seen:	2012-06-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-08-05
Quad Summary:	Rio Vista (3812126), Liberty Island (3812136)						
County Summary:	Solano, Yolo						
Lat/Long:	38.25600 / -121.68844			Accuracy:	nonspecific area		
UTM:	Zone-10 N4235033 E614752			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 19 (M)			Acres:	7500.0		
Location:	CACHE SLOUGH N OF ELKHORN SLOUGH CONFLUENCE, LIBERTY ISLAND, & SACRAMENTO RIVER DEEP WATER SHIP CHANNEL TO COURTLAND RD.						
Detailed Location:	CDFW 20MM/SMELT LARVAL SURVEY(SLS)/SPRING KODIAK TRAWL(SKT) STATIONS 713, 715, 716, 719, 723. DWR SAMPLED W/SCREW TRAPS IN DEEP WATER CHANNEL 1999-2002. IEP SAMPLED FISH OCCUPANCY OF LIBERTY ISLAND (LI) 2010-12 W/BEACH SEINE & LARVAL TRAWLS.						
Ecological:	DWR STUDY FOUND HIGHER FISH DIVERSITY IN DEEP WATER CHANNEL/YOLO BYPASS THAN SACRAMENTO RIVER SITES; WINTER/SPRING FLOODING MAY BENEFIT NATIVE FISH. LI SURVEY INDICATED HIGH OCCUPANCY BY SPLITTAIL; LARVAL LFS BUT NO ADULTS DETECTED.						
General:	59 YOY FROM DWR TRAPS, '02. 20 MM CATCH/YEAR: 3/'97 24/'01 296/'02 15/'03 1/'05 22/'08 47/'09 35/'10 6/'11 62/'12. SKT: 23/'02 1/'04 1/'06 1/'08 1/'09 2/'10 1/'11 1/'12. SLS: 97/'09 235/'10 316/'11 255/'12. 137 LARVAE FROM LI, 2010-12.						
Owner/Manager:	UNKNOWN						

Occurrence No.	44	Map Index:	89774	EO Index:	90782	Element Last Seen:	1966-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2012-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2013-07-26
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16677 / -121.48968			Accuracy:	nonspecific area		
UTM:	Zone-10 N4225397 E632304			Elevation (ft):	-5		
PLSS:	T04N, R04E, Sec. 25 (M)			Acres:	344.0		
Location:	HOG SLOUGH, EAST OF SOUTH MOKELUMNE RIVER, ABOUT 3 MILES WNW OF W WOODBRIDGE RD AT INTERSTATE 5, 17 MI N OF STOCKTON.						
Detailed Location:	MAPPED TO LOCALITY REPORTED IN CDFW STATUS REVIEW.						
Ecological:	MOST UPSTREAM DETECTION OF THE SPECIES IN THIS DRAINAGE. IN YEARS OF LOW OUTFLOW, LONGFIN SMELT SPAWN FURTHER UPSTREAM, INCREASING THEIR RISK OF ENTRAINMENT.						
General:	RADTKE CAUGHT ADULT SMELT AT THIS LOCATION IN WINTER/SPRING 1966. NOT DETECTED IN KODIAK TRAWLS CONDUCTED MONTHLY EACH SPRING SINCE 2002.						
Owner/Manager:	UNKNOWN						



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Pogonichthys macrolepidotus

Element Code: AFCJB34020

Sacramento splittail

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** GNR

State: None

State: S3

Other: AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered

Habitat: **General:** ENDEMIC TO THE LAKES AND RIVERS OF THE CENTRAL VALLEY, BUT NOW CONFINED TO THE DELTA, SUISUN BAY AND ASSOCIATED MARSHES.

Micro: SLOW MOVING RIVER SECTIONS, DEAD END SLOUGHS. REQUIRES FLOODED VEGETATION FOR SPAWNING AND FORAGING FOR YOUNG.

Occurrence No.	1	Map Index:	24986	EO Index:	881	Element Last Seen:	1995-02-26
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:			1995-02-26
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			1996-01-02

Quad Summary: Courtland (3812135), Florin (3812144), Clarksburg (3812145), Sacramento West (3812155), Taylor Monument (3812165), Grays Bend (3812166), Verona (3812175), Knights Landing (3812176), Eldorado Bend (3812177), Nicolaus (3812185)

County Summary: Sacramento, Sutter, Yolo

Lat/Long:	38.61362 / -121.56075	Accuracy:	specific area
UTM:	Zone-10 N4274883 E625304	Elevation (ft):	20
PLSS:	T09N, R04E, Sec. 20 (M)	Acres:	5037.5

Location: SACRAMENTO RIVER FROM MISSOURI BEND N OF KNIGHTS LANDING TO S OF COURTLAND. ALSO, LOWER 10 MILES OF THE FEATHER RIVER.

Detailed Location: IN THE SACRAMENTO RIVER FROM RIVER MILE 33 SOUTH OF COURTLAND TO RIVER MILE 97 NORTH OF KNIGHTS LANDING, AND THE LOWER 10 MILES OF THE FEATHER RIVER.

Ecological: MODERATE CURRENT & SANDY BOTTOM. RIVERBANKS VARIABLE, WATER TEMP AVERAGES LOW 60'S F. MOST FISH TAKEN FROM THE END OF DECEMBER TO THE END OF MAY.

General: INFORMATION TAKEN FROM A SACRAMENTO RIVER ANGLER SURVEY CONDUCTED BETWEEN 1991 & 1995. FISH WERE TAKEN BY HOOK & LINE MOSTLY FROM SHORE. MOST OF THE SPLITTAIL CAUGHT WERE TAKEN INCIDENTALLY & WERE NOT THE SPECIES TARGETED BY THE ANGLER.

Owner/Manager: PVT, STATE



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Lasiurus cinereus

Element Code: AMACC05030

hoary bat

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G5
State: None **State:** S4
Other: IUCN_LC-Least Concern, WBWG_M-Medium Priority
Habitat: **General:** PREFERS OPEN HABITATS OR HABITAT MOSAICS, WITH ACCESS TO TREES FOR COVER AND OPEN AREAS OR HABITAT EDGES FOR FEEDING.
Micro: ROOSTS IN DENSE FOLIAGE OF MEDIUM TO LARGE TREES. FEEDS PRIMARILY ON MOTHS. REQUIRES WATER.

Occurrence No. 207 **Map Index:** 68993 **EO Index:** 69701 **Element Last Seen:** 1999-09-24
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1999-09-24
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2007-04-19

Quad Summary: Rio Vista (3812126)

County Summary: Sacramento

Lat/Long: 38.14667 / -121.64745 **Accuracy:** 1/10 mile
UTM: Zone-10 N4222952 E618515 **Elevation (ft):** 20
PLSS: T04N, R03E, Sec. 33, SE (M) **Acres:** 0.0

Location: BRANNAN ISLAND, ABOUT 1.8 ROAD MILES SE OF INTERSECTION OF HWYS 12 AND 160.

Detailed Location: MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY SOURCE, WITH LOCALITY "RIVER EDGE." SOURCE LISTS 4 COORDINATES FOR "BRANNAN SRA." BAT ASSUMED TO BE DETECTED AT ALL 4 LOCATIONS (OCC #206-207).

Ecological: NO TREES. CONSISTS OF GRASSLAND OR SHRUBS.

General: BAT(S) DETECTED ON 24 SEP 1999.

Owner/Manager: UNKNOWN

Lasiurus blossevillii

Element Code: AMACC05060

western red bat

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G5
State: None **State:** S3
Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_H-High Priority
Habitat: **General:** ROOSTS PRIMARILY IN TREES, 2-40 FT ABOVE GROUND, FROM SEA LEVEL UP THROUGH MIXED CONIFER FORESTS.
Micro: PREFERS HABITAT EDGES AND MOSAICS WITH TREES THAT ARE PROTECTED FROM ABOVE AND OPEN BELOW WITH OPEN AREAS FOR FORAGING.



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Occurrence No.	65	Map Index:	68993	EO Index:	69702	Element Last Seen:	1999-09-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-09-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2007-04-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.14667 / -121.64745			Accuracy:	1/10 mile		
UTM:	Zone-10 N4222952 E618515			Elevation (ft):	20		
PLSS:	T04N, R03E, Sec. 33, SE (M)			Acres:	0.0		
Location:	BRANNAN ISLAND, ABOUT 1.8 ROAD MILES SE OF INTERSECTION OF HWYS 12 AND 160.						
Detailed Location:	MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY SOURCE, WITH LOCALITY "RIVER EDGE." SOURCE LISTS 4 COORDINATES FOR "BRANNAN SRA." BAT ASSUMED TO BE DETECTED AT ALL 4 LOCATIONS (OCC #64-65).						
Ecological:	NO TREES. CONSISTS OF GRASSLAND OR SHRUBS.						
General:	BAT(S) DETECTED ON 24 SEP 1999.						
Owner/Manager:	DPR-BRANNAN ISLAND SRA						
Occurrence No.	67	Map Index:	68994	EO Index:	69705	Element Last Seen:	1999-07-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-07-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2007-04-19
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.23560 / -121.57857			Accuracy:	1/10 mile		
UTM:	Zone-10 N4232912 E624400			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 31, E (M)			Acres:	0.0		
Location:	GRAND ISLAND, ABOUT 1.3 MILES ENE OF HOWARD LANDING.						
Detailed Location:	MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY SOURCE, WITH LOCALITY "PARKING." SOURCE LISTS 3 COORDINATES FOR "ISLETON, GRAND ISLAND." BAT ASSUMED TO BE DETECTED AT ALL 3 LOCATIONS (OCC #67-68).						
Ecological:	NO TREES. GRASSLAND OR SHRUBS.						
General:	BAT(S) DETECTED ON 26 JUL 1999.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	68	Map Index:	68996	EO Index:	69707	Element Last Seen:	1999-07-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-07-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2007-04-19
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.23176 / -121.56195				Accuracy:	nonspecific area	
UTM:	Zone-10 N4232507 E625861				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 32, SE (M)				Acres:	30.0	
Location:	GRAND ISLAND, ABOUT 0.2 TO 0.5 MILE SOUTH OF RYDE.						
Detailed Location:	MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY SOURCE, WITH LOCALITY "ROCK LEVEE" AND "WILLOW/COTTONWOOD." SOURCE LISTS 3 COORDINATES FOR "ISLETON, GRAND ISLAND." BAT ASSUMED TO BE DETECTED AT ALL 3 LOCATIONS (OCC #67-68).						
Ecological:	GRASSLAND/SHRUBS, NO TREES AT "ROCK LEVEE." COTTONWOOD/SYCAMORE; DOMINATED BY MATURE TREES AND CONSISTS OF STRIP THAT IS 2-3 TREES WIDE AT "WILLOW/COTTONWOOD."						
General:	BAT(S) DETECTED ON 26 JUL 1999.						
Owner/Manager:	UNKNOWN						

Sylvilagus bachmani riparius

Element Code: AMAEB01021

riparian brush rabbit

Listing Status:	Federal:	Endangered	CNDDDB Element Ranks:	Global:	G5T1
	State:	Endangered		State:	S1
	Other:				
Habitat:	General:	RIPARIAN AREAS ON THE SAN JOAQUIN RIVER IN NORTHERN STANISLAUS COUNTY.			
	Micro:	DENSE THICKETS OF WILD ROSE, WILLOWS, AND BLACKBERRIES.			

Occurrence No.	15	Map Index:	91784	EO Index:	92877	Element Last Seen:	2013-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2013-XX-XX	
Occ. Type:	Refugium; Artificial Habitat/Occurrence	Trend:	Unknown	Record Last Updated:		2014-03-07	
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16876 / -121.43492			Accuracy:	specific area		
UTM:	Zone-10 N4225696 E637097			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 28, N (M)			Acres:	60.0		
Location:	WHITE SLOUGH WILDLIFE AREA (NORTH UNIT/POND 6), ON N SIDE OF W WOODBRIDGE RD ABOUT 1.75 MILES W OF THE I-5 UNDERPASS.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR SPECIMENS, WHICH WERE COLLECTED FROM ALL 3 BREEDING PENS AT SITE. RABBITS USED HERE FOR BROODSTOCK TRAPPED FROM "SOUTH DELTA" POPULATION (OCC#4-8). SURVIVING BREEDERS REPATRIATED TO LOCATIONS OF CAPTURE.						
Ecological:	3 1.24-1.7 ACRE BREEDING PENS BUILT 2001-2002 TO PROPAGATE RABBITS FOR REINTRODUCTION AT SAN JOAQUIN RIVER NWR (OCC#16). HABITAT INCLUDED WILLOW, COTTONWOOD, & HIMALAYAN BLACKBERRY. PENS STILL USED AS OF 2013, BUT 2 OF 3 SLATED FOR CLOSURE.						
General:	6 RABBITS TRAPPED FROM WILD & RELEASED INTO PENS NOV-DEC 2001 PRODUCED 64 YOUNG. 20 WILD-CAUGHT RABBITS RELEASED INTO PENS DEC 2002-APR 2003 PRODUCED 284 YOUNG. SPECIMENS COLLECTED FROM MORTALITIES (2 IN '04, 6 IN '05, 3 IN '06, 5 IN '07).						
Owner/Manager:	DWR						



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Taxidea taxus

Element Code: AMAJF04010

American badger

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G5
State: None **State:** S3
Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern
Habitat: **General:** MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.
Micro: NEEDS SUFFICIENT FOOD, FRIABLE SOILS AND OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.

Occurrence No. 209 **Map Index:** 56999 **EO Index:** 57015 **Element Last Seen:** 1938-10-22
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1938-10-22
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2004-09-27

Quad Summary: Bruceville (3812134), Courtland (3812135), Florin (3812144), Clarksburg (3812145)

County Summary: Sacramento, Yolo

Lat/Long: 38.37192 / -121.51617 **Accuracy:** 1 mile
UTM: Zone-10 N4248124 E629618 **Elevation (ft):** 5
PLSS: T06N, R04E, Sec. 14 (M) **Acres:** 0.0

Location: INDIAN MOUND, NORTH OF HOOD.

Detailed Location: MAPPED TO LAT/LONG GIVEN BY MVZ WITH AN ERROR DISTANCE OF 1 MILE. LOCATION STATED AS "INDIAN MOUND, N OF HOOD."

Ecological:

General: MVZ #88217; COLLECTED BY DAVID H. JOHNSON ON 22 OCT 1938.

Owner/Manager: UNKNOWN

Emys marmorata

Element Code: ARAAD02030

western pond turtle

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G3G4
State: None **State:** S3
Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive
Habitat: **General:** A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS AND IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.
Micro: NEEDS BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.



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Occurrence No.	68	Map Index:	11417	EO Index:	629	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-01-18
Quad Summary:	Terminous (3812114), Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.11491 / -121.40967			Accuracy:	1 mile		
UTM:	Zone-10 N4219759 E639413			Elevation (ft):	3		
PLSS:	T03N, R05E, Sec. 15 (M)			Acres:	0.0		
Location:	COLDANI MARSH; 0.8 MILE WEST OF THORTON ROAD AT HIGHWAY 12.						
Detailed Location:							
Ecological:							
General:	TURTLES COLLECTED AT TWO SITES BY DFG, DATES AND NUMBERS OF SPECIMENS UNKNOWN.						
Owner/Manager:	UNKNOWN						
Occurrence No.	148	Map Index:	41455	EO Index:	41455	Element Last Seen:	1999-05-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1999-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1999-08-10
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.16222 / -121.54343			Accuracy:	80 meters		
UTM:	Zone-10 N4224816 E627604			Elevation (ft):	-10		
PLSS:	T04N, R04E, Sec. 28 (M)			Acres:	0.0		
Location:	TYLER ISLAND, 0.7 MILE EAST OF BROAD SLOUGH, 3 MILES EAST OF ISLETON.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF AN IRRIGATION DITCH WITH EMERGENT VEGETATION; VEGETATED BY TYPHA SP, SCIRPUS SP, PRIMROSE.						
General:	6 ADULTS OBSERVED ON 26 MAY 1999.						
Owner/Manager:	UNKNOWN						
Occurrence No.	150	Map Index:	41457	EO Index:	41457	Element Last Seen:	1999-07-13
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	1999-07-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1999-08-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18333 / -121.44660			Accuracy:	nonspecific area		
UTM:	Zone-10 N4227296 E636047			Elevation (ft):	-2		
PLSS:	T04N, R05E, Sec. 20 (M)			Acres:	58.4		
Location:	NORTH OF HOG SLOUGH AND SOUTH OF PELTIER ROAD, 2.5 MILES WEST OF I-5, SSW OF THORNTON						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF A NORTH-SOUTH RUNNING IRRIGATION DITCH CONTAINING WELL-DEVELOPED EMERGENT VEGETATION (SMARTWEED, WILLOWS, TYPHA, SCIRPUS, LUDWIGIA) AND SEVERAL BASKING AREAS; SURROUNDED BY AGRICULTURAL FIELDS.						
General:	6 INDIVIDUALS OBSERVED ON 13 JUL 1999.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	161	Map Index:	43972	EO Index:	43972	Element Last Seen:	2016-08-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2016-08-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-01-26
Quad Summary:	Terminous (3812114), Thornton (3812124), Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.13437 / -121.50616				Accuracy:	nonspecific area	
UTM:	Zone-10 N4221778 E630919				Elevation (ft):	5	
PLSS:	T03N, R04E, Sec. 2, SE (M)				Acres:	108.0	
Location:	SOUTH MOKELUMNE RIVER, 0.9 MILE SSE OF CONFLUENCE OF SYCAMORE SLOUGH & S MOKELUMNE RIVER, SE CORNER OF STATEN ISLAND.						
Detailed Location:	2000: SITES 4, 5, & 6; AT ABOUT 0.1 MI SW & 0.9 MI SSE OF THE CONFLUENCE. MAPPED TO SURVEY AREA DESCRIBED ON 2016 FIELD SURVEY FORM (EXACT DETECTION LOCATIONS NOT GIVEN).						
Ecological:	2000: SACRAMENTO & SAN JOAQUIN RIVER DELTA. 2016: FOUND BASKING ON LOGS AT/NEAR EDGE OF RIPRAPPED LEVEES; IN DISTURBED RIPARIAN HABITAT WITH OAKS, WILLOWS, & INVASIVE AQUATIC VEGETATION; WATER HYACINTH HARVESTING PROGRAM UNDERWAY.						
General:	6 ADULTS AND 1 JUVENILE OBSERVED ON 31 AUG 2000. 2 ADULTS AND 1 JUVENILE OBSERVED BASKING ON 9 AUG 2016.						
Owner/Manager:	UNKNOWN						

Occurrence No.	163	Map Index:	43978	EO Index:	43978	Element Last Seen:	2000-09-28
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2000-09-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-01-26
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.15618 / -121.50370				Accuracy:	specific area	
UTM:	Zone-10 N4224201 E631095				Elevation (ft):	1	
PLSS:	T04N, R04E, Sec. 36 (M)				Acres:	20.4	
Location:	SOUTH MOKELUMNE RIVER, 0.1 TO 0.35 MILE NORTH OF RIVER MILE 12, 1 MILE SW OF CONFLUENCE WITH HOG SLOUGH.						
Detailed Location:	OBSERVED ON HALF SUBMERGED CONCRETE TUBES (SITE #7 & #8) STATEN ISLAND SIDE OF RIVER, OPPOSITE OF BRACK TRACT NEAR END OF WOODBRIDGE ROAD, 8/31; ALONG LEVEE BASE 28 SEP 2000.						
Ecological:	SACRAMENTO AND SAN JOAQUIN RIVER DELTA.						
General:	2 ADULTS OBSERVED 31 AUG, AND 2 ADULTS OBSERVED 28 SEP 2000.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	166	Map Index:	43983	EO Index:	43983	Element Last Seen:	2000-09-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2000-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-10-05
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20347 / -121.47830			Accuracy:	80 meters		
UTM:	Zone-10 N4229485 E633234			Elevation (ft):	1		
PLSS:	T04N, R05E, Sec. 07 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER, 0.6 MILE NORTH OF CONFLUENCE WITH BEAVER SLOUGH, 0.1 MILE SOUTH OF LAMB ROAD AND THE LEVEE.						
Detailed Location:	BASKING ON EXPOSED LOG NEAR SOUTHWEST END OF NEW HOPE TRACT.						
Ecological:	SACRAMENTO AND SAN JOAQUIN RIVER DELTA.						
General:	1 TURTLE OBSERVED ON THE EXPOSED PART OF A SUBMERGED LOG.						
Owner/Manager:	UNKNOWN						
Occurrence No.	174	Map Index:	44282	EO Index:	44282	Element Last Seen:	2000-09-28
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-09-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-11-13
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.26749 / -121.50272			Accuracy:	80 meters		
UTM:	Zone-10 N4236554 E630981			Elevation (ft):	1		
PLSS:	T05N, R04E, Sec. 24 (M)			Acres:	0.0		
Location:	MEADOWS SLOUGH, 1.2 MILES NNE OF LOCKE, 1.3 MILES EAST OF TWIN CITIES AND RIVER ROADS.						
Detailed Location:	OBSERVED ON SUBMERGED LOG.						
Ecological:	FRESHWATER SLOUGH.						
General:	2 ADULTS OBSERVED STACKED ON TOP OF EACH OTHER ON A SUBMERGED LOG, 2000.						
Owner/Manager:	UNKNOWN						
Occurrence No.	249	Map Index:	52267	EO Index:	52267	Element Last Seen:	2003-07-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-07-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-08-27
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18181 / -121.48958			Accuracy:	80 meters		
UTM:	Zone-10 N4227065 E632285			Elevation (ft):	1		
PLSS:	T04N, R04E, Sec. 24 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER, BETWEEN HOG SLOUGH AND BEAVER SLOUGH, EAST SIDE OF STATEN ISLAND.						
Detailed Location:	TURTLES UTILIZE A FLOATING LOG FOR BASKING.						
Ecological:	HABITAT CONSISTS OF RIVERINE WITHIN A RIPRAPPED LEVEE; SOME TULE S NEARBY.						
General:	1 ADULT TURTLE OBSERVED ON 24 JUL 2003.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	250	Map Index:	52269	EO Index:	52269	Element Last Seen:	2003-07-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-07-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-08-27
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.14605 / -121.50780				Accuracy:	80 meters	
UTM:	Zone-10 N4223071 E630753				Elevation (ft):	1	
PLSS:	T04N, R04E, Sec. 35 (M)				Acres:	0.0	
Location:	SOUTH MOKELUMNE RIVER, IN A CHANNEL BETWEEN THE STATEN AND BRACKT TRACT LEVEES, 5.5 MILES EAST OF ISLETON.						
Detailed Location:	TURTLE SEEN ON A FLOATING LOG, NEXT TO SEVERAL PARTIALLY-SUBMERGED PILINGS NEAR A CHANNEL ISLAND IN THE DELTA.						
Ecological:	HABITAT CONSISTS OF RIVERINE, WITH THICK STANDS OF TULE SURROUNDING THE PILINGS AND THE FLOATING LOG.						
General:	1 ADULT TURTLE OBSERVED ON 24 JUL 2003.						
Owner/Manager:	UNKNOWN						
Occurrence No.	363	Map Index:	70793	EO Index:	71705	Element Last Seen:	2007-10-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-10-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-02-25
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14971 / -121.40511				Accuracy:	80 meters	
UTM:	Zone-10 N4223627 E639745				Elevation (ft):	11	
PLSS:	T04N, R05E, Sec. 35 (M)				Acres:	0.0	
Location:	JUNCTION OF WEST MAIN CANAL AND UNNAMED IRRIGATION DITCH, NW OF THE INTERSECTION OF I-5 AND TURNER ROAD.						
Detailed Location:							
Ecological:	PERENNIAL DIRT-LINED SLOUGH WITH VEGETATION PRESENT ON BOTH SIDES. PORTIONS OF SLOUGH BOTTOM WERE OVERGROWN WITH VEGETATION.						
General:	2 ADULTS OBSERVED ON 3 OCT 2007.						
Owner/Manager:	PVT						



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Occurrence No.	448	Map Index:	32826	EO Index:	977	Element Last Seen:	2003-09-23
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-09-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-02-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39316 / -121.49886			Accuracy:	nonspecific area		
UTM:	Zone-10 N4250506 E631092			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 12 (M)			Acres:	110.1		
Location:	STONE LAKE PRESERVE, APPROXIMATELY 1.5 TO 2.5 MILES NORTHEAST OF HOOD.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF A SEMI-NATURAL LAKE BORDERED BY SOME BULRUSHES, GRAZED GRASSLAND, AND RIPARIAN VEGETATION.						
General:	COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN (PRIOR TO 1988). 10+ ADULTS OBSERVED (1 ADULT MALE CAPTURED) ON 21 SEP 2003; 10+ ADULTS OBSERVED (1 ADULT MALE CAPTURED) ON 23 SEP 2003.						
Owner/Manager:	DPR-STONE LAKE PARK						

Occurrence No.	449	Map Index:	11275	EO Index:	623	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-03-07
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43234 / -121.49818			Accuracy:	nonspecific area		
UTM:	Zone-10 N4254853 E631081			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 25 (M)			Acres:	61.0		
Location:	BEACH LAKE PRESERVE; APPROX. 1.5 MILES SOUTH OF FREEPORT.						
Detailed Location:							
Ecological:							
General:	COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.						
Owner/Manager:	SAC COUNTY, PVT						

Occurrence No.	450	Map Index:	32827	EO Index:	4662	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-01-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39069 / -121.45214			Accuracy:	specific area		
UTM:	Zone-10 N4250298 E635177			Elevation (ft):	20		
PLSS:	T06N, R05E, Sec. 08, NE (M)			Acres:	5.2		
Location:	NORTH OF FRANKLIN; DITCH EAST OF FRANKLIN BLVD X WESTERN PACIFIC RR.						
Detailed Location:							
Ecological:							
General:	COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	451	Map Index:	32828	EO Index:	978	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1996-02-14		
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27537 / -121.45360			Accuracy:	1 mile		
UTM:	Zone-10 N4237499 E635264			Elevation (ft):	5		
PLSS:	T05N, R05E, Sec. 20 (M)			Acres:	0.0		
Location:	LOST SLOUGH. NNW OF MOKELUMNE CITY; 0.5 MILE WEST OF DESMOND RD X WESTERN PACIFIC RR.						
Detailed Location:							
Ecological:							
General:	COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.						
Owner/Manager:	UNKNOWN						

Occurrence No.	514	Map Index:	43290	EO Index:	43290	Element Last Seen:	2000-04-12
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2000-04-12		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2000-07-25		
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23855 / -121.48695			Accuracy:	80 meters		
UTM:	Zone-10 N4233365 E632413			Elevation (ft):	3		
PLSS:	T05N, R05E, Sec. 31 (M)			Acres:	0.0		
Location:	EAST SIDE OF MOKELUMNE RIVER, 0.9 MILE NORTH OF THE WALNUT GROVE ROAD BRIDGE, 3.5 MILES WEST OF THORNTON.						
Detailed Location:	SITE IS LOCATED ON THE WEST SIDE OF NEW HOPE TRACT, JUST WEST OF KMUV RADIO TOWER.						
Ecological:							
General:	1 INDIVIDUAL OBSERVED ON 11-12 APR 2000.						
Owner/Manager:	UNKNOWN						

Occurrence No.	517	Map Index:	43294	EO Index:	43294	Element Last Seen:	1999-07-05
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1999-07-05		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2000-07-25		
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.15188 / -121.53885			Accuracy:	specific area		
UTM:	Zone-10 N4223675 E628023			Elevation (ft):	1		
PLSS:	T04N, R04E, Sec. 34 (M)			Acres:	7.5		
Location:	WEST SIDE OF THE NORTH MOKELUMNE RIVER, 3.5 MILES EAST OF ISLETON.						
Detailed Location:							
Ecological:							
General:	2 INDIVIDUALS OBSERVED ON 5 JUL 1999.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	518	Map Index:	43300	EO Index:	43300	Element Last Seen:	1999-07-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1999-07-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-07-25
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.16669 / -121.58228				Accuracy:	80 meters	
UTM:	Zone-10 N4225259 E624192				Elevation (ft):		
PLSS:	T04N, R04E, Sec. 30 (M)				Acres:	0.0	
Location:	EAST SIDE OF GEORGIANA SLOUGH, 1 MILE EAST OF ISLETON.						
Detailed Location:							
Ecological:							
General:	1 INDIVIDUAL OBSERVED ON 5 JUL 1999.						
Owner/Manager:	UNKNOWN						
Occurrence No.	633	Map Index:	60252	EO Index:	60288	Element Last Seen:	2004-XX-XX
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2004-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-02-28
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44693 / -121.45081				Accuracy:	2/5 mile	
UTM:	Zone-10 N4256541 E635188				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 20, NE (M)				Acres:	0.0	
Location:	SACRAMENTO BUFFERLANDS, ENCOMPASSING LOST LAKE, LAGUNA CREEK, AND FISH HEAD LAKE, SOUTH OF SACRAMENTO.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF MOSTLY MAN-MADE WATER BODIES WITH VARYING HABITAT QUALITY. VEGETATED BY A COMBINATION OF AQUATIC, EMERGENT, AND RIPARIAN VEGETATION; SURROUNDED BY GRASSLANDS.						
General:	6 MALES AND 4 FEMALES WERE CAPTURED THROUGHOUT THE 2004 SEASON; ALL WERE VERY OLD ADULTS AND INCLUDED ONE GRAVID FEMALE.						
Owner/Manager:	SRCSD-BUFFERLANDS						



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Occurrence No.	1331	Map Index:	A3304	EO Index:	104936	Element Last Seen:	2016-07-28
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2016-07-28	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2017-01-09	

Quad Summary: Thornton (3812124)

County Summary: San Joaquin

Lat/Long:	38.1442 / -121.4925	Accuracy:	1/5 mile
UTM:	Zone-10 N4222888 E632099	Elevation (ft):	0
PLSS:	T04N, R04E, Sec. 36, S (M)	Acres:	70.0

Location: SYCAMORE SLOUGH, ABOUT 0.6 MILES E OF ITS CONFLUENCE WITH THE MOKELUMNE RIVER & 2.1 MILES NNE OF TERMINOUS.

Detailed Location: MAPPED GENERALLY TO PROVIDED COORDINATES, WHICH WERE BASED ON NOTES, PHOTOS AND GOOGLE EARTH.

Ecological: THICK MATS OF AQUATIC VEGETATION AROUND ISLANDS IN SYCAMORE SLOUGH. INDIVIDUALS WERE DISCOVERED UNDER MAT OF WATER HYACINTH DURING VEGETATION REMOVAL. CHANNEL USED FOR RECREATIONAL BOATING, SURROUNDED BY AGRICULTURE.

General: 4 ADULTS OR SUB-ADULTS CAUGHT AND RELEASED ON 26 JUL AND 1 ON 28 JUL 2016.

Owner/Manager: UNKNOWN

Occurrence No.	1332	Map Index:	A3307	EO Index:	104938	Element Last Seen:	2016-08-16
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2016-08-16	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2017-01-09	

Quad Summary: Thornton (3812124)

County Summary: San Joaquin

Lat/Long:	38.14113 / -121.44867	Accuracy:	specific area
UTM:	Zone-10 N4222610 E635945	Elevation (ft):	0
PLSS:	T03N, R05E, Sec. 5, NE (M)	Acres:	16.0

Location: SYCAMORE SLOUGH, ABOUT 1.8 MILES NNE OF HWY 12 AT N PEATLAND RD AND 2.7 MI WSW OF I-5 AT W TURNER RD.

Detailed Location: MAPPED TO INCLUDE PROVIDED COORDINATES.

Ecological: LARGE MATS OF AQUATIC VEGETATION IN SYCAMORE SLOUGH. INDIVIDUALS WERE DISCOVERED UNDER MATS OF WATER HYACINTH AND PRIMROSE DURING VEGETATION REMOVAL. CHANNEL USED FOR RECREATIONAL BOATING, SURROUNDED BY AGRICULTURE.

General: 2 ADULTS OBSERVED ON 1 AUG, 1 ON 9 AUG, 1 ON 11 AUG, & 1 ON 16 AUG 2016.

Owner/Manager: UNKNOWN

Thamnophis gigas

Element Code: ARADB36150

giant gartersnake

Listing Status: Federal: Threatened

CNDDDB Element Ranks: Global: G2

State: Threatened

State: S2

Other: IUCN_VU-Vulnerable

Habitat: General: PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS AND IRRIGATION DITCHES.

Micro: THIS IS THE MOST AQUATIC OF THE GARTERSNAKES IN CALIFORNIA.



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Occurrence No.	13	Map Index:	11466	EO Index:	13783	Element Last Seen:	1982-07-26
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-01
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41559 / -121.39989				Accuracy:	3/5 mile	
UTM:	Zone-10 N4253140 E639692				Elevation (ft):	45	
PLSS:	T07N, R05E, Sec. 35 (M)				Acres:	0.0	
Location:	VICINITY OF ELK GROVE CREEK, JUST NW OF ELK GROVE AND HWY 99 INTERSECTION, ABOUT 1.2 MILES WNW OF ELK GROVE POST OFFICE.						
Detailed Location:	MAPPED GENERALLY TO PROVIDED LOCATION DESCRIPTIONS; 1929: TEN MILES SOUTH OF SACRAMENTO. 1976: 0.1 MI N ELK GROVE BLVD, W OF HWY 99. 1982: ELK GROVE CR, 0.4 MI W US 99, 0.5 MI N ELK GROVE BLVD.						
Ecological:	THE MARSH AT THIS LOCATION WAS FILLED AND LEVELED FOR INDUSTRIAL PARK DEVELOPMENT AS OF MAY 1984.						
General:	1 COLLECTED IN MAY 1929 BY W. WILSON (CAS# 178600). AT LEAST 1 DETECTED ON 1 JUL 1976; G. HANSEN FIELD NOTES #268. 2 JUVENILES OBSERVED BASKING ON 26 JUL 1982. NO SNAKES OBSERVED DURING 1986-87 STUDY BY G. HANSEN; LEVEL OF EFFORT UNKNOWN.						
Owner/Manager:	PVT						

Occurrence No.	14	Map Index:	11413	EO Index:	27599	Element Last Seen:	1976-08-03
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-04
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43691 / -121.42307				Accuracy:	1/5 mile	
UTM:	Zone-10 N4255470 E637628				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 27, NW (M)				Acres:	0.0	
Location:	LAGUNA CREEK, JUST SOUTH OF SHELTON RD, ABOUT 0.3 MI W OF BRUCEVILLE RD, ELK GROVE.						
Detailed Location:	MAPPED ACCORDING TO PROVIDED LOCATION DESCRIPTION OF "SHELTON RD AT CREEK CROSSING, 0.3 MI W OF BRUCEVILLE RD" AND "200 FT S SHELTON RD AT LAGUNA CREEK." 1999-2014 AERIAL PHOTOS SHOW HEAVY DEVELOPMENT SURROUNDING LAGUNA CREEK.						
Ecological:	1982 DESCRIPTION: MARSH AREA SURROUNDED BY CULTIVATED FIELDS & HEAVILY GRAZED GRASSLANDS. GRAZED AREAS CHARACTERIZED BY COMPACTED SOIL, FEW RODENT BURROWS, & SPARSE VEGETATION, THEREBY PROVIDING LITTLE COVER FOR SNAKES DURING FLOODS.						
General:	AT LEAST 1 SNAKE DETECTED ON 3 AUG 1976 BY G. HANSEN (FIELD NOTES #301). NO SNAKES DETECTED DURING JUL-AUG 1982 & 1986-87 STUDY BY G. HANSEN; LEVEL OF EFFORT UNKNOWN.						
Owner/Manager:	PVT						



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Occurrence No.	15	Map Index:	94616	EO Index:	624	Element Last Seen:	1992-07-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1992-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-04
Quad Summary:	Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.42806 / -121.49442			Accuracy:	nonspecific area		
UTM:	Zone-10 N4254384 E631417			Elevation (ft):	10		
PLSS:	T07N, R04E, Sec. 25 (M)			Acres:	705.0		
Location:	BEACH LAKE/STONE LAKE PRESERVE, JUST W OF I-5 AND LAGUNA BLVD INTERSECTION, APPROXIMATELY 2.4 MILES S OF FREEPORT.						
Detailed Location:	MAPPED TO PROVIDED MAP AND LOCATION DESCRIPTIONS OF "SNODGRASS SLOUGH 20' W. ELLIOT RD BEACH L. PRSV" (1974), "BEACH LAKE PRESERVE, 1 MI S. FREEPORT" (1976), & "EASTERN FACE OF THE LEVEE BETWEEN MORRISON CREEK AND THE LAKE" (1992).						
Ecological:	SHORE VEGETATION DOMINATED BY SCIRPUS ACUTA. LEVEE SERVES AS ACCESS TO AGRICULTURAL FIELD (PROPOSED CALTRANS MITIGATION BANK) TO EAST. LIGHT FISHING/RECREATIONAL USE FROM BLP MEMBERS (BEACH LAKE PROPERTIES).						
General:	SNAKES DETECTED ON 26 JUN & 3 JUL 1974 (A. SARTAIN FIELD NOTES #42). UNKNOWN NUMBER DETECTED IN 1976 BY G. HANSEN. 1 ADULT OBSERVED EATING A BULLFROG ON 19 JUL 1992.						
Owner/Manager:	SAC COUNTY, PVT						

Occurrence No.	52	Map Index:	11349	EO Index:	27579	Element Last Seen:	1976-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-02
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36740 / -121.45523			Accuracy:	1/5 mile		
UTM:	Zone-10 N4247709 E634951			Elevation (ft):	8		
PLSS:	T06N, R05E, Sec. 17, SW (M)			Acres:	0.0		
Location:	VICINITY OF FRANKLING BLVD, ABOUT 0.5 MI S OF INTERSECTION WITH HOOD-FRANKLING RD, 3.5 MI E OF HOOD PO, SW OF ELK GROVE.						
Detailed Location:	MAPPED GENERALLY TO PROVIDED LOCATION DESCRIPTION OF "FRANKLIN BLVD. ~0.5 MI S. OF HOOD-FRANKLIN RD."						
Ecological:							
General:	UNKNOWN NUMBER DETECTED ON 7 JUL 1976 BY G. HANSEN (FIELD NOTES # 271). NONE DETECTED DURING 1986-1987 SURVEYS CONDUCTED BY G. HANSEN; LEVEL OF EFFORT UNKNOWN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	79	Map Index:	10758	EO Index:	27547	Element Last Seen:	1987-XX-XX
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2005-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-12
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.35809 / -121.73889				Accuracy:	2/5 mile	
UTM:	Zone-10 N4246300 E610183				Elevation (ft):	15	
PLSS:	T06N, R02E, Sec. 22, NE (M)				Acres:	0.0	
Location:	CANAL CROSSING SWAN RD, ABOUT 1.5 MILES W OF LIBERTY ISLAND RD, 7.7 MILES SE OF DIXON, YOLO BYPASS.						
Detailed Location:	MAPPED TO PROVIDED LOCATION DESCRIPTION OF "CANAL CROSSING SWAN RD," "2.5 MI W OF SOLANO/YOLO" COUNTY LINE, & 1.3 MI W LIBERTY ISLAND RD AND TRS OF T 6N, R 2E, NW 1/4 OF NE 1/4 SEC 22. SURROUNDED BY LIVESTOCK PASTURES.						
Ecological:	20 FT WIDE CANAL CONTAINED WITHIN LEVEES; CATTAIL/TULE MARGINS, SOME YELLOW WATERWEED IN CHANNEL, ANNUAL GRASSES AND THISTLES ON BANKS.						
General:	ANECDOTALLY DETECTED PRIOR TO 1986. ADULT OBSERVED ON 8 AUG 1986. OBSERVED IN 1987. USGS SURVEYED AREA NEAR LIBERTY FARMS IN 2004 & 2005 AND FOUND NO SNAKES. WYLIE & MARTIN (2005) SUSPECTED THAT SPECIES MAY NO LONGER OCCUR IN SOLANO COUNTY.						
Owner/Manager:	UNKNOWN						
Occurrence No.	82	Map Index:	10820	EO Index:	13284	Element Last Seen:	1994-XX-XX
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2005-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-08-21
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.33934 / -121.71301				Accuracy:	1/5 mile	
UTM:	Zone-10 N4244250 E612473				Elevation (ft):	10	
PLSS:	T06N, R02E, Sec. 26, NE (M)				Acres:	0.0	
Location:	LIBERTY ISLAND ROAD, 1.3 MILES SOUTH OF THE SWAN ROAD INTERSECTION, 9 MILES SE OF DIXON, YOLO BYPASS.						
Detailed Location:	MAPPED TO PROVIDED LOCATION DESCRIPTION OF "LIBERTY ISLAND RD, 1.3 MILES S SWAN RD, 9 MILES SE DIXON." PROVIDED TRS WAS T 6N, R 3E, SE 1/4 OF NE 1/4 SEC 26.						
Ecological:	HABITAT CONSISTED OF AN AGRICULTURAL CANAL WITH TULE AND CATTAIL MARGINS. VEGETATED TOE DRAINS PARALLELING THE CANAL LEVEES. SITE IS FAIR ACCORDING TO HANSEN (1987).						
General:	1 INDIVIDUAL OBSERVED ON 21 SEP 1987. UNKNOWN NUMBER OBSERVED IN 1994. USGS SURVEYED AREA NEAR LIBERTY FARMS IN 2004 AND 2005 AND FOUND NO SNAKES. WYLIE AND MARTIN (2005) SUSPECTED THAT SPECIES MAY NO LONGER OCCUR IN SOLANO COUNTY.						
Owner/Manager:	PVT						



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Occurrence No.	84	Map Index:	11449	EO Index:	27544	Element Last Seen:	1982-08-03
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43119 / -121.40279				Accuracy:	1/5 mile	
UTM:	Zone-10 N4254866 E639409				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 26, NW (M)				Acres:	0.0	
Location:	LAGUNA CREEK, JUST W OF HWY 99 OVERPASS, ABOUT 0.8 MI SE OF JCT OF BRUCEVILLE RD & SHELDON RD, ELK GROVE.						
Detailed Location:	MAPPED TO PROVIDED LOCATION OF "0.2 MILES W US 99, 0.5 MILES S SHELDON RD" (1982). 1976 DETECTION LOCATION GIVEN AS "LAGUNA CRK, W OF HWY 99 AT ARNO RD OVERCROSSING." ARNO RD RUNS ABOUT 8 MI TO THE SE; ATTRIBUTED TO LAGUNA CK W OF HWY 99.						
Ecological:	1982: SNAKE FOUND SWIMMING AMONG CATTAILS & TULE; AREA ALSO KNOWN AS "CONFLUENCE MARSH" (JCT OF LAGUNA CR & ELK GROVE CR). POTENTIAL PREY SPECIES INCLUDE CARP, BULLHEAD, MOSQUITOFISH, & BULLFROG.						
General:	UNKNOWN NUMBER OF SNAKES DETECTED ON 1 JUL 1976 BY G. HANSEN (FIELD #270). 1 ADULT OBSERVED SWIMMING ON 3 AUG 1982. NONE OBSERVED DURING 1986-87 STUDY BY G. HANSEN DUE TO HEAVY FLOOD EVENT.						
Owner/Manager:	PVT						
Occurrence No.	132	Map Index:	32428	EO Index:	2292	Element Last Seen:	19XX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	19XX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-08-10
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32642 / -121.52032				Accuracy:	1/5 mile	
UTM:	Zone-10 N4243069 E629337				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 34, SE (M)				Acres:	0.0	
Location:	SNODGRASS SLOUGH; 0.6 KM NORTH OF THE CROSSING OF SNODGRASS SLOUGH AND LAMBERT ROAD.						
Detailed Location:							
Ecological:							
General:	SNAKES OBSERVED PRIOR TO BUT NOT DURING A 1986-87 STUDY BY G. HANSEN.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	133	Map Index:	32429	EO Index:	2291	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		XXXX-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1996-01-18	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.36134 / -121.48735	Accuracy:	3/5 mile
UTM:	Zone-10 N4246990 E632155	Elevation (ft):	10
PLSS:	T06N, R04E, Sec. 24, NE (M)	Acres:	0.0

Location: STONE LAKE; SOUTHWEST OF THE INTERSECTION OF HOOD FRANKLIN ROAD & I-5.

Detailed Location:

Ecological:

General: SNAKE OBSERVED PRIOR TO, BUT NOT DURING A 1986-87 STUDY BY G. HANSEN.

Owner/Manager: UNKNOWN

Occurrence No.	147	Map Index:	37128	EO Index:	32125	Element Last Seen:	1965-XX-XX
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1965-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1997-10-08	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.43521 / -121.48503	Accuracy:	1/10 mile
UTM:	Zone-10 N4255191 E632223	Elevation (ft):	7
PLSS:	T07N, R04E, Sec. 25 (M)	Acres:	0.0

Location: SOUTH OF SOUTH BEACH LAKE AND WEST OF I-5, VICINITY OF LOWER MORRISON CREEK, SOUTH OF SACRAMENTO.

Detailed Location: SNAKES WERE FOUND IN OLD "PIT" BLINDS AT A SMALL DUCK CLUB.

Ecological: AT THE TIME OF THE ORIGINAL OBSERVATIONS (1955 AND 1965), THIS AREA CONSISTED OF FARMLAND (WHEAT, CORN) ADJACENT TO MORRISON CREEK RIPARIAN/FLOODPLAIN. SITE IS NOW MANAGED AS SANITATION DISTRICT BUFFER LANDS (MANAGED MARSH).

General: 1 GGS OBSERVED IN 1955; 2 OBSERVED IN 1965. GGS IS PRESUMED TO BE EXTANT AT THIS SITE DUE TO THE PERSISTENCE OF SUITABLE WETLANDS AT THIS SITE AND OBSERVATIONS OF GGS FROM NEARBY UPSTREAM AND DOWNSTREAM LOCATIONS.

Owner/Manager: SRCSD-BUFFERLANDS



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Occurrence No.	198	Map Index:	61361	EO Index:	61397	Element Last Seen:	2005-05-01
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-05-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-03-03
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45477 / -121.46375			Accuracy:	80 meters		
UTM:	Zone-10 N4257392 E634044			Elevation (ft):	10		
PLSS:	T07N, R05E, Sec. 17 (M)			Acres:	0.0		
Location:	LAGUNA CREEK, ON THE BUFFERLANDS AREA, SOUTH OF SACRAMENTO.						
Detailed Location:	SNAKE WAS BASKING ON A SMALL ISLAND IN THE CREEK.						
Ecological:	HABITAT CONSISTS OF A RIPARIAN AREA ALONG LAGUNA CREEK, DOMINATED BY RUMEX CRISPUS AND TYPHA LATIFOLIA, WITH ASSOCIATES WHICH INCLUDE SALIX SPP AND POPULUS FREMONTII.						
General:	1 JUVENILE (~1.5' IN LENGTH) OBSERVED ON 1 MAY 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	247	Map Index:	64680	EO Index:	64759	Element Last Seen:	1992-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1992-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-05-12
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.26075 / -121.50076			Accuracy:	3/5 mile		
UTM:	Zone-10 N4235810 E631165			Elevation (ft):	10		
PLSS:	T05N, R04E, Sec. 24 (M)			Acres:	0.0		
Location:	VICINITY OF SNODGRASS SLOUGH, 0.75 MI NNE OF LOCKE.						
Detailed Location:							
Ecological:							
General:	UNKNOWN NUMBER OF SNAKES OBSERVED DURING 1992.						
Owner/Manager:	UNKNOWN						
Occurrence No.	250	Map Index:	73292	EO Index:	74250	Element Last Seen:	2008-06-20
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2008-06-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-12-31
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.40322 / -121.64831			Accuracy:	80 meters		
UTM:	Zone-10 N4251420 E618024			Elevation (ft):	10		
PLSS:	T07N, R03E, Sec. 33, SW (M)			Acres:	0.0		
Location:	POPE RANCH MITIGATION/CONSERVATION BANKS IN THE YOLO BYPASS.						
Detailed Location:							
Ecological:	MIXTURE OF OPEN WATER AND CHANNELS, PERENNIAL AND SEASONAL MARSH AND UPLAND HABITATS.						
General:	1 ADULT CAPTURED IN A MESH FUNNEL TRAP ON 20 JUN 2008. SNAKE WAS PIT TAGGED & RELEASED.						
Owner/Manager:	PVT-WILDLANDS INC						



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Occurrence No.	308	Map Index:	92493	EO Index:	93637	Element Last Seen:	2012-09-08
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	2012-09-08		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2014-05-27		
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.38858 / -121.63002	Accuracy:	specific area				
UTM:	Zone-10 N4249819 E619645	Elevation (ft):	5				
PLSS:	T06N, R03E, Sec. 03, SW (M)	Acres:	13.0				
Location:	E END OF COUNTY RD 155, JUST W OF SHIP CHANNEL, ~1.5 MI WSW OF CENTRAL AVE & ALAMEDA AVE INTERSECTION, W OF CLARKSBURG.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. LAND MANAGED AS WETLANDS AND A DUCK CLUB. WETLANDS LOCATED TO THE W OF SACRAMENTO DEEP WATER SHIP CHANNEL. LANDOWNER DISKED AREA IN PREPARATION OF HUNTING SEASON. NEAR YOLO BYPASS TOE DRAIN.						
Ecological:	SEASONAL WETLAND MANAGED FOR WATERFOWL, SILT/MUD SUBSTRATE. TERRESTRIAL VEGETATION CONSISTED OF VARIOUS GRASSES AND RUDERALS. AQUATIC VEGETATION CONSISTED OF CATTAILS, TULE, AND OTHE EMERGENT MACROPHYTES. RICE FIELDS LOCATED TO THE N.						
General:	1 ADULT RETRIEVED FROM UNDERGROUND DUCK BLIND ON 11 AUG 2011; SNAKE WEIGHED, MEASURED, PIT TAGGED, MARKED, PHOTOGRAPHED AND RELEASED. 1 DISCOVERED IN DUCK BLIND ON 8 SEP 2012.						
Owner/Manager:	PVT						
Occurrence No.	309	Map Index:	92494	EO Index:	93638	Element Last Seen:	2012-03-21
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:	2012-03-21		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2014-12-17		
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.40153 / -121.63855	Accuracy:	80 meters				
UTM:	Zone-10 N4251244 E618879	Elevation (ft):	10				
PLSS:	T07N, R03E, Sec. 33, SE (M)	Acres:	0.0				
Location:	ABOUT 1 MILE N OF COUNTY RD 155 & COUNTY RD 107 INTERSECTION, JUST W OF DEEP WATER CHANNEL, BETWEEN DIXON & CLARKSBURG.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. COORDINATES DERIVED FROM GOOGLEEARTH.						
Ecological:	MANAGED WETLAND AND AGRICULTURE.						
General:	1 ADULT GIANT GARTER SNAKE WAS INCIDENTALLY DISCOVERED ALONG DIRT ROADWAY ON 21 MAR 2012; SNAKE HAD BEEN STRUCK BY AN UNKNOWN VEHICLE AND WAS STILL ALIVE AND WARM WHEN FIRST DISCOVERED, HOWEVER, SNAKE DIED SHORTLY THEREAFTER.						
Owner/Manager:	PVT						



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Occurrence No.	310	Map Index:	92495	EO Index:	93639	Element Last Seen:	2012-03-19
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2012-03-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.41388 / -121.63968				Accuracy:	specific area	
UTM:	Zone-10 N4252613 E618760				Elevation (ft):	10	
PLSS:	T07N, R03E, Sec. 33, NE (M)				Acres:	16.0	
Location:	ALONG DIRT ROAD ABOUT 1.9 MILES E OF COUNTY RD 104 AND COUNTY RD 152 INTERSECTION, 6.2 MILES W OF CLARKSBURG.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES. 2009 DETECTION LOCATION DESCRIBED AS "GRAVEL ROAD APPROXIMATELY 4.84 KM E OF COUNTY RD 104." ADDITIONAL LOCATION INFORMATION INCLUDED T 7N, R 33E, SEC 33 NE.						
Ecological:	DIRT ROAD SURROUNDED BY CULTIVATED EMERGENT RICE FIELDS WHICH WERE BORDERED BY MANAGED WETLAND HABITAT UTILIZED PRIMARILY FOR WATERFOWL.						
General:	1 GIANT GARTER SNAKE OBSERVED ALONG DIRT ROAD ON 1 JUL 2009; SNAKE HAD BEEN STRUCK BY VEHICLE BUT WAS NOT MORTALLY WOUNDED, SNAKE PIT TAGGED AND RELEASED INTO ADJACENT IRRIGATION CANAL. 1 SNAKE OBSERVED BASKING ALONG ROADWAY ON 19 MAR 2012.						
Owner/Manager:	PVT						
Occurrence No.	350	Map Index:	94528	EO Index:	95644	Element Last Seen:	1976-07-07
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1976-07-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-11-24
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.25589 / -121.44069				Accuracy:	2/5 mile	
UTM:	Zone-10 N4235357 E636429				Elevation (ft):	30	
PLSS:	T05N, R05E, Sec. 28 (M)				Acres:	0.0	
Location:	VICINITY OF THORTON RD AND MOKELUMNE RIVER INTERSECTION, ABOUT 2.4 MILES NNW OF THORTON POST OFFICE, JUST E OF I-5.						
Detailed Location:	MAPPED ACCORDING TO PROVIDED LOCATION DESCRIPTION OF "THORNTON RD, N. END OF BENSON FERRY BRIDGE." USED HISTORICAL USGS MAPS (1894 & 1941) TO DETERMINE LIKELY LOCATION OF "BENSON BRIDGE" AND "BENSON."						
Ecological:							
General:	AT LEAST 1 COLLECTED ON 7 JUL 1976; PART OF G. HANSEN FIELD COLLECTION #275.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	424	Map Index:	A6905	EO Index:	108694	Element Last Seen:	2017-10-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2017-10-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-10-20
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.291 / -121.6936				Accuracy:	80 meters	
UTM:	Zone-10 N4238910 E614246				Elevation (ft):	1	
PLSS:	T05N, R03E, Sec. 7, SW (M)				Acres:	5.0	
Location:	W BANK OF SHAG SLOUGH, ABOUT 3.4 MI W OF HWY 84 AT RYER RD, LIBERTY ISLAND.						
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES/KMZ FILE. ALONG SHAG SLOUGH.						
Ecological:							
General:	ONE FOUND AS ROADKILL ON 19 OCT 2017. THE SNAKE WAS IDENTIFIED BASED ON COLORING, APPEARANCE, & LABIAL SCALE COUNT BY THE BIOLOGICAL MONITOR WITH GGS HANDLING PERMIT. APPROXIMATELY 30 IN & WAS COLLECTED, BAGGED, & FROZEN.						
Owner/Manager:	UNKNOWN						

Northern Hardpan Vernal Pool			Element Code: CTT44110CA	
Northern Hardpan Vernal Pool				
Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global: G3
	State:	None		State: S3.1
	Other:			
Habitat:	General:	<input type="checkbox"/>		
	Micro:	<input type="checkbox"/>		

Occurrence No.	28	Map Index:	11356	EO Index:	27516	Element Last Seen:	1980-05-13
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1980-05-13	Record Last Updated:	1998-07-15
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44129 / -121.45412				Accuracy:	1/5 mile	
UTM:	Zone-10 N4255911 E634910				Elevation (ft):	18	
PLSS:	T07N, R05E, Sec. 20, S (M)				Acres:	0.0	
Location:	NORTH OF SIMS ROAD, WEST OF FRANKLIN ROAD. (SACRAMENTO VICINITY).						
Detailed Location:	FRESHWATER MARSH AREAS PRESENT. APPROX 200 ACRES.						
Ecological:	LOW FLOOD PLAIN POOLS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.						
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	34	Map Index:	11453	EO Index:	27458	Element Last Seen:	1983-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1983-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1998-07-15		

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.43323 / -121.40355	Accuracy:	1/5 mile
UTM:	Zone-10 N4255091 E639339	Elevation (ft):	25
PLSS:	T07N, R05E, Sec. 26, W (M)	Acres:	0.0

Location: SOUTH OF SHELDON ROAD AND WEST OF HWY 99. (SACRAMENTO VICINITY).

Detailed Location: APPROX 200 ACRES.

Ecological: LOW FLOODPLAIN POOLS W/ FRESHWATER MARSH AREAS. ON SAN JOAQUIN ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Occurrence No.	52	Map Index:	11322	EO Index:	26980	Element Last Seen:	1980-05-13
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1980-05-13		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1998-07-15		

Quad Summary: Bruceville (3812134), Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.38073 / -121.46635	Accuracy:	1 mile
UTM:	Zone-10 N4249172 E633955	Elevation (ft):	15
PLSS:	T06N, R05E, Sec. 07, SE (M)	Acres:	0.0

Location: 10 MILES SOUTH OF SACRAMENTO. FRANKLIN BLVD, NW OF FRANKLIN AREA INCLUDES 6 1/2 SECTIONS.

Detailed Location:

Ecological: LARGE, SHALLOW, FLOODPLAIN VERNAL POOLS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN



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Occurrence No.	93	Map Index:	11328	EO Index:	26716	Element Last Seen:	1983-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1983-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1998-07-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41574 / -121.46468				Accuracy:	1 mile	
UTM:	Zone-10 N4253060 E634035				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 31 (M)				Acres:	0.0	
Location:	ELLIOT RANCH ROAD, WEST OF FRANKLIN BLVD.						
Detailed Location:	SPARSELY DISTRIBUTED.						
Ecological:	ON SAN JOAQUIN-ALAMO ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.						
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.						
Owner/Manager:	UNKNOWN						

Occurrence No.	94	Map Index:	11340	EO Index:	26865	Element Last Seen:	1983-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1983-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1998-07-15
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.36177 / -121.45896				Accuracy:	1 mile	
UTM:	Zone-10 N4247079 E634635				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 20 (M)				Acres:	0.0	
Location:	WEST OF FRANKLIN BLVD ABOUT 1.3 MILES SOUTH OF FRANKLIN.						
Detailed Location:	SPARSE DISTRIBUTION.						
Ecological:	ON SAN JOAQUIN-ALAMO ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.						
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.						
Owner/Manager:	UNKNOWN						

Occurrence No.	97	Map Index:	11412	EO Index:	26718	Element Last Seen:	1983-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1983-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1998-07-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43962 / -121.42411				Accuracy:	1 mile	
UTM:	Zone-10 N4255769 E637532				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 22, SW (M)				Acres:	0.0	
Location:	JUST NORTH OF SHELDON ROAD, WEST OF BRUCEVILLE ROAD. SOUTH OF COSUMNES RIVER COLLEGE.						
Detailed Location:	SPARSE VERNAL POOLS AS SEEN IN 1983 AERIAL PHOTOS.						
Ecological:	ON SAN JOAQUIN ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.						
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.						
Owner/Manager:	UNKNOWN						



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Coastal and Valley Freshwater Marsh

Element Code: CTT52410CA

Coastal and Valley Freshwater Marsh

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G3

State: None

State: S2.1

Other:

Habitat: **General:** ☐

Micro: ☐

Occurrence No.	42	Map Index:	11245	EO Index:	16055	Element Last Seen:	1975-09-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1975-09-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-20	

Quad Summary: Thornton (3812124), Bruceville (3812134), Courtland (3812135)

County Summary: Sacramento

Lat/Long:	38.26049 / -121.50088	Accuracy:	specific area
UTM:	Zone-10 N4235780 E631155	Elevation (ft):	10
PLSS:	T05N, R04E, Sec. 24 (M)	Acres:	405.8

Location: DELTA MEADOWS: NE OF LOCKE.

Detailed Location:

Ecological: UNDISTURBED MARSH AND SLOUGHS; TYPHA LATIFOLIA, TWO SPP OF SCIRPUS, SAGITTARIA LATIFOLIA, POTENTILLA PALUSTRIS AND OTHERS.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: PVT



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Great Valley Mixed Riparian Forest

Element Code: CTT61420CA

Great Valley Mixed Riparian Forest

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2

State: None

State: S2.2

Other:

Habitat: **General:** ☐

Micro: ☐

Occurrence No. 31 **Map Index:** 11396 **EO Index:** 8890 **Element Last Seen:** 1985-07-16

Occ. Rank: Good **Presence:** Presumed Extant **Site Last Seen:** 1985-07-16

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 1998-07-21

Quad Summary: Bruceville (3812134)

County Summary: Sacramento, San Joaquin

Lat/Long: 38.26245 / -121.43089

Accuracy: nonspecific area

UTM: Zone-10 N4236099 E637275

Elevation (ft): 10

PLSS: T05N, R05E, Sec. 21 (M)

Acres: 559.1

Location: NORTH & EAST OF MOKELUMNE CITY AT THE CONFLUENCE OF THE COSUMNES & MOKELUMNE RIVERS.

Detailed Location: SPREAD OVER THE FLOODPLAIN AT THE RIVER CONFLUENCE.

Ecological: CONSPICUOUS HIGH-WATER CHANNELS & INTERVENING SAND & SILT BARS. QUERCUS LOBATA RESTRICTED TO HIGHER LEVELS; LOW SPOTS ARE COMPLETELY VEGETATED W/ POPULUS FREMONTII, SALIX GOODINGII W/ ISOLATED ALNUS RHOMBIFOLIA & A DENSE SUBCANOPY.

General: SUBCANOPY INCL SALIX SPP., CORNUS STOLONIFERA X CALIFORNICA, CEPHALANTHUS OCCIDENTALIS, VITIS CAL., & FRAXINUS LAT. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: PVT



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Great Valley Valley Oak Riparian Forest

Element Code: CTT61430CA

Great Valley Valley Oak Riparian Forest

Listing Status: Federal: None

CNDDDB Element Ranks: Global: G1

State: None

State: S1.1

Other:

Habitat: General: ☐

Micro: ☐

Occurrence No.	5	Map Index:	11448	EO Index:	15622	Element Last Seen:	1986-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1986-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Increasing	Record Last Updated:	1998-07-23		

Quad Summary: Thornton (3812124), Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.25585 / -121.40682	Accuracy:	specific area
UTM:	Zone-10 N4235403 E639393	Elevation (ft):	5
PLSS:	T05N, R05E, Sec. 26 (M)	Acres:	236.9

Location: VICINITY OF CONFLUENCE OF GRIZZLY & BEAR SLOUGHS & COSUMNES RIVER, APPROXIMATELY 6 MILES WEST OF GALT.

Detailed Location:

Ecological: DIVERSE FOREST OF VALLEY OAK, COTTONWOOD & ASH CLEARLY DOM BY OAKS. SHRUBS INCL CEPHALANTHUS OCCIDENTALIS, CORNUS STOLONIFERA X CALIFORNICA, SALIX LASIOLEPIS, S. GOODINGII. MANY SLOUGHS CUT FOREST; AREA FLOODED 2-5 MONTHS/YR.

General: EXCELLENT CONDITION, GOOD OAK REPRODUCTION. NOMINATED FOR NATIONAL NATURAL LANDMARK, 1986. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: TNC, PVT

Occurrence No.	12	Map Index:	11532	EO Index:	15618	Element Last Seen:	1986-XX-XX
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1986-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1998-07-23		

Quad Summary: Galt (3812133), Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.32416 / -121.36686	Accuracy:	specific area
UTM:	Zone-10 N4243044 E642756	Elevation (ft):	25
PLSS:	T06N, R06E, Sec. 31 (M)	Acres:	643.6

Location: "VALENSIN OAKS," COSUMNES RIVER EAST OF EAST END OF LAMBERT ROAD, U/S TO COSUMNES RIVER OVERFLOW.

Detailed Location:

Ecological: VALLEY OAKS W/SEVERAL LARGE SYCAMORES & A FEW LARGE COTTONWOODS, OAKS APPROACHING 50 FT W/AMPLE REPRODUCTION. SOME UNDERSTORY OF FRAXINUS LATIFOLIA INCL SOME INDIVIDUALS TO 50 FT TALL & 30 INCHES IN DIAM. AREA BEEN GRAZED, IS FAIRLY OPEN.

General: DESIGNATED NATIONAL NATURAL LANDMARK, 1976. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: PVT



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Valley Oak Woodland

Element Code: CTT71130CA

Valley Oak Woodland

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G3

State: None

State: S2.1

Other:

Habitat: **General:** ☐

Micro: ☐

Occurrence No.	102	Map Index:	21518	EO Index:	8540	Element Last Seen:	1980-12-31
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		1983-05-27	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-31	
Quad Summary:	Galt (3812133), Bruceville (3812134)						
County Summary:	Sacramento						

Lat/Long:	38.26862 / -121.37357	Accuracy:	nonspecific area
UTM:	Zone-10 N4236870 E642278	Elevation (ft):	10
PLSS:	T05N, R06E, Sec. 19 (M)	Acres:	368.5
Location:	NORTH AND EAST OF MOKELUMNE CITY AT THE CONFLUENCE OF THE COSUMNES AND MOKELUMNE RIVERS.		
Detailed Location:	SITE HAS VERY COMPLEX MOSAIC OF VEGETATION. THE VALLEY OAK WOODLANDS ARE FOUND ON THE DEEP ALLUVIAL SOILS NEXT TO RIVERS WHERE FLOODING IS OF SHORT DURATION. ON THE HIGHER ELEVATIONS, VALLEY OAK SAVANNA DOMINATES.		
Ecological:	DOMINATED BY HEALTHY, REPRODUCTIVE STAND OF QUERCUS LOBATA. ASSOCIATED TAXA INCLUDE ACER NEGUNDO, FRAXINUS LATIFOLIA, POPULUS FREMONTII AND SALIX GOODINGII.		
General:	ALSO THE SITE OF CEPHALANTHUS SCRUB AND GREAT VALLEY VALLEY OAK RIPARIAN FOREST. NEEDS ECOLOGICAL INVESTIGATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.		
Owner/Manager:	TNC		



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Branchinecta conservatio

Element Code: ICBRA03010

Conservancy fairy shrimp

Listing Status: **Federal:** Endangered

CNDDDB Element Ranks: **Global:** G2

State: None

State: S2

Other: IUCN_EN-Endangered

Habitat: **General:** ENDEMIC TO THE GRASSLANDS OF THE NORTHERN TWO-THIRDS OF THE CENTRAL VALLEY; FOUND IN LARGE, TURBID POOLS.

Micro: INHABIT ASTATIC POOLS LOCATED IN SWALES FORMED BY OLD, BRAIDED ALLUVIUM; FILLED BY WINTER/SPRING RAINS, LAST UNTIL JUNE.

Occurrence No. 19 **Map Index:** 54520 **EO Index:** 54520 **Element Last Seen:** 2008-03-14
Occ. Rank: Excellent **Presence:** Presumed Extant **Site Last Seen:** 2008-03-14
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2014-06-11

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.43662 / -121.66998 **Accuracy:** specific area
UTM: Zone-10 N4255098 E616078 **Elevation (ft):** 15
PLSS: T07N, R03E, Sec. 20, SW (M) **Acres:** 10.3

Location: YOLO BYPASS WILDLIFE AREA, 1.7 MI SE OF INTERSECTION OF HYDE RD (ROAD 104) AND HACKMAN RD (ROAD 38A), SW OF SACRAMENTO.

Detailed Location: POOL LOCATED NORTH OF BARN.

Ecological: A TURBID PLAYA POOL WITH DISTINCTIVE CUTBANKS, DOMIATED BY ELEOCHARIS AND ERYNGIUM ARISTULATUM. SURROUNDING AREA GRAZED BY CATTLE. LEPIDURUS PACKARDI AND CYZICUS CALIFORNICUS ALSO FOUND AT THIS SITE.

General: MANY ADULTS OBSERVED ON 7 APR 2003 AND 14 MAR 2008.

Owner/Manager: DFG-YOLO BYPASS WA

Branchinecta lynchi

Element Code: ICBRA03030

vernal pool fairy shrimp

Listing Status: **Federal:** Threatened

CNDDDB Element Ranks: **Global:** G3

State: None

State: S3

Other: IUCN_VU-Vulnerable

Habitat: **General:** ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MOUNTAINS, AND SOUTH COAST MOUNTAINS, IN ASTATIC RAIN-FILLED POOLS.

Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.



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Occurrence No.	138	Map Index:	34812	EO Index:	29267	Element Last Seen:	1997-01-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1997-01-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39538 / -121.46627				Accuracy:	specific area	
UTM:	Zone-10 N4250798 E633934				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 06 (M)				Acres:	570.1	
Location:	BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF BILBY ROAD, ELK GROVE.						
Detailed Location:	ELLIOTT RANCH & ELK GROVE BLVD EXTENSION/I-5 INTERCHANGE MITIGATION SITES. 1995: 23 WETLANDS SURVEYED. 1996: 74 WETLANDS SURVEYED. LINDERIELLA OCCIDENTALIS AND/OR MIDVALLEY SHRIMP (BRANCHINECTA SP) ALSO PRESENT. 1997: 52 WETLANDS SAMPLED.						
Ecological:	NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS IN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.						
General:	1995: 50+ ADULTS OBS IN 3 POOLS (VP101, VP221 & VPG2), 3 COLLECTED & DEPOSITED IN CAS CASIZ#103133,103130, & 103111). 1996: 50+ ADULTS OBS IN 27 POOLS. 1997: OBS IN 43 OF 52 SAMPLED WETLANDS. 1998: BRANCHINECTA SP OBS IN 11 POOLS.						
Owner/Manager:	PVT-GRUPE DEVELOPMENT CO						

Occurrence No.	161	Map Index:	33873	EO Index:	30426	Element Last Seen:	2013-01-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2013-01-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-05-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44580 / -121.45917				Accuracy:	nonspecific area	
UTM:	Zone-10 N4256403 E634460				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 20, W (M)				Acres:	33.0	
Location:	ALONG WESTERN PACIFIC RAILROAD TRACKS, FROM LAGUNA CREEK (UNION HOUSE CREEK) SOUTH TO SIMS RD, 2.25 MI ESE OF FREEPORT.						
Detailed Location:	MAPPED TO LAT/LONG GIVEN FOR 2012-13 DETECTIONS AND SPECIMEN LOCALITIES "SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, E OF PLANT, W OF [RR TRACKS]" (OR SIMILAR). 1999/2000 DETECTIONS IN SRWTP BUFFERLANDS PRESERVE, EXACT LOCATION UNKNOWN.						
Ecological:	1999/2000: NATURAL VERNAL POOLS ON 732 ACRE PRESERVE. 2012/2013: GRASSY-BOTTOMED DEPRESSIONS ON BOTH SIDES OF RAILROAD TRACKS, 2-20 INCHES DEEP; SOME POOLS INVADDED BY WEEDS. LEPIDURUS PACKARDI & LINDERIELLA OCCIDENTALIS CO-OCCURRED.						
General:	REPORTEDLY DETECTED PRIOR TO 1993. COLLECTED JAN 1995 (CASIZ #103316, 104239) & APR 1998 (#115430, 115431). DETECTED, 1999-2000. 600 FOUND IN 5 BASINS, DEC 2012-JAN 2013 (4 BASINS MAPPED HERE, SEE ALSO OCC#671); COLLECTED (CASIZ #192828).						
Owner/Manager:	SRCSD-BUFFERLANDS, PG&E, PVT						



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Occurrence No.	187	Map Index:	36815	EO Index:	31812	Element Last Seen:	1993-02-04
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1993-02-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41294 / -121.46223				Accuracy:	nonspecific area	
UTM:	Zone-10 N4252753 E634254				Elevation (ft):	10	
PLSS:	T07N, R05E, Sec. 32 (M)				Acres:	953.0	
Location:	UP TO 2 MILES EAST OF I-5, 4 MILES SOUTH OF SACRAMENTO.						
Detailed Location:	TRS GIVEN FOR 1991 COLLECTIONS WAS SOUTH HALF OF T7N R5E SEC 31, BUT DESCRIBED AS "2 MILES EAST OF INTERSTATE 5" WHICH WOULD BE SEC 32 OR 33. 1993 DETECTION LOCATION GIVEN AS T7N R5E SEC 32.						
Ecological:							
General:	AT LEAST 15 COLLECTED ON 13 MAR 1991 (DB #1019, 1021, 1022, 1024; USNM #1072653). FOUND IN 1 OF 4 POOLS IN SECTION 32, 4 FEB 1993 (SUGNET #57).						
Owner/Manager:	PVT						

Occurrence No.	312	Map Index:	46122	EO Index:	46122	Element Last Seen:	2001-03-11
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2001-03-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-12-30
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43553 / -121.38764				Accuracy:	80 meters	
UTM:	Zone-10 N4255371 E640723				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 25, NW (M)				Acres:	0.0	
Location:	NW ELK GROVE; ABOUT 0.75 MILE SE OF HIGHWAY 99 AT SHELDON RD, ALONG SHORTLINE LN.						
Detailed Location:	EAST SIDE OF ROAD, VERNAL POOL 10.						
Ecological:	VERNAL POOLS AND SEASONAL WETLANDS ON DISKED FIELDS. PLANT SPECIES INCLUDED ANNUAL GRASSES, WITH CARTER'S BUTTERCUP, WINGED WATER-STARWORT, SLENDER POPCORN FLOWER IN POOLS. DEVELOPMENT.						
General:	FEWER THAN 100 INDIVIDUALS OBSERVED ON 11 MAR 2001, 8 COLLECTED (CASIZ #158787).						
Owner/Manager:	PVT						



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Occurrence No.	328	Map Index:	48477	EO Index:	48477	Element Last Seen:	2002-02-06
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2002-04-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43560 / -121.68267				Accuracy:	specific area	
UTM:	Zone-10 N4254969 E614972				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 19 (M)				Acres:	40.9	
Location:	SAXON, 1.2 TO 1.9 MILES ALONG THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE FROM ROAD 106.						
Detailed Location:	SITE NUMBERS 51-04 AND 51-06, ADJACENT TO EAST SIDE OF RAILROAD GRADE.						
Ecological:	HABITAT CONSISTS OF 2 LARGE, SHALLOW, NATURAL VERNAL POOLS. WHEN FULL, THE POOLS OVERFLOW INTO A DRAINAGE DITCH ON SE SIDE OF RAILROAD GRADE. SURROUNDING AREA IS A CATTLE GRAZED GRASSLAND. Hyla REGILLA IN VICINITY.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 23 & 24 JAN 2002 AND 6 FEB 2002.						
Owner/Manager:	UNKNOWN, PVT						

Occurrence No.	332	Map Index:	48476	EO Index:	48476	Element Last Seen:	2002-03-05
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-03-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.39340 / -121.72014				Accuracy:	specific area	
UTM:	Zone-10 N4250240 E611767				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 02 (M)				Acres:	72.5	
Location:	0.1-1.2 MILES SW OF KING RD ALONG SE SIDE OF ABANDONED SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE, 7 MILES SE OF DIXON.						
Detailed Location:	SITES NUMBERS 47-06 AND 48-11.						
Ecological:	HABITAT CONSISTS OF 2 LONG, NARROW, SEASONALLY PONDED DITCHES IN A GRASSLAND ALONG GRADE. SURROUNDING AREA USED FOR CATTLE GRAZING. LINDERIELLA OCCIDENTALIS, Hyla REGILLA AND CYZICUS CALIFORNICUS PRESENT IN VICINITY.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 24 JAN; 6, 7 & 21 FEB, AND 5 MAR 2002.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	333	Map Index:	48478	EO Index:	48478	Element Last Seen:	2002-02-06
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-09-24
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.44536 / -121.67336				Accuracy:	specific area	
UTM:	Zone-10 N4256063 E615769				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, SW (M)				Acres:	20.9	
Location:	3 MILES NE OF YOLANO, APPROX 1 TO 1.2 MILES SW ALONG THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE FROM ROAD 38.						
Detailed Location:	SITE NUMBERS 52-10F, 52-10E, 52-10, 52-10B AND 52-10C; SE SIDE OF RAILROAD GRADE.						
Ecological:	5 POOLS IN A VERNAL POOL COMPLEX PRIMARILY AROUND DITCHES & EDGES OF BERMS; NATURAL TOPOGRAPHY MOSTLY ABSENT. SURROUNDING LAND USED FOR GRAZING. LEPIDURUS PACKARDI, B. MESOVALLENSIS & LINDERIELLA OCCIDENTALIS FOUND IN VICINITY.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 11 & 23 JAN 2002 AND 5 & 6 FEB 2002; 11 COLLECTED AND ACCESSIONED IN CAS (CASIZ #161123).						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	340	Map Index:	48493	EO Index:	48493	Element Last Seen:	2002-03-05
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-03-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Liberty Island (3812136), Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.37617 / -121.73554				Accuracy:	specific area	
UTM:	Zone-10 N4248310 E610448				Elevation (ft):	20	
PLSS:	T06N, R02E, Sec. 10, SE (M)				Acres:	26.6	
Location:	1.9 TO 2.4 MILES SW OF KING ROAD ALONG THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE, 7 MILES SE OF DIXON.						
Detailed Location:	SITE NUMBERS 45-05, 45-13, 46-04, 46-06 AND 46-07; BETWEEN DELHI ROAD AND ETZEL ROAD.						
Ecological:	HABITAT CONSISTS OF 5 SEASONALLY PONDED DEPRESSIONS (SOME ON ELEVATED GRADIENT, OTHERS IN BORROW PITS) ALONG RAILROAD GRADE. RAILROAD CORRIDOR HAS REVERTED TO A GRASSLAND. AREA SURROUNDING RAILROAD GRADE IS UNDER AGRICULTURAL PRODUCTION.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 14 & 23 JAN 2002; 7 FEB 2002, & 5 MAR 2002. LINDERIELLA OCCIDENTALIS IN VICINITY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	632	Map Index:	82002	EO Index:	82962	Element Last Seen:	2009-03-10
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-03-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-23
Quad Summary:	Bruceville (3812134), Courtland (3812135), Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.37476 / -121.49674				Accuracy:	specific area	
UTM:	Zone-10 N4248466 E631310				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 13, NW (M)				Acres:	71.0	
Location:	JUST N OF HOOD FRANKLIN RD, 1 MI W OF I-5, 1 MI E OF HOOD PO.						
Detailed Location:	BY STONE LAKES NATIONAL WILDLIFE REFUGE AND CATTLE GRAZING. POOL ID: 16, 22, 23, 27, 37, 56 & 65. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	VERNAL POOL GRASSLAND DOMINATED BY HORDEUM MARINUM SSP. GUSSONEANUM, LOLIUM MULTIFLORUM, PLAGIOBOTHRYIS STIPITATUS & LASTHENIA GLABERRIMA. HISTORICAL GRADING CAUSED POOLS TO BE POORLY DEFINED & SHALLOW. DEEPEST POOLS OCCUR BY BERMS & ROADS.						
General:	ABOUT 100 BREEDING ADULTS OBSERVED AMONG 7 POOLS; ASSOCIATED MUSEUM RECORDS INCLUDE: CAS-IZ #180491 -180495 ON 6 MAR, AND #18496 & 18497 ON 10 MAR 2009 COLLECTED BY E. PIMENTEL ET AL.						
Owner/Manager:	PVT, DWR						
Occurrence No.	656	Map Index:	93062	EO Index:	94214	Element Last Seen:	2010-02-25
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2010-02-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49435 / -121.68594				Accuracy:	80 meters	
UTM:	Zone-10 N4261484 E614594				Elevation (ft):	25	
PLSS:	T08N, R03E, Sec. 31 (M)				Acres:	0.0	
Location:	MCCLELLAN AFB DAVIS COMMUNICATIONS FACILITY, 0.5 MILE E OF INTERSECTION OF TREMONT RD AND ROAD 104, 4 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO LOCATION OF POOL #37 GIVEN IN 2010 REPORT. DETECTED IN 2 OF 13 POOLS SURVEYED IN 2010 (1 MAPPED HERE, SEE ALSO EO #657).						
Ecological:	POOLS HIGHLY DISTURBED FROM HISTORICAL MILITARY USE. LEPIDURUS PACKARDI AND LINDERIELLA OCCIDENTALIS ALSO FOUND IN AREA.						
General:	DETECTED DURING SURVEYS ON 14 AND 25 FEB 2010.						
Owner/Manager:	DOD, YOL COUNTY						



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Occurrence No.	657	Map Index:	93065	EO Index:	94217	Element Last Seen:	2010-02-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-02-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49233 / -121.67895				Accuracy:	80 meters	
UTM:	Zone-10 N4261269 E615206				Elevation (ft):	25	
PLSS:	T08N, R03E, Sec. 31, SE (M)				Acres:	0.0	
Location:	MCCLELLAN AFB DAVIS COMMUNICATIONS FACILITY, 0.3 MI NNW OF INTERSECTION OF ROAD 105 AND ROAD 36, 5 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO LOCATION OF POOL #124 GIVEN IN 2010 REPORT. DETECTED IN 2 OF 13 POOLS SURVEYED IN 2010 (1 MAPPED HERE, SEE ALSO EO #656).						
Ecological:	POOLS ARE HIGHLY DISTURBED FROM HISTORICAL MILITARY USE. LEPIDURUS PACKARDI AND LINDERIELLA OCCIDENTALIS ALSO FOUND IN AREA.						
General:	DETECTED DURING SURVEYS ON 14 AND 25 FEB 2010.						
Owner/Manager:	DOD, YOL COUNTY						
Occurrence No.	658	Map Index:	93068	EO Index:	94219	Element Last Seen:	2008-03-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45708 / -121.67208				Accuracy:	80 meters	
UTM:	Zone-10 N4257367 E615862				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	0.0	
Location:	TULE RANCH, YOLO BYPASS WILDLIFE AREA, 0.2 MILE SE OF INTERSECTION OF ROAD 38 AND ROAD 105, 8 MILES EAST OF DIXON.						
Detailed Location:	MAPPED TO LOCATION GIVEN IN 2008 REPORT.						
Ecological:	CLEAR-WATER POOL IN A PASTURE.						
General:	DETECTED DURING FIELD TRAINING EXERCISES ON 14 MAR 2008; NO SPECIMENS COLLECTED.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	659	Map Index:	54520	EO Index:	94220	Element Last Seen:	2008-03-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43662 / -121.66998				Accuracy:	specific area	
UTM:	Zone-10 N4255098 E616078				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20, SW (M)				Acres:	10.3	
Location:	TULE RANCH, YOLO BYPASS WILDLIFE AREA, 1.1 MILES SSE OF INTERSECTION OF ROAD 38A AND ROAD 105, 8 MILES EAST OF DIXON.						
Detailed Location:	MAPPED TO LOCATION GIVEN IN 2008 REPORT. "NORTH OF BARN."						
Ecological:	HIGHLY TURBID PLAYA POOL. B. CONSERVATIO, LEPIDURUS PACKARDI, AND LINDERIELLA OCCIDENTALIS ALSO FOUND HERE.						
General:	DETECTED DURING FIELD TRAINING EXERCISES ON 14 MAR 2008; NO SPECIMENS COLLECTED.						
Owner/Manager:	DFG-YOLO BYPASS WA						
Occurrence No.	660	Map Index:	93078	EO Index:	94228	Element Last Seen:	2011-01-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2011-01-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-09
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.35394 / -121.66455				Accuracy:	80 meters	
UTM:	Zone-10 N4245930 E616685				Elevation (ft):	5	
PLSS:	T06N, R03E, Sec. 20, NE (M)				Acres:	0.0	
Location:	YOLO BYPASS, 2.0 AIR MILES SE OF DELHI RD AT LEVEE RD (ROAD 104), 11 MILES SE OF DIXON.						
Detailed Location:	MAPPED TO COORDINATES PROVIDED ON FIELD SURVEY FORM.						
Ecological:	VERNAL POOL SURROUNDED BY NON-NATIVE ANNUAL GRASSES AND DISTICHLIS. POTENTIAL MAX DEPTH 11 INCHES. REGULARLY FLOODED BY YOLO BYPASS, HYDROLOGICAL DISTURBANCES FROM AGRICULTURE. SMALL POPULATION OF LINDERIELLA OCCIDENTALIS CO-OCCURRED.						
General:	FEWER THAN 20 OBSERVED THROUGH ENTIRE SAMPLING SEASON IN 2011.						
Owner/Manager:	WESTLANDS WATER DISTRICT						



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Occurrence No.	671	Map Index:	93331	EO Index:	94477	Element Last Seen:	2013-01-16
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2013-01-16	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-07-31	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.43454 / -121.45776	Accuracy:	80 meters
UTM:	Zone-10 N4255156 E634605	Elevation (ft):	20
PLSS:	T07N, R05E, Sec. 29, NW (M)	Acres:	0.0

Location: NW CORNER OF DWIGHT RD AND THE WESTERN PACIFIC RAILROAD TRACKS, 0.9 MILE NW OF LAGUNA BLVD AT FRANKLIN BLVD, ELK GROVE.

Detailed Location: UNDATED SPECIMEN LOCALITY GIVEN AS "RAILROAD SIDE DITCH... NW CORNER OF DWIGHT ROAD AND WESTERN PACIFIC RAILROAD." 1993 DETECTION LOCATION GIVEN AS T7N R5E SEC 29. MAPPED TO LAT/LONG GIVEN FOR 2012/2013 DETECTION.

Ecological: 1993: NATURAL VERNAL POOLS. 2012/2013: GRASSY-BOTTOMED DEPRESSIONS ON BOTH SIDES OF RAILROAD TRACKS, 2-20 INCHES DEEP; SOME POOLS INVADDED BY WEEDS. LEPIDURUS PACKARDI AND LINDERIELLA OCCIDENTALIS CO-OCCURRED.

General: FOUND IN 1 OF 1 POOL SURVEYED, 4 FEB 1993. 2 COLLECTED ON 29 MAR 1995 (CASIZ #103317). 600 DETECTED IN 5 BASINS, 28 DEC 2012 - 16 JAN 2013 (1 OF 5 MAPPED HERE, SEE ALSO OCCURRENCE #161).

Owner/Manager: SRCSD-BUFFERLANDS, PG&E, PVT

Occurrence No.	672	Map Index:	93281	EO Index:	94480	Element Last Seen:	1995-01-31
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1995-01-31	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-07-31	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.45089 / -121.48269	Accuracy:	2/5 mile
UTM:	Zone-10 N4256935 E632399	Elevation (ft):	0
PLSS:	T07N, R04E, Sec. 24 (M)	Acres:	0.0

Location: NORTH SIDE OF MORRISON CREEK, ABOUT 0.9 MILE NE OF THE I-5 CROSSING, 1.75 MILES SOUTH OF SACRAMENTO.

Detailed Location: MAPPED GENERALLY TO LOCALITY "INUNDATED WHEAT FIELD NORTH OF MORRISON CREEK LEVEE ROAD, 50 FEET EAST OF PUMPING STATION, 7/8 MILE EAST OF INTERSTATE 5."

Ecological: POOL DEPTH OF 0.07 METERS.

General: 1 COLLECTED ON 31 JAN 1995 (CASIZ #104243).

Owner/Manager: SRCSD-STONE LAKES NWP



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Occurrence No.	673	Map Index:	93335	EO Index:	94482	Element Last Seen:	1995-01-25
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1995-01-25	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-08-13	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.48953 / -121.46909 **Accuracy:** 1/10 mile

UTM: Zone-10 N4261242 E633514 **Elevation (ft):** 15

PLSS: T07N, R05E, Sec. 06, NE (M) **Acres:** 0.0

Location: ALONG THE WESTERN PACIFIC (=UNION PACIFIC) RAILROAD TRACKS, ABOUT 0.4 MILE SOUTH OF FLORIN RD INTERSECTION, SACRAMENTO.

Detailed Location: MAPPED TO SPECIMEN LOCALITY: "S OF FLORIN RD, W OF UNION PACIFIC RAILROAD, E OF POCKET SUBSTATION IN A SEASONALLY PONDED DEPRESSION."

Ecological: POOL WITH DEPTH OF 1-6 INCHES.

General: 6 COLLECTED ON 25 JAN [YEAR LIKELY 1995] (CAS #94832).

Owner/Manager: PVT-UNION PACIFIC RR

Occurrence No.	891	Map Index:	95340	EO Index:	96470	Element Last Seen:	1998-04-30
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1998-04-30	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-03-02	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.44351 / -121.46676 **Accuracy:** nonspecific area

UTM: Zone-10 N4256138 E633802 **Elevation (ft):** 10

PLSS: T07N, R05E, Sec. 19, NE (M) **Acres:** 27.0

Location: SACTO REGIONAL WASTEWATER TREATMENT PLANT, PARCEL BOUNDED BY LAGUNA STATION RD (E), S LANDFILL WAY (N), & SIMS RD (W).

Detailed Location: MAPPED TO BOUNDARY OF SURVEYED SITE. PROVIDED MAP GAVE LOCATIONS OF WETLAND FEATURES, BUT DID NOT INDICATE WHICH WERE OCCUPIED.

Ecological: ANNUAL GRASSLAND WITH VERNAL POOLS, SEASONAL WETLANDS & DRAINAGES. PSILOCARPHUS PRESENT. SITE PROPOSED FOR A BIOSOLIDS DEWATERING FACILITY IN 1998, BUT AERIAL PHOTOS INDICATE THIS PARCEL HAD NOT BEEN DEVELOPED AS OF 2014.

General: 10 CYSTS FOUND IN 2 OF 11 SITES EXAMINED IN APR 1998, COLLECTED AND DEPOSITED IN CAS (CASIZ #115430 & 115431).

Owner/Manager: SRCSD

Branchinecta mesoallensis

Element Code: ICBRA03150

midvalley fairy shrimp

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** G2

State: None

State: S2S3

Other:

Habitat: **General:** VERNAL POOLS IN THE CENTRAL VALLEY.

Micro: ☐



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Occurrence No.	18	Map Index:	46082	EO Index:	46082	Element Last Seen:	2007-03-08
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-03-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43050 / -121.38704				Accuracy:	specific area	
UTM:	Zone-10 N4254814 E640785				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 25, W (M)				Acres:	8.0	
Location:	NEAR WHITE PEACOCK COURT, NORTH OF LAGUNA CREEK, ELK GROVE.						
Detailed Location:	2 BASINS REPRESENTED. NORTH BASIN, "VERNAL POOL #5," WAS SITE OF 2001 DETECTION AND IS MAPPED TO LOCATION GIVEN ON VICINITY MAP. SOUTH BASIN, SITE OF 2006 & 2007 DETECTIONS, IS MAPPED TO GIVEN COORDINATES.						
Ecological:	DISKED FIELDS INTERSPERSED WITH VERNAL POOLS AND SEASONAL WETLANDS, MANY DISKED BUT STILL EVIDENT (2001). AERIAL PHOTOS INDICATE THAT SINCE 2001, THE NORTHERN POOL HAS BEEN DEVELOPED. THE SOUTH POOL WAS 195 SQUARE M, 8 CM DEEP IN 2006.						
General:	MORE THAN 100 FOUND IN VERNAL POOL #5, 11 MAR 2001. 100S OBSERVED ON 25 JAN 2006. 100S OBSERVED ON 8 MAR 2007.						
Owner/Manager:	PVT						
Occurrence No.	26	Map Index:	34812	EO Index:	48247	Element Last Seen:	1997-03-06
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1997-03-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39538 / -121.46627				Accuracy:	specific area	
UTM:	Zone-10 N4250798 E633934				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 06 (M)				Acres:	570.1	
Location:	BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF BILBY ROAD, ELK GROVE.						
Detailed Location:	MAPPED TO SURVEYED AREA AT ELLIOTT RANCH MITIGATION SITE; DETECTED AT POOLS VP201, VP202 AND SW235 IN 1997. SPECIMEN WITH LOCALITY "5.0 MILES SOUTH OF SACRAMENTO ALONG I-5," ALSO ATTRIBUTED HERE.						
Ecological:	NATURAL & CONSTRUCTED HARDPAN VERNAL POOLS, SEASONAL MARSHES & WETLANDS WITHIN NON-NATIVE ANNUAL GRASSLAND.						
General:	3 COLLECTED ON 13 MAR 1991 (BELK #1018, USNM #1084032). FOUND IN UNKNOWN # OUT OF 21 SAMPLED POOLS, FEB 1995. IN 70 POOLS, FEB-MAR 1996. FOUND IN 3 OF 52 POOLS ON 10, 14 JAN & 6 MAR 1997. BRANCHINECTA SP OBS IN 11 POOLS 25 JAN-22 FEB 1998.						
Owner/Manager:	PVT-GRUPE DEVELOPMENT CO						



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Occurrence No.	27	Map Index:	48248	EO Index:	48248	Element Last Seen:	1991-03-13
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1991-03-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40934 / -121.44630				Accuracy:	1/10 mile	
UTM:	Zone-10 N4252377 E635652				Elevation (ft):	10	
PLSS:	T07N, R05E, Sec. 32, SW (M)				Acres:	0.0	
Location:	ABOUT 4 MILES SOUTH OF SACRAMENTO AND 2 MILES EAST OF I-5.						
Detailed Location:	MAPPED TO LOCATION FROM ROGERS MAPS AND SPECIMEN LOCALITY, "4.0 MILES SOUTH OF SACRAMENTO, 2 MILES EAST OF INTERSTATE 5."						
Ecological:	VERNAL POOL. 2008 AERIAL PHOTO SHOWS THAT THIS AREA HAS BEEN COMPLETELY DEVELOPED.						
General:	10 COLLECTED ON 13 MAR 1991 (BELK #1021, USNM #1144062).						
Owner/Manager:	UNKNOWN						

Occurrence No.	40	Map Index:	48348	EO Index:	48348	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2009-06-08
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40933 / -121.45822				Accuracy:	1/10 mile	
UTM:	Zone-10 N4252358 E634611				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 32, SW (M)				Acres:	0.0	
Location:	5.2 MILES WEST OF ELK GROVE, 200 FT NORTH OF ELK GROVE BLVD, 0.45 MILE WEST OF FRANKLIN BLVD.						
Detailed Location:							
Ecological:	2008 AERIAL PHOTO SHOWS THAT THIS AREA HAS BEEN COMPLETELY DEVELOPED.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #015. DATE OF COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.						
Owner/Manager:	UNKNOWN						

Occurrence No.	41	Map Index:	48349	EO Index:	48349	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-07-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42421 / -121.44625				Accuracy:	1/10 mile	
UTM:	Zone-10 N4254026 E635629				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 29, SE (M)				Acres:	0.0	
Location:	4.5 MILES WEST OF ELK GROVE, 1.1 MILES NORTH OF ELK GROVE BLVD ALONG FRANKLIN BLVD AND 400 FT TO THE EAST.						
Detailed Location:							
Ecological:							
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #005. DATE OF COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	53	Map Index:	48498	EO Index:	48498	Element Last Seen:	2002-02-06
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-02-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.44605 / -121.67314				Accuracy:	specific area	
UTM:	Zone-10 N4256140 E615787				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, SE (M)				Acres:	27.5	
Location:	1.6 MILES SW OF SAXON, 1 TO 1.3 MILES SW ALONG THE NORTHERN ELECTRIC RAILROAD GRADE FROM ROAD 38.						
Detailed Location:	SITE NUMBERS 52-10, 52-10B, 52-10C, 52-10G, 52-10H AND 52-24; EAST SIDE OF RAILROAD GRADE.						
Ecological:	SHALLOW SHORT-LIVED POOLS IN A CATTLE GRAZED GRASSLAND. POOLS OCCURRED NEAR ARTIFICIALLY CONSTRUCTED BERMS. NATURAL TOPOGRAPHY MAINLY ABSENT. BRANCHINECTA LYNCHI, LEPIDURUS PACKARDI & LINDERIELLA OCCIDENTALIS IN COMPLEX.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 11 AND 23 JAN 2002 AND 6 FEB 2002.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	58	Map Index:	51552	EO Index:	51552	Element Last Seen:	2003-01-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-01-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-06-16
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45404 / -121.66678				Accuracy:	80 meters	
UTM:	Zone-10 N4257035 E616330				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	0.0	
Location:	JUST NW OF THE OLD SACRAMENTO NORTHERN RAILROAD.						
Detailed Location:	POOLS FILLED WITH WATER DURING THE HEAVY RAINS OF DECEMBER 2002 AND WERE DRY BY MID-FEBRUARY.						
Ecological:	HABITAT CONSISTS OF TWO SHALLOW VERNAL POOLS IN GRAZED NON-NATIVE GRASSLAND. CYZICUS CALIFORNICUS FOUND IN POOL #52-06A. LINDERIELLA AND BRANCHINECTA LYNCHI ALSO OCCUR IN NEARBY POOLS.						
General:	FEW INDIVIDUALS OBSERVED IN JAN 2003.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	65	Map Index:	60907	EO Index:	60943	Element Last Seen:	2004-03-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-03-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-04-11
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44821 / -121.41953				Accuracy:	1/10 mile	
UTM:	Zone-10 N4256729 E637915				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 22, NW (M)				Acres:	0.0	
Location:	NORTHWEST CORNER OF INTERSECTION OF BRUCEVILLE RD AND JACINTO RD.						
Detailed Location:							
Ecological:	SITE IS COMPOSED OF NON-NATIVE ANNUAL GRASSLAND AND APPEARS TO BE DISKED AT LEAST ANNUALLY FOR WEED CONTROL AND FIRE PREVENTION.						
General:	6 SEASONAL WETLAND FEATURES SAMPLED BETWEEN 2 JAN & 12 MAR 2004. 1 MALE FAIRY SHRIMP OBSERVED IN VP-01 ON 12 MAR 2004.						
Owner/Manager:	PVT						

<i>Linderiella occidentalis</i>	Element Code:	ICBRA06010
California linderiella		
Listing Status:	Federal:	None
	State:	None
	Other:	IUCN_NT-Near Threatened
Habitat:	General:	SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.
	Micro:	WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TOTAL DISSOLVED SOLIDS.
CNDDDB Element Ranks:	Global:	G2G3
	State:	S2S3

Occurrence No.	27	Map Index:	24533	EO Index:	1788	Element Last Seen:	2013-01-29
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2013-01-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-07-31	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44335 / -121.45897			Accuracy:	specific area		
UTM:	Zone-10 N4256132 E634483			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 20 (M)			Acres:	49.0		
Location:	ALONG RAILROAD TRACKS FROM JUST E OF SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, S TO DWIGHT RD, S OF SACRAMENTO.						
Detailed Location:	FOUND ALONG BOTH SIDES OF THE WESTERN PACIFIC RR TRACKS. 1995 SPECIMEN TAKEN "E OF SRWTP, W OF RR TRACKS" ATTRIBUTED HERE. N-MOST POLYGON REPRESENTS 1992-1993 DETECTIONS; REST OF POLYGONS MAPPED TO LAT/LONG GIVEN FOR 2012/13 DETECTIONS.						
Ecological:	WEEDY, WATER-FILLED DEPRESSIONS WITHIN RAILROAD ROW; SLIGHTLY TURBID WATER; DOMINANT PLANTS WERE JUNCUS BUFONIUS, PLAGIOBOTHRYUS STIPITATUS VAR. MICRANTHUS, GRATIOLA EBRACTEATA, LYTHRUM HYSSOPIFOLIA (1993). LEPIDURUS PACKARDI ALSO FOUND.						
General:	DETECTED ON 2 APR 1992. DETECTED AND COLLECTED ON 11 FEB; OVER 100 DETECTED ON 23 FEB 1993. 1 COLLECTED ON 6 JAN 1995 (CASIZ #104241). 60,000 DETECTED IN 17 BASINS BETWEEN 10 DEC 2012 AND 29 JAN 2013.						
Owner/Manager:	SRCSD, PVT-WESTERN PACIFIC RR						



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Occurrence No.	127	Map Index:	34794	EO Index:	12558	Element Last Seen:	1992-04-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1992-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-06-19
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49582 / -121.47084				Accuracy:	80 meters	
UTM:	Zone-10 N4261937 E633350				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 06, SE (M)				Acres:	0.0	
Location:	CORNER OF FLORIN ROAD AND UNION PACIFIC (WESTERN PACIFIC) RAILROAD, WEST OF HIGHWAY 99.						
Detailed Location:							
Ecological:							
General:	LINDERIELLA OBSERVED BY KOFORD DURING SURVEY IN SPRING OF 1992. LEPIDURUS PACKARDI ALSO PRESENT.						
Owner/Manager:	PVT-UNION PACIFIC RR						
Occurrence No.	140	Map Index:	34812	EO Index:	29268	Element Last Seen:	2003-02-17
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-02-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-28
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39538 / -121.46627				Accuracy:	specific area	
UTM:	Zone-10 N4250798 E633934				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 06 (M)				Acres:	570.1	
Location:	BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF HOOD FRANKLIN ROAD, ELK GROVE.						
Detailed Location:	ELLIOTT RANCH & ELK GROVE BLVD EXTENSION/I-5 INTERCHANGE MITIGATION SITES. 1991 LOCALITY "5.0 MILES SOUTH OF SACRAMENTO ALONG I-5," MAPPED HERE. 1995: 23 WETLANDS SAMPLED. 1996: 74 WETLANDS SAMPLED. 1997: 52 WETLANDS SAMPLED.						
Ecological:	NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS, SEASONAL MARSHES AND WETLANDS WITHIN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.						
General:	52 COLLECTED IN 1991 (USNM #1144050 & 1144061). MORE THAN 50 L. OCCIDENTALIS AND/OR MIDVALLEY FAIRY SHRIMP FOUND IN 12 POOLS IN 1995, AND IN 43 POOLS IN 1996. FOUND IN 23 POOLS, 1997. 100S TO 1000S IN 11 POOLS, 1998. 100S FOUND IN 2003.						
Owner/Manager:	PVT-GRUPE DEVELOPMENT CO						



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Occurrence No.	178	Map Index:	42552	EO Index:	42552	Element Last Seen:	1998-10-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1998-10-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-03-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43614 / -121.39915				Accuracy:	specific area	
UTM:	Zone-10 N4255421 E639718				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 26, NW (M)				Acres:	8.2	
Location:	EAST SIDE OF HIGHWAY 99, BETWEEN WHITEHOUSE CREEK AND SHELDON ROAD, SOUTH OF SACRAMENTO.						
Detailed Location:							
Ecological:							
General:	OBSERVED DURING DRY-SEASON SAMPLING OF SEASONAL WETLANDS ON 15 OCT 1998.						
Owner/Manager:	PVT						

Occurrence No.	179	Map Index:	37071	EO Index:	42553	Element Last Seen:	1998-04-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1998-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-03-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45613 / -121.41327				Accuracy:	nonspecific area	
UTM:	Zone-10 N4257618 E638447				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 15, SW (M)				Acres:	161.6	
Location:	INTERSECTION OF COSUMNES RIVER COLLEGE BOULEVARD AND HIGHWAY 99, SOUTH OF SACRAMENTO.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF BOTH NATURAL AND MAN-MADE VERNAL POOLS.						
General:	DRY/WET SEASON SAMPLING CONDUCTED JAN-APR 1998 OF A CREATED VERNAL POOL AND A CONTROL SITE; UNKNOWN NUMBER OF INDIVIDUALS FOUND.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	206	Map Index:	48434	EO Index:	48434	Element Last Seen:	2003-01-15
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-01-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-12-23
Quad Summary:	Liberty Island (3812136), Dozier (3812137)						
County Summary:	Solano						
Lat/Long:	38.35739 / -121.75320			Accuracy:	specific area		
UTM:	Zone-10 N4246205 E608933			Elevation (ft):	18		
PLSS:	T06N, R02E, Sec. 21 (M)			Acres:	122.6		
Location:	5.5 MILES NW OF DOZIER, EXTENDING 4.4 MILES NW FROM BUNKER ALONG ABANDONED SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE.						
Detailed Location:	LOCATED BETWEEN BINGHAMTON ROAD (TO THE SOUTH) AND DEHLI ROAD (TO THE NORTH). SOUTHERN SECTION: 27 POOLS. MIDDLE SECTION: 16 POOLS. NORTHERN SECTION: 12 POOLS.						
Ecological:	HABITAT CONSISTS OF STRING OF SEASONALLY PONDED POOLS. MOST POOLS ARE BORROW PITS/DITCHES. A FEW NATURALLY OCCURRING VERNAL POOLS LOCATED IN SECTION 15 WITHIN A CATTLE GRAZED GRASSLAND. SOME AREAS GRAZED BY SHEEP AND GOATS.						
General:	UNKNOWN NUMBER OBSERVED BETWEEN JAN AND FEB 2002, AND JAN 2003. MOST OF HABITAT SURROUNDING CORRIDOR IS UNDER AGRICULTURAL PRODUCTION.						
Owner/Manager:	UNKNOWN						

Occurrence No.	212	Map Index:	48496	EO Index:	48496	Element Last Seen:	2008-03-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-08-26
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45179 / -121.66785			Accuracy:	specific area		
UTM:	Zone-10 N4256784 E616239			Elevation (ft):	15		
PLSS:	T07N, R03E, Sec. 17 (M)			Acres:	131.0		
Location:	ALONG HISTORIC RAILROAD GRADE, 0.3 TO 1.9 MILES SW OF ITS INTERSECTION WITH COUNTY ROAD 106, 8 MILES EAST OF DIXON.						
Detailed Location:	2002/2003: OBSERVED AT 28 DIFFERENT SITES ALONG BOTH SIDES OF THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE. 2008: OBSERVED IN 2 FEATURES SE OF THE RAILROAD GRADE IN SECTION 20.						
Ecological:	2002/2003: PONDED DEPRESSIONS (BORROW PITS, DITCHES) & SOME NATURAL VERNAL POOLS IN GRAZED GRASSLAND; NATURAL TOPOGRAPHY MAINLY ABSENT. BRANCHINECTA LYNCHI & LEPIDURUS PACKARDI FOUND. 2008: HIGHLY TURBID PLAYA POOL & LARGE CLEAR-WATER POOL.						
General:	DETECTED FROM 3 JAN - 2 APR 2002, AND IN JAN 2003. DETECTED DURING FIELD TRAINING EXERCISES ON 14 MAR 2008; NO SPECIMENS COLLECTED.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	213	Map Index:	48497	EO Index:	48497	Element Last Seen:	2002-01-14
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2002-01-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.42764 / -121.68946				Accuracy:	80 meters	
UTM:	Zone-10 N4254077 E614392				Elevation (ft):	20	
PLSS:	T07N, R03E, Sec. 30, NW (M)				Acres:	0.0	
Location:	1.4 MILES NE OF YOLANO, 0.3 MILE SE OF THOMSEN ROAD, NORTH OF UNNAMED SLOUGH & EAST OF NORTHERN ELECTRIC RAILROAD GRADE.						
Detailed Location:	SITE NUMBERS 50-09 AND 50-10.						
Ecological:	HABITAT CONSISTS OF 2 SMALL ARTIFICIALLY CREATED DEPRESSIONS THAT SEASONALLY POND RAINWATER. AREA IS GENERALLY DISTURBED AND SURROUNDING LAND IS UNDER AGRICULTURAL PRODUCTION.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 14 JAN 2002.						
Owner/Manager:	UNKNOWN						
Occurrence No.	238	Map Index:	59076	EO Index:	59112	Element Last Seen:	2002-02-04
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-02-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-01-03
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39514 / -121.45328				Accuracy:	80 meters	
UTM:	Zone-10 N4250791 E635069				Elevation (ft):	20	
PLSS:	T06N, R05E, Sec. 05 (M)				Acres:	0.0	
Location:	ABOUT 1.2 MILES NORTH OF FRANKLIN, ON WEST SIDE OF WESTERN PACIFIC RAILROAD TRACKS.						
Detailed Location:	FOUND IN A SHALLOW TOPOGRAPHIC DEPRESSION IN RAILROAD RIGHT-OF-WAY.						
Ecological:	HERBACEOUS AND GRASSY SUBSTRATE.						
General:	5-10 ADULTS OBSERVED VISUALLY ON 4 FEB 2002, NO AQUATIC SAMPLING.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	265	Map Index:	65888	EO Index:	65967	Element Last Seen:	2007-03-08
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-03-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-28
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43147 / -121.39101				Accuracy:	specific area	
UTM:	Zone-10 N4254915 E640436				Elevation (ft):	30	
PLSS:	T07N, R05E, Sec. 26 (M)				Acres:	14.0	
Location:	FROM 0.4 TO 0.7 MILE NE OF HWY 99 AT LAGUNA BLVD, 0.4 TO 0.75 MILE S OF SHELDON RD AT POWER INN RD, ELK GROVE.						
Detailed Location:	MAPPED TO COORDINATES GIVEN FOR POOLS VP21, VP11, AND SW14 FROM FIELD SURVEY FORMS. COORDINATES NOT GIVEN FOR ADDITIONAL DETECTIONS IN 2006 AT VP6, VP14, VP22, SW2, & SW3; BUT THESE POOLS WERE WITHIN 600' OF VP21.						
Ecological:	VERNAL POOLS AND SEASONAL WETLANDS IN ANNUAL GRASSLAND. SURFACE AREA OF POOLS RANGED FROM 489 TO 9849 SQ M; AVG DEPTH 7-30 CM; WATER TEMPERATURE 15-25 DEGREES C. SURROUNDING LAND USE RESIDENTIAL AND COMMERCIAL.						
General:	100S OF INDIVIDUALS OBSERVED IN 7 BASINS DURING SURVEYS ON 25 JAN, 8 FEB, AND 5 APR 2006. 100S OBSERVED IN 2 BASINS ON 8 MAR 2007.						
Owner/Manager:	PVT						

Occurrence No.	387	Map Index:	82079	EO Index:	83068	Element Last Seen:	2009-03-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-03-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-23
Quad Summary:	Bruceville (3812134), Courtland (3812135), Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.37888 / -121.50013				Accuracy:	specific area	
UTM:	Zone-10 N4248918 E631007				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 13, NW (M)				Acres:	234.0	
Location:	1 MI W OF HOOD FRANKLIN RD AT I-5, 1 MI NE HOOD PO.						
Detailed Location:	JUST S OF NORTH STONE LAKE. POOL ID: 16, 20-23, 26-28, 30, 32, 37, 56-58, 63, 65-67, 80 & 84. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	MAXIMUM DEPTH OF POOLS RANGED FROM 6 IN TO 24 IN; WATER TEMPERATURE RANGED FROM 13 TO 21 DEGREES CELSIUS.						
General:	10S OF CALIFORNIA LINDERIELLA OBSERVED AT 13 DIFFERENT POOLS AND 2 DITCHES; 100S OBSERVED AT 5 DIFFERENT POOLS DURING WET-SEASON FIELD SURVEYS BETWEEN 6-11 MAR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	388	Map Index:	82080	EO Index:	83072	Element Last Seen:	2009-03-10
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-03-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-22
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.36839 / -121.50884				Accuracy:	specific area	
UTM:	Zone-10 N4247742 E630265				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 14, SE (M)				Acres:	39.0	
Location:	ABOUT 0.5 MI E OF HOOD PO, 1 MI WSW OF I-5 AT HOOD FRANKLIN RD.						
Detailed Location:	JUST S OF NORTH STONE LAKE. POOL ID: 110, 42, 43, 45, 50, 52 & 54. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	MAXIMUM DEPTH OF POOLS RANGED FROM 8 TO 21 IN; WATER TEMPERATURE RANGED FROM 8 TO 11 DEGREES CELSIUS. GLYCERIA, ELEOCHARIS, SNAIL EGGS, TREE FROG EG MASSES & ALGAE ALSO FOUND ON SITE.						
General:	10S OF CALIFORNIA LINDERIELLA OBSERVED IN EACH POOL DURING WET-SEASON FIELD SURVEYS ON 10 MAR 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	389	Map Index:	82082	EO Index:	83074	Element Last Seen:	2009-03-06
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2009-03-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.34804 / -121.50593				Accuracy:	specific area	
UTM:	Zone-10 N4245489 E630555				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 26, NE (M)				Acres:	8.0	
Location:	JUST NW OF STONE LAKE, ABOUT 1.5 MI SSE HOOD PO.						
Detailed Location:	STONE LAKES NWR. POOL ID: 4B. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	POOL HAS COMBINED WITH SMALLER SURROUNDING POOLS. MAXIMUM DEPTH OF 20 IN; WATER TEMPERATURE OF 11 DEGREES CELSIUS. GLYCERIA, SPIDERS, WORMS AND A DEAD ADULT BULLFROG ALSO FOUND ON SITE.						
General:	10S OF CALIFORNIA LINDERIELLA OBSERVED IN EACH POOL DURING WET-SEASON FIELD SURVEYS ON 6 MAR 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	394	Map Index:	93229	EO Index:	94369	Element Last Seen:	2008-05-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-05-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-18
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38010 / -121.37821				Accuracy:	specific area	
UTM:	Zone-10 N4249234 E641654				Elevation (ft):	35	
PLSS:	T06N, R05E, Sec. 12 (M)				Acres:	28.0	
Location:	ABOUT 0.9 MILE WNW OF HIGHWAY 99 AT GRANT LINE ROAD & 1.1 MILES NE OF KAMMERER RD AT MCMILLAN ROAD, SOUTH OF ELK GROVE.						
Detailed Location:	"STERLING MEADOWS PROPERTY." MAPPED TO LOCATIONS GIVEN IN 2008 REPORT.						
Ecological:	200-ACRE PROPERTY. BRANCHINECTA CYSTS ALSO FOUND.						
General:	LINDERIELLA OCCIDENTALIS CYSTS WERE FOUND IN 8 OUT OF 15 BASINS DRY-SAMPLED ON 2 MAY 2008.						
Owner/Manager:	PVT						



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Occurrence No.	395	Map Index:	93078	EO Index:	94393	Element Last Seen:	2011-01-20
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2011-01-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.35394 / -121.66455			Accuracy:	80 meters		
UTM:	Zone-10 N4245930 E616685			Elevation (ft):	5		
PLSS:	T06N, R03E, Sec. 20, NE (M)			Acres:	0.0		
Location:	YOLO BYPASS, 2.0 AIR MILES SE OF DELHI RD AT LEVEE RD (ROAD 104), 11 MILES SE OF DIXON.						
Detailed Location:	MAPPED TO COORDINATES PROVIDED ON FIELD SURVEY FORM.						
Ecological:	VERNAL POOL SURROUNDED BY NON-NATIVE ANNUAL GRASSES AND DISTICHLIS. POTENTIAL MAX DEPTH 11". REGULARLY FLOODED BY YOLO BYPASS, HYDROLOGICAL DISTURBANCES FROM AGRICULTURE. VERY SMALL POPULATION OF BRANCHINECTA LYNCHI CO-OCCURRED.						
General:	DETECTED ON 20 JAN 2011.						
Owner/Manager:	WESTLANDS WATER DISTRICT						
Occurrence No.	399	Map Index:	93267	EO Index:	94403	Element Last Seen:	2005-01-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-01-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-23
Quad Summary:	Rio Vista (3812126), Birds Landing (3812127)						
County Summary:	Solano						
Lat/Long:	38.19089 / -121.75059			Accuracy:	3/5 mile		
UTM:	Zone-10 N4227733 E609411			Elevation (ft):	80		
PLSS:	T04N, R02E, Sec. 15 (M)			Acres:	0.0		
Location:	VICINITY OF CANRIGHT ROAD BETWEEN MCCORMACK ROAD (TO N) AND HWY 12 (TO S), ABOUT 3 MILES NW OF RIO VISTA.						
Detailed Location:	MAPPED TO VICINITY OF BRANN PROPERTY AS DESCRIBED IN 2006 REPORT. EXACT DETECTION LOCATIONS WITHIN PROPERTY UNKNOWN.						
Ecological:	DETECTIONS ON 313-ACRE PROPERTY CHARACTERIZED BY SLOPING HILLS AND OPEN GRASSLANDS, WITH FOUR SEASONAL WETLANDS IN THE FLOOD PLAIN ADJACENT TO AN UNNAMED TRIBUTARY.						
General:	OBSERVED AND CAPTURED IN 2 OF THE SEASONAL WETLAND FEATURES ONSITE, 25 JAN 2005.						
Owner/Manager:	PVT						



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Occurrence No.	404	Map Index:	93281	EO Index:	94417	Element Last Seen:	1995-01-31
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1995-01-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45089 / -121.48269				Accuracy:	2/5 mile	
UTM:	Zone-10 N4256935 E632399				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 24 (M)				Acres:	0.0	
Location:	NORTH SIDE OF MORRISON CREEK, ABOUT 0.9 MILE NE OF THE I-5 CROSSING, 1.75 MILES SOUTH OF SACRAMENTO.						
Detailed Location:	MAPPED GENERALLY TO LOCALITY "INUNDATED WHEAT FIELD NORTH OF MORRISON CREEK LEVEE ROAD, 50 FEET EAST OF PUMPING STATION, 7/8 MILE EAST OF INTERSTATE 5."						
Ecological:	POOL DEPTH OF 0.07 METERS.						
General:	3 COLLECTED ON 31 JAN 1995 (CASIZ #104242).						
Owner/Manager:	SRCSD-STONE LAKES NWP						
Occurrence No.	408	Map Index:	93293	EO Index:	94427	Element Last Seen:	2007-10-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2007-10-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-28
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47035 / -121.38620				Accuracy:	specific area	
UTM:	Zone-10 N4259237 E640781				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 12, SW (M)				Acres:	28.0	
Location:	EAST SIDE OF THE SOUTHERN PACIFIC RAILROAD TRACKS FROM CASELMAN ROAD TO CORD WAY, SACRAMENTO.						
Detailed Location:	MAPPED TO LOCATIONS GIVEN FOR OCCUPIED SITES (P1, P2, & P3; BASIN 3; DITCH 1 & DITCH 2; HBC 13 & 21) ON DEANE-VINTAGE I / CARLISLE VILLAGE PROPERTY.						
Ecological:	34 BASINS INCLUDING PONDS AND DITCHES SURVEYED ON PROPERTY.						
General:	UNKNOWN # DETECTED IN 4 BASINS IN JAN 2006. CYSTS DETECTED IN 5 OF 34 BASINS DRY-SAMPLED 15 OCT 2005, 1 AUG 2006, & 3 OCT 2007.						
Owner/Manager:	PVT						
Occurrence No.	409	Map Index:	93294	EO Index:	94428	Element Last Seen:	2006-05-01
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2006-05-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38001 / -121.40858				Accuracy:	1/10 mile	
UTM:	Zone-10 N4249178 E639001				Elevation (ft):	30	
PLSS:	T06N, R05E, Sec. 10, SE (M)				Acres:	0.0	
Location:	NORTH SIDE OF BILBY ROAD ABOUT 0.5 MILE EAST OF THE INTERSECTION WITH BRUCEVILLE ROAD, ELK GROVE.						
Detailed Location:	MAPPED TO LOCATION GIVEN FOR OCCUPIED POOL SW-2; MAPPED NON-SPECIFICALLY SINCE COORDINATES AND MAP DO NOT APPEAR TO BE HIGHLY ACCURATE.						
Ecological:	LARGE, EXCAVATED SEASONAL WETLAND IN DISTURBED ANNUAL GRASSLAND.						
General:	DETECTED AT A DENSITY OF 50/25L ON 22 JAN 2006; OVER 100 OBSERVED BETWEEN 22 JAN & 1 MAY 2006.						
Owner/Manager:	PVT						



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Occurrence No.	410	Map Index:	48248	EO Index:	94430	Element Last Seen:	1991-03-13
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1991-03-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-08-21
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40934 / -121.44630				Accuracy:	1/10 mile	
UTM:	Zone-10 N4252377 E635652				Elevation (ft):	10	
PLSS:	T07N, R05E, Sec. 32, SW (M)				Acres:	0.0	
Location:	ABOUT 4 MILES SOUTH OF SACRAMENTO AND 2 MILES EAST OF I-5.						
Detailed Location:	MAPPED TO SPECIMEN LOCALITY, "4.0 MILES SOUTH OF SACRAMENTO, 2 MILES EAST OF INTERSTATE 5."						
Ecological:	VERNAL POOL. 2008 AERIAL PHOTO SHOWS THAT THIS AREA HAS BEEN COMPLETELY DEVELOPED. BRANCHINECTA MESOVALLENSIS COLLECTED AT THIS LOCALITY ON SAME DATE.						
General:	19 COLLECTED ON 13 MAR 1991 (BELK #1019 & 1022; USNM #1144059 & 1144063).						
Owner/Manager:	UNKNOWN						

Occurrence No.	411	Map Index:	93299	EO Index:	94434	Element Last Seen:	2008-03-18
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-03-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48359 / -121.39129				Accuracy:	specific area	
UTM:	Zone-10 N4260698 E640311				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 02, SE (M)				Acres:	27.0	
Location:	NORTHWEST CORNER OF INTERSECTION OF FRENCH ROAD AND GERBER ROAD, EAST OF SOUTHERN PACIFIC RAILROAD TRACKS, SACRAMENTO.						
Detailed Location:	MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS SW1, SW2, SW3, RD1, DD1A, DD1B, DD1C, AND RD1 (2008). "FEENSTRA UNIT 6A" PROPERTY.						
Ecological:	OBSERVED WITHIN MOST OF THE SURVEYED FEATURES, WHICH INCLUDED SEASONAL WETLANDS, DRAINAGE AND ROADSIDE DITCHES, AND DISTURBANCE-CREATED POOLS. IN MOSTLY NON-NATIVE, ANNUAL GRASSLAND. LEPIDURUS PACKARDI ALSO FOUND.						
General:	DETECTED AT LOW TO HIGH ABUNDANCE IN 7 OUT OF 9 BASINS SAMPLED, FROM 6 FEB TO 18 MAR 2008.						
Owner/Manager:	PVT						



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Occurrence No.	420	Map Index:	93324	EO Index:	94470	Element Last Seen:	2010-02-25
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2010-02-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-30
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49228 / -121.67894				Accuracy:	specific area	
UTM:	Zone-10 N4261264 E615208				Elevation (ft):	25	
PLSS:	T08N, R03E, Sec. 31, SE (M)				Acres:	8.0	
Location:	MCCLELLAN AFB DAVIS COMMUNICATIONS FACILITY SITE, 0.3 MILE NNW OF ROAD 105 AT ROAD 36, 5 MILES SE OF DAVIS.						
Detailed Location:	MAPPED TO LOCATION OF POOL R-A3 FROM 2004 FIELD SURVEY FORM AND POOLS 125, 126, 127, AND 128 FROM 2010 REPORT.						
Ecological:	DEEP, TURBID VERNAL POOLS IN AREA HIGHLY DISTURBED FROM HISTORICAL MILITARY USE. LEPIDURUS PACKARDI AND BRANCHINECTA LYNCHI ALSO FOUND IN AREA. SITE WAS BURNED IN 2003. ANNEXED TO YOLO COUNTY GRASSLANDS REGIONAL PARK SINCE TIME OF SURVEY.						
General:	DETECTED IN 1 POOL DURING SURVEYS BETWEEN 30 DEC 2003 AND 23 MAR 2004. DETECTED IN 4 ADJACENT BASINS DURING SURVEYS 14 AND 25 FEB 2010.						
Owner/Manager:	DOD, YOL COUNTY						
Occurrence No.	421	Map Index:	93068	EO Index:	94471	Element Last Seen:	2008-03-14
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-30
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45708 / -121.67208				Accuracy:	80 meters	
UTM:	Zone-10 N4257367 E615862				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	0.0	
Location:	TULE RANCH, YOLO BYPASS WILDLIFE AREA, 0.2 MILE SE OF INTERSECTION OF ROAD 38 AND ROAD 105, 8 MILES EAST OF DIXON.						
Detailed Location:	MAPPED TO LOCATION GIVEN IN 2008 REPORT.						
Ecological:	CLEAR-WATER POOL IN A PASTURE.						
General:	DETECTED DURING FIELD TRAINING EXERCISES ON 14 MAR 2008; NO SPECIMENS COLLECTED.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	423	Map Index:	93328	EO Index:	94474	Element Last Seen:	2003-02-17
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2003-02-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-07-30	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38649 / -121.45508				Accuracy:	80 meters	
UTM:	Zone-10 N4249829 E634927				Elevation (ft):	17	
PLSS:	T06N, R05E, Sec. 08, W (M)				Acres:	0.0	
Location:	LAGUNA STONELAKE PRESERVE, ON WEST SIDE OF FRANKLIN BLVD ABOUT 0.5 MILE SSW OF THE WHITELOCK PKWY JUNCTION, ELK GROVE.						
Detailed Location:	MAPPED TO LOCATION GIVEN FOR POOL 21 ON 2003 FIELD SURVEY FORM.						
Ecological:	PRESERVE WITH 49 VERNAL POOLS CONSTRUCTED IN 1999. SOME EVIDENCE OF ORV USE WAS NOTED IN 2003, BUT THERE WAS NO EVIDENCE OF EFFECT TO THE POOLS. LEPIDURUS PACKARDI ALSO FOUND.						
General:	DETECTED IN ONE POOL ON 17 FEB 2003.						
Owner/Manager:	PVT						

<i>Lepidurus packardii</i>				Element Code: ICBRA10010			
vernal pool tadpole shrimp							
Listing Status:	Federal:	Endangered		CNDDB Element Ranks:	Global:	G4	
	State:	None			State:	S3S4	
	Other:	IUCN_EN-Endangered					
Habitat:	General:	INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.					
	Micro:	POOLS COMMONLY FOUND IN GRASS-BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED AND HIGHLY TURBID.					

Occurrence No.	29	Map Index:	32514	EO Index:	1994	Element Last Seen:	2010-02-14
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		2010-02-14	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-07-22	
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49502 / -121.67774			Accuracy:	specific area		
UTM:	Zone-10 N4261569 E615308			Elevation (ft):	25		
PLSS:	T08N, R03E, Sec. 31, E (M)			Acres:	100.0		
Location:	FORMER AIR FORCE COMMUNICATION FACILITY, 0.5-1.0 MI EAST OF INTERSECTION OF TREMONT ROAD AND ROAD 104, 5 MI SE OF DAVIS.						
Detailed Location:	ADJACENT TO YOLO COUNTY GRASSLANDS REGIONAL PARK; ANNEXED TO PARK PRIOR TO 2010. POOL #3 ESTIMATED TO BE 200' X 50' X 12"D; POOL #9, 300' X 75' X 36"D (IN 1995). MAPPED TO LOCATIONS OF OCCUPIED POOLS.						
Ecological:	ANNUAL GRASSLAND WITH 10-13 DEEP VERNAL POOLS (WET INTO MAY/JUN) & MUD-BOTTOMED BORROW PIT. SITE BURNED IN 2003. TREE FROGS, AQUATIC INVERTS INCL CYZICUS PRESENT. POOLS HIGHLY DISTURBED FROM HISTORIC MILITARY USE. SURROUNDED BY AGRICULTURE.						
General:	PRESENT IN 1993 & 1994. FOUND IN 3 OF 5 POOLS (ABUNDANT IN #3 & #9) SAMPLED 10 FEB-16 MAR 1995; VOUCHERS SENT TO CAS. 100S FOUND IN 1997 & 1998. FOUND IN 8 POOLS, 2004. FOUND IN 8 OF 13 POOLS, 2010.						
Owner/Manager:	YOL COUNTY						



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Occurrence No.	32	Map Index:	93185	EO Index:	1787	Element Last Seen:	2013-01-29
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2013-01-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-01-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44619 / -121.45225			Accuracy:	nonspecific area		
UTM:	Zone-10 N4256457 E635064			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 20 (M)			Acres:	1120.0		
Location:	SRWTP BUFFERLANDS, FROM BEACON CREEK SOUTH TO DWIGHT RD AND FROM FRANKLIN BLVD WEST TO RAILROAD TRACKS, SACRAMENTO.						
Detailed Location:	1992-93 & 2012-13 DETECTIONS MAINLY ALONG RR TRACKS NEAR WATER TREATMENT PLANT. MAPPED TO INCLUDE ENTIRE BUFFERLANDS PRESERVE AS DESCRIBED IN 2000 FIELD SURVEY FORM; SPECIFIC LOCATIONS NOT GIVEN FOR DETECTIONS IN POOLS THROUGHOUT PRESERVE.						
Ecological:	1992-93: SLIGHTLY TURBID PONDED DEPRESSIONS IN RR ROW & ROADSIDE DITCHES. BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS ALSO FOUND. 2012-13: 2-20" DEEP DEPRESSIONS ON BOTH SIDES OF RR TRACKS.						
General:	DETECTED, 2 APR 1992. OVER 100 ADULTS OBSERVED, 23 FEB 1993; 1 COLLECTED. DETECTED IN SEC 29, 12 MAR 1993 (SUGNET #134). COLLECTED IN 1995. FOUND IN 19 AC OF POOLS OVER 732 AC IN 2000. 100S DETECTED IN MULTIPLE BASINS, DEC 2012 & JAN 2013.						
Owner/Manager:	SRCSD, PVT-WESTERN PACIFIC RR						
Occurrence No.	68	Map Index:	93180	EO Index:	12533	Element Last Seen:	1995-01-25
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	1995-01-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2015-01-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49580 / -121.47079			Accuracy:	nonspecific area		
UTM:	Zone-10 N4261935 E633354			Elevation (ft):	15		
PLSS:	T07N, R05E, Sec. 06 (M)			Acres:	16.0		
Location:	ALONG WESTERN PACIFIC RAILROAD, FROM FLORIN RD TO ABOUT 0.4 MILE SOUTH, WEST OF FRANKLIN BLVD, SACRAMENTO.						
Detailed Location:	N POLYGON MAPPED TO 1992 DETECTION; 1995 SPECIMEN FROM EAST OF RAILROAD, WEST OF HIGH SCHOOL MAPPED HERE. S POLY MAPPED TO 1995 SPECIMEN LOCALITY "S OF FLORIN RD, W OF [RR], NE OF POCKET SUBSTATION." 1993 LOC GIVEN ONLY TO TRS (SEC 6).						
Ecological:	1992: ROADSIDE DITCHES. 1993: MANMADE VERNAL POOL & DITCHES; CALIF & VERNAL POOL FAIRY SHRIMP ALSO FOUND. 2015: RE-SURVEY OF AREA INDICATED OCCURRENCE MAY STILL PERSIST, THOUGH HABITAT WAS FILLED/DEVELOPED IN 1990S & MITIGATED OFFSITE.						
General:	DETECTED 2 APR 1992. DETECTED ON 3 & 12 MAR 1993. COLLECTED 25 JAN 1995 (CASIZ #94830, 94831).						
Owner/Manager:	PVT-UNION PACIFIC RR, SMUD						



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Occurrence No.	69	Map Index:	34795	EO Index:	12473	Element Last Seen:	1992-04-02
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:		1992-04-02	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-05-05	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49587 / -121.39662			Accuracy:	1/10 mile		
UTM:	Zone-10 N4262053 E639822			Elevation (ft):	35		
PLSS:	T07N, R05E, Sec. 02, SE (M)			Acres:	0.0		
Location:	CORNER OF FLORIN ROAD AND SOUTHERN PACIFIC TRACTION RAILROAD, IN FLORIN.						
Detailed Location:	MAPPED TO LOCATION DESCRIBED BY KOFORD. SUGNET LOCATION GIVEN ONLY AS TRS SECTION 35, ATTRIBUTED HERE.						
Ecological:	RAILROAD DITCH ("ROADSIDE DITCH" IN SUGNET RECORDS). SURROUNDING AREA IS HIGHLY URBANIZED.						
General:	TADPOLE SHRIMP OBSERVED BY KOFORD DURING SURVEY IN SPRING OF 1992 (SUGNET ID #143, FROM SAME DATE, IS PROBABLY ANOTHER RECORD OF THIS DETECTION).						
Owner/Manager:	PVT-SPRR						

Occurrence No.	70	Map Index:	34796	EO Index:	12535	Element Last Seen:	1992-04-02
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1992-04-02	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1996-06-20	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48145 / -121.46642			Accuracy:	80 meters		
UTM:	Zone-10 N4260349 E633762			Elevation (ft):	21		
PLSS:	T07N, R05E, Sec. 06, SE (M)			Acres:	0.0		
Location:	ALONG UNION PACIFIC RAILROAD AND MEADOWVIEW ROAD, WEST OF HIGHWAY 99.						
Detailed Location:							
Ecological:	TURBID POOL.						
General:	KOFORD OBSERVED TADPOLE SHRIMP DURING SURVEY IN SPRING OF 1992.						
Owner/Manager:	PVT-UNION PACIFIC RR						



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Occurrence No.	76	Map Index:	34812	EO Index:	29269	Element Last Seen:	2003-02-17
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-02-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-16
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39538 / -121.46627			Accuracy:	specific area		
UTM:	Zone-10 N4250798 E633934			Elevation (ft):	15		
PLSS:	T06N, R05E, Sec. 06 (M)			Acres:	570.1		
Location:	BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF BILBY ROAD, ELK GROVE.						
Detailed Location:	ELLIOTT RANCH, ELK GROVE BLVD EXTENSION / I-5 INTERCHANGE MITIGATION SITES. 1995: 23 WETLANDS SAMPLED. 1996: 74 WETLANDS SAMPLED. 1997: 52 WETLANDS SAMPLED. LINDERIELLA OCCIDENTALIS AND/OR MIDVALLEY FAIRY SHRIMP (BRANCHINECTA SP) ALSO OBS.						
Ecological:	NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS IN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.						
General:	1993: 3 OBS. 1995: <50 TO 50+ OBS IN 4 POOLS; SPECIMENS IN CAS (#103131 & 103136). 1996: 50+ OBS IN 25 POOLS, <50 IN 1 POOL. 1997: 10S TO 100S OBS IN 17 POOLS. 1998: 10S OBS IN 9 POOLS, 100S OBS IN 1 POOL. 2002: 1 OBS. 2003: 1000S OBS.						
Owner/Manager:	PVT-GRUPE DEVELOPMENT CO						
Occurrence No.	82	Map Index:	33677	EO Index:	30425	Element Last Seen:	1993-03-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1993-03-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1997-03-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.29764 / -121.43832			Accuracy:	3/5 mile		
UTM:	Zone-10 N4239993 E636559			Elevation (ft):	15		
PLSS:	T05N, R05E, Sec. 09 (M)			Acres:	0.0		
Location:	WEST OF BRUCEVILLE ROAD, NORTH OF TWIN CITIES ROAD, IN THE VICINITY OF FRANKLIN FIELD.						
Detailed Location:	ROADSIDE DITCHES LOCATED SOMEWHERE IN SECTION 9.						
Ecological:	MANMADE ROADSIDE DITCHES.						
General:	LEPIDURUS PACKARDI OBSERVED IN 1 OF 3 FEATURES INSPECTED. NO B. LYNCHI OBSERVED. SUGNET RECORD #117.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	84	Map Index:	33678	EO Index:	30424	Element Last Seen:	1993-03-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1993-03-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1997-03-13
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.35742 / -121.45452				Accuracy:	3/5 mile	
UTM:	Zone-10 N4246603 E635031				Elevation (ft):	15	
PLSS:	T06N, R05E, Sec. 20 (M)				Acres:	0.0	
Location:	BOTH SIDES OF FRANKLIN BLVD, ABOUT 1.5 MILES SOUTH OF FRANKLIN.						
Detailed Location:	ROADSIDE DITCHES LOCATED SOMEWHERE IN SECTION 20.						
Ecological:	MANMADE ROADSIDE DITCHES.						
General:	LEPIDURUS PACKARDI OBSERVED IN THE 1 FEATURE INSPECTED. NO B. LYNCHI OBSERVED. SUGNET RECORD #128.						
Owner/Manager:	UNKNOWN						

Occurrence No.	88	Map Index:	33681	EO Index:	30428	Element Last Seen:	1992-04-02
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1992-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47379 / -121.45529				Accuracy:	nonspecific area	
UTM:	Zone-10 N4259515 E634747				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 08 (M)				Acres:	639.0	
Location:	SOUTHWEST OF THE INTERSECTION OF MACK RD AND THE WESTERN PACIFIC (=UNION PACIFIC) RAILROAD IN SOUTH SACRAMENTO.						
Detailed Location:	1992 DETECTIONS IN TRS SECTION 8; EXACT LOCATION UNKNOWN. 2007 SURVEY ON "FRANKLIN POINT PROJECT" PROPERTY, 5.5 ACRES AT THE SW CORNER OF FRANKLIN BLVD AND MACK RD.						
Ecological:	DETECTED IN MANMADE ROADSIDE DITCHES IN URBANIZED AREA. WET SEASON SURVEYS IN 2007 AT FRANKLIN POINT PROJECT PROPERTY FOUND NO BRANCHIOPODS; BUT POOLS DID NOT POND LONG ENOUGH FOR A SUCCESSFUL HATCH THAT SEASON.						
General:	OBSERVED IN 2 OF 3 ROADSIDE DITCHES SAMPLED IN TRS SECTION 8, 2 APR 1992 (SUGNET RECORD #131).						
Owner/Manager:	UNKNOWN						



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Occurrence No.	89	Map Index:	33683	EO Index:	30429	Element Last Seen:	2008-07-14
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2008-07-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48338 / -121.39184				Accuracy:	specific area	
UTM:	Zone-10 N4260675 E640264				Elevation (ft):	40	
PLSS:	T07N, R05E, Sec. 02 (M)				Acres:	18.0	
Location:	EAST SIDE OF SOUTHERN PACIFIC RAILROAD, AT THE NW CORNER OF FRENCH ROAD AND GERBER ROAD, SACRAMENTO.						
Detailed Location:	1992 DETECTION IN MANMADE ROADSIDE DITCH SOMEWHERE IN SECTION 2; EXACT LOCATION UNKNOWN. MAPPED TO LOCATIONS OF OCCUPIED BASINS SAMPLED IN 2008 ON "FEENSTRA UNIT 6A" PROPERTY.						
Ecological:	MOST OF THIS SECTION URBANIZED. DETECTIONS FROM DITCHES ALONGSIDE ROAD, RAILROAD TRACKS. SURROUNDING LAND AGRICULTURAL, FALLOW, AND URBANIZED.						
General:	DETECTED IN 1992 (SUGNET RECORD #130). ABUNDANCE HIGH IN DITCH DD1B, MEDIUM IN DD1C, FEB-MAR 2008. CYSTS FOUND IN 3 OF 9 BASINS (DD1A, DD1B, DD1C), 14 JUL 2008.						
Owner/Manager:	UNKNOWN						
Occurrence No.	114	Map Index:	37071	EO Index:	32068	Element Last Seen:	1998-04-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1998-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-03-15
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45613 / -121.41327				Accuracy:	nonspecific area	
UTM:	Zone-10 N4257618 E638447				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 15 (M)				Acres:	161.6	
Location:	INTERSECTION OF COSUMNES RIVER COLLEGE BOULEVARD AND HIGHWAY 99, SOUTH OF SACRAMENTO.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF BOTH NATURAL AND MAN-MADE VERNAL POOLS.						
General:	ONE POND SURVEYED. LEPIDURUS PACKARDI DETECTED ON 10 FEB 1993. DRY/WET SEASON SAMPLING CONDUCTED JAN-APR 1998 OF A CREATED VERNAL POOL AND A CONTROL SITE; 4 INDIVIDUALS FOUND.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	170	Map Index:	48478	EO Index:	48494	Element Last Seen:	2002-04-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2002-04-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-08-08
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.44536 / -121.67336				Accuracy:	specific area	
UTM:	Zone-10 N4256063 E615769				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, SW (M)				Acres:	20.9	
Location:	3 MILES NE OF YOLANO, ABOUT 1 TO 1.2 MILES SW ALONG THE SACRAMENTO NORTHERN ELECTRIC RAILROAD GRADE FROM ROAD 38.						
Detailed Location:	SITE NUMBERS 52-10D, 52-10F, 52-25, 52-10E, 52-10, 52-10A, 52-10B AND 52-10C.						
Ecological:	HABITAT CONSISTS OF 8 POOLS IN A VERNAL POOL COMPLEX LOCATED PRIMARILY AROUND DITCHES AND THE EDGES OF BERMS. NATURAL TOPOGRAPHY IS MOSTLY ABSENT. BRANCHINECTA LYNCHI, BRANCHINECTA MESOVALLENSIS & LINDERIELLA OCCIDENTALIS ALSO IN VICINITY.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED ON 11 & 23 JAN 2002; 5, 6 & 20 FEB 2002; 4 & 19 MAR 2002 AND 2 APR 2002. ON 4 MAR 2002 AND 20 FEB 2002 INDIVIDUALS OBSERVED DEAD. CARAPACE OBSERVED ON 4 MAR 2002.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	171	Map Index:	48495	EO Index:	48495	Element Last Seen:	2003-04-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2003-04-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-11-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45729 / -121.66652				Accuracy:	specific area	
UTM:	Zone-10 N4257396 E616347				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NE (M)				Acres:	66.8	
Location:	0.5 MI SW OF SAXON; 100 TO 400' SW ALONG SACRAMENTO NORTHERN ELECTRIC RR GRADE FROM RD 38, & IN POOLS TO WEST OF TRACKS.						
Detailed Location:	SITE NUMBERS 53-01A AND 53-07. 1 POOL ON EACH SIDE OF RAILROAD GRADE, AND SEVERAL POOLS ON WEST SIDE OF TRACKS.						
Ecological:	POOLS ALONG RR-2 ARTIFICIALLY CREATED POOLS (BORROW PITS) THAT SEASONALLY POND RAINWATER. POOL ON W SIDE IS DEEP, TURBID & LONG-LASTING, TADPOLE SHRIMP ARE EXTREMELY ABUNDANT. LINDERIELLA OCCIDENTALIS & CYZICUS CALIFORNICUS ALSO PRESENT.						
General:	UNKNOWN NUMBER OBS ON 5, 20 FEB 2002; 4, 19 MAR 2002 & 2 APR 2002. >50 OBS JAN/FEB 2003, AND "LOTS" ON 7 APR 2003. INDIVIDUALS COLLECTED FOR CAS NOT YET ACCESSIONED. SURROUNDING AREA USED FOR GRAZING CATTLE.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	182	Map Index:	93165	EO Index:	54521	Element Last Seen:	2008-03-14
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2008-03-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-15
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43638 / -121.67017				Accuracy:	specific area	
UTM:	Zone-10 N4255071 E616062				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20, SW (M)				Acres:	28.0	
Location:	GLIDE TULE ELK RESERVE, YOLO BYPASS, 1.3 MILES EAST OF INTERSECTION OF THOMSEN ROAD AND ROAD 104, 8 MILES EAST OF DIXON.						
Detailed Location:	MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS.						
Ecological:	TURBID PLAYA POOL (NORTH POLYGON); SURROUNDING AREA GRAZED BY CATTLE. BRANCHINECTA CONSERVATIO AND CYZICUS CALIFORNICUS ALSO FOUND AT THIS SITE.						
General:	ABUNDANT IN 3 POOLS, 7 APR 2003. ABUNDANT IN PLAYA POOL ON 14 MAR 2008.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	272	Map Index:	82005	EO Index:	82981	Element Last Seen:	2009-03-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-03-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-22
Quad Summary:	Bruceville (3812134), Florin (3812144), Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.37933 / -121.49717				Accuracy:	specific area	
UTM:	Zone-10 N4248973 E631264				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 12, SW (M)				Acres:	63.0	
Location:	1.25 MI WNW HOOD FRANKLIN RD AT I-5, 1.3 MI NE HOOD PO.						
Detailed Location:	BY STONE LAKES NATIONAL WILDLIFE REFUGE. LAND USED FOR CATTLE GRAZING. POOL ID: 30, 32, 37 & 65. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	VERNAL POOL GRASSLAND DOMINATED BY HORDEUM MARINUM SSP. GUSSONEANUM, LOLIUM MULTIFLORUM, PLAGIOBOTHRYIS STIPITATUS & LASTHENIA GLABERRIMA. HISTORICAL GRADING CAUSED POOLS TO BE POORLY DEFINED & SHALLOW. DEEPEST POOLS OCCUR BY BERMS & ROADS.						
General:	10S OF BREEDING ADULTS OBSERVED AT 4 POOLS ON 6 AND 10 MAR 2009; 1 SPECIMEN COLLECTED BY E. PIMENTEL ET AL. (CAS-IZ #184098) ON 10 MAR 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	273	Map Index:	82006	EO Index:	82983	Element Last Seen:	2009-03-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-03-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-03-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39768 / -121.48731				Accuracy:	specific area	
UTM:	Zone-10 N4251023 E632092				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 01, SE (M)				Acres:	14.0	
Location:	0.75 MI SSW ELK GROVE BLVD AT I-5, 2.7 MI NE HOOD PO.						
Detailed Location:	BY STONE LAKES NATIONAL WILDLIFE REFUGE. LAND USED FOR CATTLE GRAZING. POOL ID: 33 & 75. MAPPED TO PROVIDED SHAPEFILE.						
Ecological:	VERNAL POOL GRASSLAND DOMINATED BY HORDEUM MARINUM SSP. GUSSONEANUM, LOLIUM MULTIFLORUM, PLAGIOBOTHRYIS STIPITATUS & LASTHENIA GLABERRIMA. HISTORICAL GRADING CAUSED POOLS TO BE POORLY DEFINED & SHALLOW. DEEPEST POOLS OCCUR BY BERMS & ROADS.						
General:	10S OF BREEDING ADULTS OBSERVED AT 2 POOLS; 1 SPECIMEN COLLECTED BY E. PIMENTEL ET AL. (CAS-IZ #180499) ON 11 MAR 2009.						
Owner/Manager:	DPR						
Occurrence No.	290	Map Index:	83344	EO Index:	84353	Element Last Seen:	2003-02-17
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-02-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-08
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38596 / -121.46416				Accuracy:	80 meters	
UTM:	Zone-10 N4249756 E634136				Elevation (ft):	17	
PLSS:	T06N, R05E, Sec. 07, SE (M)				Acres:	0.0	
Location:	LAGUNA STONELAKE PRESERVE, 1 MI NORTHEAST INTERSECTION OF I-5 AND HOOD-FRANKLIN RD, 0.7 MI NORTHWEST OF FRANKLIN (TOWN).						
Detailed Location:							
Ecological:	HABITAT AT PRESERVE CONSISTS OF SEASONAL WETLANDS AND CONSTRUCTED/EXISTING VERNAL POOLS. SITE IS A WETLAND PRESERVATION AND COMPENSATION AREA. DISTURBANCE DUE TO ATV USE THROUGHOUT PRESERVE, BUT NO EVIDENCE OF EFFECT TO VERNAL POOLS.						
General:	UNKNOWN NUMBER OBSERVED IN A COMPENSATION POOL ON 17 FEB 2003; 1000'S OBSERVED IN A TOTAL OF 6 POOLS AT ENTIRE PRESERVE SITE.						
Owner/Manager:	PVT						



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Occurrence No.	291	Map Index:	83345	EO Index:	84354	Element Last Seen:	2003-02-17
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		2003-02-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-07-08	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.38559 / -121.45617	Accuracy:	specific area
UTM:	Zone-10 N4249727 E634834	Elevation (ft):	17
PLSS:	T06N, R05E, Sec. 08, SW (M)	Acres:	21.0

Location: LAGUNA STONELAKE PRESERVE, JUST WEST OF FRANKLIN BLVD AND 0.4 MILE NORTH OF BILBY ROAD AND THE TOWN OF FRANKLIN.

Detailed Location:

Ecological: HABITAT AT PRESERVE CONSISTS OF SEASONAL WETLANDS AND CONSTRUCTED/EXISTING VERNAL POOLS. SITE IS A WETLAND PRESERVATION AND COMPENSATION AREA. DISTURBANCE DUE TO ATV USE THROUGHOUT PRESERVE, BUT NO EVIDENCE OF EFFECT TO VERNAL POOLS.

General: UNKNOWN NUMBER OF SHRIMP OBSERVED IN 3 COMPENSATION POOLS ON 17 FEB 2003; 1000'S OBSERVED IN A TOTAL OF 6 POOLS AT ENTIRE PRESERVE SITE.

Owner/Manager: PVT

Occurrence No.	299	Map Index:	93188	EO Index:	94328	Element Last Seen:	2002-02-01
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2002-02-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-08-06	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.41169 / -121.45510	Accuracy:	80 meters
UTM:	Zone-10 N4252625 E634880	Elevation (ft):	20
PLSS:	T07N, R05E, Sec. 32, SW (M)	Acres:	0.0

Location: WEST SIDE OF WESTERN PACIFIC (UNION PACIFIC) RAILROAD TRACKS, 0.3 MILE NW OF FRANKLIN BLVD AT ELK GROVE BLVD, ELK GROVE.

Detailed Location: 1993 DETECTION LOCATION GIVEN ONLY AS TRS T7N R5E SEC 32. MAPPED TO POOL LOCATION GIVEN ON 2002 FIELD SURVEY FORM.

Ecological: 2002: SHALLOW (5" DEEP), LINEAR, GRASS-BOTTOMED DEPRESSION ADJACENT TO RAILROAD TRACKS. COPEPODS AND WATER FLEAS PRESENT.

General: FOUND IN 1 OF 4 VERNAL POOLS SAMPLED 4 FEB 1993. 1 ADULT OBSERVED ON 1 FEB 2002; NO AQUATIC SAMPLING CONDUCTED.

Owner/Manager: PVT



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Occurrence No.	300	Map Index:	93191	EO Index:	94331	Element Last Seen:	2007-10-03
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-10-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-31
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47256 / -121.38642				Accuracy:	specific area	
UTM:	Zone-10 N4259482 E640757				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 12, SW (M)				Acres:	17.0	
Location:	FROM THE WEST END OF CASELMAN RD, DUE WEST TO THE WESTERN PACIFIC (=UNION PACIFIC) RAILROAD TRACKS, SACRAMENTO.						
Detailed Location:	MAPPED TO BASINS "DITCH 1" AND "HBC 13" ON DEANE-VINTAGE CREEK I PROPERTY.						
Ecological:	BRANCHINECTA SP. & LINDERIELLA OCCIDENTALIS CYSTS ALSO FOUND HERE.						
General:	LEPIDURUS PACKARDI CYSTS FOUND IN DRY SAMPLES TAKEN 3 OCT 2007.						
Owner/Manager:	PVT						

Occurrence No.	301	Map Index:	93192	EO Index:	94332	Element Last Seen:	2005-10-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-10-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-07-16
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.46719 / -121.38549				Accuracy:	80 meters	
UTM:	Zone-10 N4258887 E640849				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 12, SW (M)				Acres:	0.0	
Location:	EAST SIDE OF WESTERN PACIFIC (UNION PACIFIC) RAILROAD TRACKS, 0.25 MILE SW OF CARLISLE AVE AT SUNNYSIDE WAY, SACRAMENTO.						
Detailed Location:	MAPPED TO BASIN "POND 1,2,3" ON DEANE-VINTAGE CREEK I PROPERTY.						
Ecological:	BRANCHINECTA SP. CYSTS ALSO FOUND.						
General:	LEPIDURUS PACKARDI CYSTS FOUND IN DRY SAMPLE TAKEN 15 OCT 2005.						
Owner/Manager:	PVT						



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Desmocerus californicus dimorphus

Element Code: IICOL48011

valley elderberry longhorn beetle

Listing Status: **Federal:** Threatened

CNDDDB Element Ranks: **Global:** G3T2

State: None

State: S2

Other:

Habitat: **General:** OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

Micro: PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Occurrence No. 53 **Map Index:** 11480 **EO Index:** 22715 **Element Last Seen:** 1987-04-23
Occ. Rank: Poor **Presence:** Presumed Extant **Site Last Seen:** 1987-04-23
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 1998-07-15

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long: 38.30601 / -121.38690 **Accuracy:** 1/5 mile
UTM: Zone-10 N4240999 E641039 **Elevation (ft):** 20
PLSS: T05N, R05E, Sec. 01, SW (M) **Acres:** 0.0

Location: ONETO TRACT, 2.25 MI E OF FRANKLIN FIELD, ALONG COSUMNES RIVER.

Detailed Location: FIVE STANDS SURVEYED: THREE ALONG THE MAIN CHANNEL OF THE RIVER AND TWO ALONG AN UNNAMED SLOUGH.

Ecological:

General: STAND #2301 WITH 2 YEAR OLD EXIT HOLES.

Owner/Manager: PVT

Anthicus sacramento

Element Code: IICOL49010

Sacramento anthicid beetle

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G1

State: None

State: S1

Other: IUCN_EN-Endangered

Habitat: **General:** RESTRICTED TO SAND DUNE AREAS.

Micro: INHABIT SAND SLIPFACES AMONG BAMBOO AND WILLOW BUT MAY NOT DEPEND ON PRESENCE OF THESE PLANT SPECIES.



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Occurrence No.	1	Map Index:	10897	EO Index:	12141	Element Last Seen:	1977-06-27
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1977-06-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-10-05
Quad Summary:	Isleton (3812125), Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17458 / -121.63030				Accuracy:	1 mile	
UTM:	Zone-10 N4226072 E619972				Elevation (ft):	15	
PLSS:	T04N, R03E, Sec. 22 (M)				Acres:	0.0	
Location:	WEST END OF GRAND ISLAND, 1 MI W OF ISLETON.						
Detailed Location:							
Ecological:							
General:	TYPE LOCALITY; TYPE SPECIMEN DEPOSITED AT CAS. 2 PARATYPES AND ONE NON-TYPE SPECIMEN DEPOSITED IN THE CALIFORNIA STATE COLLECTION OF ARTHROPODS (CDFA).						
Owner/Manager:	UNKNOWN						

Occurrence No.	2	Map Index:	10835	EO Index:	14460	Element Last Seen:	1974-08-21
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1979-09-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1989-08-11
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.13510 / -121.69802				Accuracy:	specific area	
UTM:	Zone-10 N4221605 E614102				Elevation (ft):	30	
PLSS:	T03N, R02E, Sec. 01 (M)				Acres:	164.9	
Location:	SAND DUNE AREA IMMEDIATELY S OF RIO VISTA.						
Detailed Location:							
Ecological:	SAND IS DREDGE SPOIL.						
General:	21 PARATYPES COLLECTED IN SAND DUNE AREA.						
Owner/Manager:	UNKNOWN						

Occurrence No.	3	Map Index:	57250	EO Index:	57325	Element Last Seen:	2004-05-30
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-06-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-10-08
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.18273 / -121.68784				Accuracy:	3/5 mile	
UTM:	Zone-10 N4226904 E614919				Elevation (ft):	20	
PLSS:	T04N, R03E, Sec. 19 (M)				Acres:	0.0	
Location:	DREDGE DISPOSAL SITE ABOUT 0.5 MI INLAND FROM THE SACRAMENTO RIVER AT RM 13.8. JUST NORTH OF RIO VISTA AIRPORT.						
Detailed Location:							
Ecological:	DREDGED MATERIAL DISPOSAL SITE.						
General:	3 ADULTS COLLECTED IN 12 PITFALL TRAPS ON 30 MAY 1987, NONE COLLECTED IN 9 TRAPS ON 13 JUN 1987.						
Owner/Manager:	STATE (RECLAMATION BOARD)						



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Anthicus antiochensis

Element Code: IICOL49020

Antioch Dunes anthicid beetle

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G1

State: None

State: S1

Other:

Habitat: **General:** EXTIRPATED FROM ANTIOCH DUNES BUT PRESENT IN SEVERAL LOCALITIES ALONG THE SACRAMENTO AND FEATHER RIVERS.

Micro: ☐

Occurrence No.	2	Map Index:	57250	EO Index:	57266	Element Last Seen:	1987-06-13
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			1987-06-13
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2004-10-08

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long: 38.18273 / -121.68784 **Accuracy:** 3/5 mile

UTM: Zone-10 N4226904 E614919 **Elevation (ft):** 20

PLSS: T04N, R03E, Sec. 19 (M) **Acres:** 0.0

Location: DREDGE DISPOSAL SITE ABOUT 0.5 MI INLAND FROM THE SACRAMENTO RIVER AT RM 13.8. JUST NORTH OF RIO VISTA AIRPORT.

Detailed Location:

Ecological: DREDGED MATERIAL DISPOSAL SITE.

General: COLLECTED IN PITFALL TRAPS. 23 ADULTS COLLECTED 30 MAY 1987 IN 12 TRAPS, 83 COLLECTED 13 JUN 1987 IN 9 TRAPS.

Owner/Manager: STATE (RECLAMATION BOARD)



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Hydrochara rickseckeri

Element Code: IICOL5V010

Ricksecker's water scavenger beetle

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2?

State: None

State: S2?

Other:

Habitat: **General:** AQUATIC.

Micro: ☐

Occurrence No.	7	Map Index:	60710	EO Index:	60746	Element Last Seen:	2005-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			2005-XX-XX
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2005-03-29

Quad Summary: Bruceville (3812134)

County Summary: Sacramento, San Joaquin

Lat/Long:	38.26352 / -121.43266	Accuracy:	3/5 mile
UTM:	Zone-10 N4236215 E637117	Elevation (ft):	10
PLSS:	T05N, R05E, Sec. 21 (M)	Acres:	0.0

Location: COSUMNES RIVER PRESERVE.

Detailed Location: SPECIES HAS BEEN TAKEN IN VARIOUS AREAS OF THE PRESERVE.

Ecological:

General: AN UNKNOWN NUMBER OF LARVA(E) COLLECTED BY BUREAU OF RECLAMATION STAFF; PHOTO OF LARVA SENT TO UC DAVIS ENTOMOLOGY MUSEUM AND IDENTIFIED BY D. CHRISTOPHER ROGERS DURING A VISIT THERE.

Owner/Manager: TNC-COSUMNES RIVER PRESERVE



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Bombus crotchii

Element Code: IIHYM24480

Crotch bumble bee

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G3G4

State: Candidate Endangered

State: S1S2

Other:

Habitat: **General:** COASTAL CALIFORNIA EAST TO THE SIERRA-CASCADE CREST AND SOUTH INTO MEXICO.

Micro: FOOD PLANT GENERA INCLUDE ANTIRRHINUM, PHACELIA, CLARKIA, DENDROMECON, ESCHSCHOLZIA, AND ERIOGONUM.

Occurrence No.	274	Map Index:	B5208	EO Index:	118155	Element Last Seen:	2007-05-26
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:			2007-05-26
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2020-03-02

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.30078 / -121.38005	Accuracy:	1/5 mile
UTM:	Zone-10 N4240430 E641649	Elevation (ft):	21
PLSS:	T05N, R05E, Sec. 12, NE (M)	Acres:	70.0

Location: E SIDE COSUMNES RIVER NEAR RIVER MILE 6, ABOUT 0.6 MILES N OF WHERE TWIN CITIES RD CROSSES THE RIVER, 5 MILES NW OF GALT

Detailed Location: APPEARS TO BE AT THE TNC COSUMNES RIVER PRESERVE. DETECTED AT STUDY SITE COSUMNES/TWIN CITIES RD (CRTC). MAPPED WITH RESPECT TO STUDY DESIGN AND PROVIDED COORDINATES FOR STUDY PLOT.

Ecological: SAMPLING SITE WAS A MIX OF RIPARIAN, SEMI-NATURAL LANDSCAPE, AND AGRICULTURE. NETTED ON NON-NATIVE CICHORIUM INTYBUS (COMMON CHICORY).

General: ONE NETTED ON 26 MAY 2007 AND DEPOSITED IN THE PRIVATE COLLECTION OF B. LOVE AT THE USDA BEE LAB IN LOGAN, UT.

Owner/Manager: TNC-COSUMNES RIVER PRESERVE



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Cicuta maculata var. bolanderi

Element Code: PDAPI0M051

Bolander's water-hemlock

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G5T4T5

State: None

State: S2?

Other: Rare Plant Rank - 2B.1

Habitat: **General:** MARSHES AND SWAMPS.

Micro: IN FRESH OR BRACKISH WATER. 0-20 M.

Occurrence No. 16 **Map Index:** 83772 **EO Index:** 84800 **Element Last Seen:** 1993-07-03

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1993-07-03

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2011-09-26

Quad Summary: Thornton (3812124), Isleton (3812125), Bruceville (3812134), Courtland (3812135)

County Summary: Sacramento

Lat/Long: 38.26295 / -121.49892 **Accuracy:** 1 mile

UTM: Zone-10 N4236056 E631321 **Elevation (ft):** 0

PLSS: T05N, R04E, Sec. 24 (M) **Acres:** 0.0

Location: DELTA MEADOWS RIVER PARK.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN GENERAL VICINITY OF DELTA MEADOWS.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1993 BOWCUTT COLLECTION CITED IN A 1996 AREA CHECKLIST FOR DELTA MEADOWS RIVER PARK. NEEDS FIELDWORK.

Owner/Manager: DPR-DELTA MEADOWS RIVER PARK



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Eryngium jepsonii

Element Code: PDAPI0Z130

Jepson's coyote-thistle

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2

State: None

State: S2

Other: Rare Plant Rank - 1B.2

Habitat: **General:** VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND.

Micro: CLAY. 3-305 M.

Occurrence No. 8 **Map Index:** A2113 **EO Index:** 103682 **Element Last Seen:** 2002-04-30

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2002-04-30

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2016-10-14

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.42468 / -121.66249 **Accuracy:** 2/5 mile

UTM: Zone-10 N4253783 E616751 **Elevation (ft):** 10

PLSS: T07N, R03E, Sec. 29 (M) **Acres:** 280.0

Location: GLIDE-TULE RANCH, 2.5 MILES SSE OF INTERSECTION OF ROAD 105 AND ROAD 38, YOLO COUNTY.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB ABOUT 2.5 MILES SSE OF GIVEN INTERSECTION BASED ON 2002 SOLOMESHCH COLLECTION.

Ecological: FLAT PLAIN GRASSLAND ON VERTISOLS. ASSOCIATES INCLUDE LOLIUM MULTIFLORUM, HEMIZONIA CONGESTA, HESPEREVAX CAULESCENS, TRIFOLIUM WILDENOVII, LOTUS WRANGELIANUS, AND LASTHENIA GLABRATA.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2002 SOLOMESHCH COLLECTION. NEEDS FIELDWORK.

Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No. 9 **Map Index:** A2114 **EO Index:** 103683 **Element Last Seen:** 2007-04-20

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2007-04-20

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2016-10-06

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.43944 / -121.67361 **Accuracy:** 1/10 mile

UTM: Zone-10 N4255407 E615758 **Elevation (ft):** 20

PLSS: T07N, R03E, Sec. 20, NW (M) **Acres:** 18.0

Location: GLIDE-TULE RANCH, 7.6 MILES SOUTH OF DAVIS.

Detailed Location: MAPPED BY CNDDDB FROM 2007 PRESTON COORDINATES IN THE SW 1/4 OF THE NW 1/4 OF SECTION 20. SOURCE AND ACCURACY OF COORDINATES IS UNKNOWN.

Ecological: ANNUAL GRASSLAND, WITH LOLIUM MULTIFLORUM, HORDEUM MARINUM, TRIFOLIUM MICRODON, LUPINUS MICROCARPUS, AND SIDALCEA SP.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2007 PRESTON COLLECTION. NEEDS FIELDWORK.

Owner/Manager: DFG-YOLO BYPASS WA

Lilaeopsis masonii

Element Code: PDAPI19030

Mason's lilaeopsis

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2

State: Rare

State: S2

Other: Rare Plant Rank - 1B.1

Habitat: **General:** MARSHES AND SWAMPS, RIPARIAN SCRUB.



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Micro: TIDAL ZONES, IN MUDDY OR SILTY SOIL FORMED THROUGH RIVER DEPOSITION OR RIVER BANK EROSION. IN BRACKISH OR FRESHWATER. 0-10 M.

Occurrence No.	23	Map Index:	66758	EO Index:	7763	Element Last Seen:	2009-09-03
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-09-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-11-23	

Quad Summary: Rio Vista (3812126)

County Summary: Sacramento

Lat/Long:	38.13233 / -121.68674	Accuracy:	specific area
UTM:	Zone-10 N4221312 E615095	Elevation (ft):	10
PLSS:	T03N, R03E, Sec. 06 (M)	Acres:	6.0

Location: ABOUT 2.0 MILES SOUTH OF RIO VISTA, EAST SIDE SACRAMENTO RIVER NEAR GAS WELLS ALONG HWY 160.

Detailed Location: 1.5 MI SOUTH OF RIO VISTA BRIDGE ON WEST SIDE OF BRANNON ISLAND. IN VICINITY & SOUTH OF PULLOUT. MAPPED BY CNDDB AS 2 POLYS; NORTH POLY MAPPED NEAR GAS WELLS AND PULLOUT TO ENCOMPASS 1980 & 1986 INFO, SOUTH POLY MAPPED ACC TO 2010 DWR DATA.

Ecological: NORTH POLYGON: SAND AND SILT WITH SIGNIFICANT ORGANIC MATTER CONTENT. ASSOCIATED WITH SCIRPUS ACUTUS, CYPERUS ERAGROSTIS, POLYGONUM, RUMEX, AND VERBENA BONARIENSIS. SOUTH POLYGON: ON LOG AND PILINGS.

General: NORTH POLYGON: PLANTS OBSERVED NEAR GAS WELLS IN 1980, 2 CLUMPS OF 1 FT X 1/2 FT OBSERVED IN 1986, 5 CLUMPS TOTALING APPROXIMATELY 75 SQ METERS OBSERVED IN 1990. SOUTH POLYGON: OBSERVED IN 2009.

Owner/Manager: PVT, DFG

Occurrence No.	25	Map Index:	22576	EO Index:	16464	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1988-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1995-12-15	

Quad Summary: Liberty Island (3812136)

County Summary: Solano

Lat/Long:	38.29490 / -121.74154	Accuracy:	specific area
UTM:	Zone-10 N4239284 E610047	Elevation (ft):	10
PLSS:	T05N, R02E, Sec. 10, N (M)	Acres:	91.3

Location: CACHE SLOUGH, FROM PUMPING STATIONS DOWNSTREAM 1 MILE TOWARDS SE TIP OF PETERS POCKET.

Detailed Location:

Ecological: IN SPLASH ZONE ALONG THE EAST BANK OF BARKER SLOUGH.

General: 15 CLUSTERS OF THE PLANT OBSERVED IN 1984; BASED ON NON-FLOWERING SPECIMEN, BUT VERIFIED BY LINCOLN CONSTANCE. 1988 SURVEYS REVEALED MUCH LARGER POPULATION.

Owner/Manager: PVT



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Occurrence No.	26	Map Index:	10908	EO Index:	19975	Element Last Seen:	2009-09-17
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-16
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.18172 / -121.65690			Accuracy:	specific area		
UTM:	Zone-10 N4226830 E617630			Elevation (ft):	0		
PLSS:	T04N, R03E, Sec. 21, NW (M)			Acres:	1.0		
Location:	NEAR CONFLUENCE OF STEAMBOAT SLOUGH WITH SACRAMENTO RIVER ON NORTH BANK OF GRAND ISLAND.						
Detailed Location:	NEAR MILE MARKER 15. MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	IN 1985 HABITAT DESCRIBED AS "TIDALLY INUNDATED FRESHWATER MARSH BORDERING SLOUGH ON SOD FORMED BY VERBENA HASTATA". IN 2009, HABITAT WAS DESCRIBED AS "EXPOSED LOG AT WATER'S EDGE WITH JUNCUS EFFUSUS".						
General:	ABOUT 100 PLANTS OBSERVED IN 1985. AREA SEARCHED IN 1990 BUT NO PLANTS FOUND. A SMALL DENSE PATCH (2 X 2 FEET) WAS REPORTED IN 2009. PLANTS REPORTED FROM STEAMBOAT SLOUGH IN 1995 ARE ALSO ATTRIBUTED TO THIS SITE (ZEBELL AND FIEDLER, 1996).						
Owner/Manager:	DOD-COE						

Occurrence No.	27	Map Index:	80802	EO Index:	9610	Element Last Seen:	2009-10-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-10-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-16
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.23270 / -121.67076			Accuracy:	specific area		
UTM:	Zone-10 N4232470 E616335			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 32, W (M)			Acres:	22.0		
Location:	CONFLUENCE OF MINER SLOUGH AND CACHE SLOUGH, SOUTH OF LIBERTY ISLAND.						
Detailed Location:	MAPPED BY CNDDDB AS 5 POLYGONS TO ECOMPASS INFORMATION FROM A 1988 ECOS, INC REPORT, A 1991 GOLDEN & FIELDER REPORT, AND 2010 DWR DIGITAL DATA.						
Ecological:	SOUTH-FACING BANKS OF TULE ISLANDS, INUNDATED AT HIGH TIDE AND EXPOSED AT LOW TIDE. ASSOCIATED WITH LIMOSELLA SUBULATA, HYDROCOTYLE VERTICILLATA VAR. TRIRADIATA, SCIRPUS CALIFORNICUS, JUNCUS BALTICUS, VERBENA BONARIENSIS, ETC.						
General:	10,000+ PLANTS OBS IN 1985 ON SEVERAL TULE ISLANDS NEAR CONFLUENCE OF MINER SLOUGH AND CACHE SLOUGH. SEEN IN AREA IN 1988 & 1990. SMALL PATCHES OBSERVED IN 2009. PLANTS ALSO REPORTED IN VICINITY IN 1995 (ZEBELL AND FIEDLER, 1996).						
Owner/Manager:	DFG-MINER SLOUGH WA						



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Occurrence No.	39	Map Index:	10853	EO Index:	14347	Element Last Seen:	1990-08-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-08-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-10-17
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.13975 / -121.68650			Accuracy:	80 meters		
UTM:	Zone-10 N4222136 E615104			Elevation (ft):	10		
PLSS:	T04N, R03E, Sec. 31, S (M)			Acres:	0.0		
Location:	ALONG HWY 160 APPROXIMATELY 1 MI S OF THE RIO VISTA BRIDGE. WEST EDGE OF BRANNAN ISLAND ALONG THE SACRAMENTO RIVER.						
Detailed Location:	JUST SOUTH OF THE R.V. PARK. POPULATION ENDS WHERE RIPRAP BEINGS AT THE SOUTHERN AND NORTHERN ENDS OF THE BEACH.						
Ecological:	ON SAND AND CLAY WITH HIGH ORGANIC MATTER CONTENT. ALONG THE BEACH BETWEEN OLD PILINGS AND THE LEVEE.						
General:	SEVERAL DENSE POPULATIONS EXTENDING OVER 80 METERS OBSERVED IN 1990.						
Owner/Manager:	UNKNOWN						
Occurrence No.	40	Map Index:	10848	EO Index:	19967	Element Last Seen:	1988-05-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1988-05-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24438 / -121.69462			Accuracy:	specific area		
UTM:	Zone-10 N4233736 E614229			Elevation (ft):	5		
PLSS:	T05N, R03E, Sec. 30, SW (M)			Acres:	10.0		
Location:	LINDSEY SLOUGH; NEAR ITS CONFLUENCE WITH CACHE SLOUGH, SOUTH END OF LITTLE HASTINGS TRACT.						
Detailed Location:							
Ecological:	ON CLAY BANKS SUBJECT TO TIDALLY-MEDIATED FRESHWATER INUNDATION.						
General:	MANY PLANTS OBSERVED IN 1988.						
Owner/Manager:	UNKNOWN						
Occurrence No.	41	Map Index:	11266	EO Index:	22269	Element Last Seen:	1987-09-02
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	1987-09-02
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	1994-02-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16608 / -121.49209			Accuracy:	80 meters		
UTM:	Zone-10 N4225316 E632095			Elevation (ft):	10		
PLSS:	T04N, R04E, Sec. 25, E (M)			Acres:	0.0		
Location:	MOUTH OF HOG SLOUGH AT CONFLUENCE WITH SOUTH FORK MOKELUMNE RIVER.						
Detailed Location:							
Ecological:							
General:	ABOUT 50 PLANTS SEEN ON AN ISLAND IN 1987. POOR SITE QUALITY DUE TO EROSION.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	51	Map Index:	11223	EO Index:	11878	Element Last Seen:	2009-08-03
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-24
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.14591 / -121.51054			Accuracy:	specific area		
UTM:	Zone-10 N4223052 E630513			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 35, SE (M)			Acres:	7.0		
Location:	SOUTH MOKELUMNE RIVER; ISLAND IN OXBOW OF RIVER JUST NORTH OF JUNCTION OF SOUTH MOKELUMNE RIVER AND SYCAMORE SLOUGH.						
Detailed Location:	MAPPED BY CNDDDB AS 2 POLYGONS BASED ON A 1987 DAINS MAP AND 2010 DWR DIGITAL DATA.						
Ecological:	ON EXPOSED LOGS AND TIDAL MUD FLATS. PLANTS OCCUR WITH CRASSULA AQUATICA, LIMOSELLA SUBULATA, ELEOCHARIS ACICULARIS, IN SHADE OF JUNCUS EFFUSUS, SALIX LASIOLEPIS AND CEPHALANTHUS OCCIDENTALIS.						
General:	OBSERVED ON WEST END OF INSTREAM ISLAND IN 1987. SMALL, SPARSE PATCHES OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	69	Map Index:	21627	EO Index:	14257	Element Last Seen:	1995-07-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1995-07-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1997-02-14
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16117 / -121.67378			Accuracy:	nonspecific area		
UTM:	Zone-10 N4224528 E616185			Elevation (ft):	13		
PLSS:	T04N, R03E, Sec. 29, SW (M)			Acres:	8.9		
Location:	BRANNAN ISLAND, 0.5 MILE NORTH OF RIO VISTA BRIDGE ALONG STATE ROUTE 160.						
Detailed Location:							
Ecological:	GROWING AT THE INUNDATION LINE IN SUBSTRATE OF SEDIMENTS AND FINES WHICH HAVE BEEN DEPOSITED AMONG SUBSIDED RIPRAP. ASSOCIATES INCLUDE SCIRPUS CALIFORNICUS, MIMULUS SP., JUNCUS SP., VERBENA BONARIENSIS, AND SYMPHYOTRICHUM LENTUM.						
General:	MAIN SOURCE OF INFORMATION FOR THIS SITE IS 1990 OBSERVATION BY MCKEE. PLANTS ALSO REPORTED IN THIS VICINITY IN 1995 (ZEBELL ET AL. 1996). MANAGED BY THE BRANNAN-ANDRUS LEVEE DISTRICT.						
Owner/Manager:	PVT, BRANNON-ANDRUS LEVEE DIST						



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Occurrence No.	71	Map Index:	21935	EO Index:	12005	Element Last Seen:	1995-09-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1995-09-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26344 / -121.49866				Accuracy:	80 meters	
UTM:	Zone-10 N4236110 E631344				Elevation (ft):	15	
PLSS:	T05N, R04E, Sec. 24, SW (M)				Acres:	0.0	
Location:	SNODGRASS SLOUGH AT THE MEADOWS, 0.9 AIR MILE SOUTH OF TWIN CITIES ROAD EAST OF THE RAILROAD TRACKS.						
Detailed Location:	DELTA MEADOWS STATE PARK AT THE NORTH END OF THE LEVEE THAT RUNS NORTHEAST FROM THE TOWN OF LOCKE.						
Ecological:							
General:	POPULATION COVERED AN AREA OF APPROXIMATELY 25 SQ. FEET IN 1990. PLANTS ALSO REPORTED IN THIS VICINITY IN 1995 (ZEBELL AND FIEDLER, 1996).						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						

Occurrence No.	72	Map Index:	22575	EO Index:	16465	Element Last Seen:	2005-08-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-06
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31249 / -121.73734				Accuracy:	specific area	
UTM:	Zone-10 N4241241 E610387				Elevation (ft):	10	
PLSS:	T05N, R02E, Sec. 03, NE (M)				Acres:	56.5	
Location:	ALONG HASS SLOUGH, FROM DUCK SLOUGH NORTHWEST APPROXIMATELY 1 MILE.						
Detailed Location:	ALSO INTO THE SOUTH 1/2 OF PROJECTED SECTION 34.						
Ecological:	GROWING ON LEVEE BANKS AND ISLANDS. ASSOCIATED WITH SCHOENOPLECTUS ACUTUS, POLYGONUM PUNCTATUM, SCIRPUS CALIFORNICUS, RUBUS DISCOLOR, LYCOPUS AMERICANUS, QUERCUS LOBATA, ROSA CALIFORNICA, SALIX EXIGUA, SALIX LASIOLEPIS, ETC.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED IN 1988. 1 PATCH (8" X8") OBSERVED AT NORTHWESTERN EDGE OF SITE IN 2005.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	73	Map Index:	22577	EO Index:	16579	Element Last Seen:	2005-08-24
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-11-30
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.29046 / -121.72392				Accuracy:	specific area	
UTM:	Zone-10 N4238813 E611594				Elevation (ft):	10	
PLSS:	T05N, R02E, Sec. 11, SW (M)				Acres:	10.1	
Location:	AT THE SOUTHEAST TIP OF PETERS POCKET, AT CONFLUENCE OF CACHE SLOUGH AND HASS SLOUGH.						
Detailed Location:	2 CNDDB POLYGONS: (1) ON THE VERY SE CORNER OF PETERS POCKET, (2) THE ERODING BASE OF THE OUTBOARD SIDE OF A LEVEE, ON THE EASTERN EDGE OF CACHE SLOUGH/HASS SLOUGH.						
Ecological:	LEVEE EDGE, FOUND WITH SALIX LUCIDA, MENTHA ARVENSIS, AND ALNUS RHOMBIFOLIA.						
General:	1988 MAP DETAIL IS ONLY SOURCE OF INFORMATION FOR COLONY (1). 1 PATCH SEEN AT COLONY (2) IN 2005.						
Owner/Manager:	PVT						

Occurrence No.	83	Map Index:	23237	EO Index:	22585	Element Last Seen:	1992-07-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1992-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-01
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.15735 / -121.53594				Accuracy:	80 meters	
UTM:	Zone-10 N4224286 E628268				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 34, NW (M)				Acres:	0.0	
Location:	ISLAND IN NORTH MOKELUMNE RIVER, APPROX. 6 KM (3.6 MI) DUE EAST OF ISLETON.						
Detailed Location:	ALONG SOUTHWEST SHORELINE OF ERODING ISLAND.						
Ecological:	SOILS APPEAR TO BE PEAT AND CLAY. FOUND GROWING IN ASSOCIATION WITH TULES AND SEDGES AT THE WATERLINE.						
General:	APPROX. 100 PLANTS SEEN IN 1992. ACCORDING TO CLEMONS, EROSION APPEARS TO BE OCCURRING AT A RAPID RATE BASED UPON COMPARISON WITH AERIAL PHOTOGRAPHS OF THE SITE FROM 1940-1977.						
Owner/Manager:	PVT						

Occurrence No.	159	Map Index:	46370	EO Index:	46370	Element Last Seen:	2000-04-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-04-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2001-11-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20460 / -121.44355				Accuracy:	80 meters	
UTM:	Zone-10 N4229661 E636275				Elevation (ft):	5	
PLSS:	T04N, R05E, Sec. 09, SW (M)				Acres:	0.0	
Location:	NORTH SIDE OF BEAVER SLOUGH ALONG THE SOUTH BORDER OF NEW HOPE TRACT, 2 AIR MILES SOUTHWEST OF THORNTON.						
Detailed Location:	ON NORTH EDGE OF SLOUGH.						
Ecological:	NEAR THE BASE OF A DISTURBED LEVEE.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2000.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	219	Map Index:	80864	EO Index:	81807	Element Last Seen:	2009-09-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-29
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.22748 / -121.49638				Accuracy:	specific area	
UTM:	Zone-10 N4232124 E631607				Elevation (ft):	15	
PLSS:	T04N, R04E, Sec. 01, N (M)				Acres:	3.0	
Location:	NORTH MOKELUMNE RIVER BETWEEN DEAD HORSE ISLAND AND STATEN ISLAND.						
Detailed Location:	MAPPED BY CNDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	EXPOSED TIDAL MUD FLAT AND LOGS AT WATER'S EDGE WITH JUNCUS EFFUSUS. IN SHADE OF ALDER.						
General:	SPARSE TO DENSE PATCHES OBSERVED IN 2009.						
Owner/Manager:	TNC, UNKNOWN						

Occurrence No.	220	Map Index:	80865	EO Index:	81808	Element Last Seen:	2009-09-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-29
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17562 / -121.65640				Accuracy:	specific area	
UTM:	Zone-10 N4226153 E617684				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 21, SW (M)				Acres:	6.0	
Location:	ALONG THE SACRAMENTO RIVER BETWEEN GRAND ISLAND AND BRANNAN ISLAND.						
Detailed Location:	MAPPED BY CNDDB AS 4 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA IN THE SW 1/4 OF SECTION 21 AND THE SE 1/4 OF SECTION 20.						
Ecological:	EXPOSED TIDAL MUD FLAT WITH SCIRPUS, HYDROCOTYLE, POLYGONUM, AND JUNCUS EFFUSUS.						
General:	MANY DENSE TO SCATTERED PATCHES OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	221	Map Index:	80866	EO Index:	81809	Element Last Seen:	2009-09-17
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-29
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.20827 / -121.65608				Accuracy:	specific area	
UTM:	Zone-10 N4229777 E617659				Elevation (ft):	10	
PLSS:	T04N, R03E, Sec. 09, NW (M)				Acres:	1.0	
Location:	NEAR THE JUNCTION OF CACHE SLOUGH AND ELKHORN SLOUGH, SW SIDE OF RYER ISLAND.						
Detailed Location:	NEAR PUMPING STATION IN THE SW 1/4 OF THE NW 1/4 OF SECTION 9.						
Ecological:	BOAT WRECKAGE.						
General:	A DENSE 4 X 4 FT PATCH OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	222	Map Index:	80868	EO Index:	81810	Element Last Seen:	2009-09-04
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-09-04	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-11-29	

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long:	38.24639 / -121.67207	Accuracy:	specific area
UTM:	Zone-10 N4233986 E616199	Elevation (ft):	10
PLSS:	T05N, R03E, Sec. 29, SW (M)	Acres:	1.0

Location: BETWEEN THE SACRAMENTO RIVER DEEP WATER SHIP CHANNEL AND PROSPECT SLOUGH, ABOUT 0.8 AIR MILE NE OF LIBERTY ISLAND FERRY.

Detailed Location:

Ecological: EXPOSED TIDAL MUD FLAT AND SAND BANK WITH CYPERUS ERAGROSTIS, JUNCUS EFFUSUS, J. XIPHIODES, AND PASPALUM.

General: DENSE PATCHES SCATTERED IN THIS AREA IN 2009.

Owner/Manager: UNKNOWN

Occurrence No.	223	Map Index:	80869	EO Index:	81811	Element Last Seen:	2009-09-17
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-09-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-11-29	

Quad Summary: Liberty Island (3812136), Clarksburg (3812145), Saxon (3812146)

County Summary: Solano, Yolo

Lat/Long:	38.37324 / -121.63082	Accuracy:	specific area
UTM:	Zone-10 N4248115 E619600	Elevation (ft):	
PLSS:	T06N, R03E, Sec. 10 (M)	Acres:	794.0

Location: ALONG THE SACRAMENTO DEEP WATER SHIP CHANNEL FROM PROSPECT ISLAND NORTH TO THE VICINITY OF GARCIA BEND.

Detailed Location: MAPPED AS 29 POLYGONS STRETCHING OVER 16 MILES ACCORDING TO 2010 DWR DIGITAL DATA.

Ecological: EXPOSED TIDAL MUD FLATS AND LOGS WITH HYDROCOTYLE, SCIRPUS, CALAMAGROSTIS, CYPERUS ERAGROSTIS, SYMPHYOTRICHUM LENTUM, JUNCUS XIPHIODES, AND PASPALUM. SOME AREAS ARE IN SHADE OF ALDERS AND RIPARIAN TREES.

General: MANY SCATTERED PATCHES OBSERVED IN 2009.

Owner/Manager: UNKNOWN



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Occurrence No.	230	Map Index:	88417	EO Index:	81957	Element Last Seen:	2007-08-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-08-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-03-12
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24604 / -121.70249			Accuracy:	specific area		
UTM:	Zone-10 N4233911 E613538			Elevation (ft):	0		
PLSS:	T05N, R02E, Sec. 25, SE (M)			Acres:	1.0		
Location:	LINDSEY SLOUGH, APPROXIMATELY 0.4 MILE WEST OF WRIGHT CUT, SE END OF HASTINGS TRACT, NORTH OF RIO VISTA.						
Detailed Location:	MAPPED BY CNDDB AS 2 POLYGONS IN THE NW 1/4 OF THE SE 1/4 OF SECTION 25. ON A MID-CHANNEL ISLAND WITHIN SLOUGH, JUST WEST OF HASTINGS ISLAND ROAD BRIDGE AND ON THE SOUTH SHORE OF LINDSEY SLOUGH JUST EAST OF HASTINGS ISLAND ROAD BRIDGE.						
Ecological:	HARD CLAY BENCHES WITH A LOT OF HERBS. ASSOCIATES INCLUDE CORNUS SERICEA, RUBUS DISCOLOR, SALIX EXIGUA, SALIX LASIOLEPIS, SCHOENOPLECTUS ACUTUS, SALIX BABYLONICA, ALNUS RHOMBIFOLIA, PHRAGMITES AUSTRALIS, CAREX BARBARAE, ETC.						
General:	OBSERVED IN NORTHERN POLYGON IN 2005 DURING VEGETATION SURVEYS. OBSERVED IN SOUTHERN POLYGON IN 2007.						
Owner/Manager:	UNKNOWN						
Occurrence No.	231	Map Index:	80964	EO Index:	81970	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-06
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.25973 / -121.73982			Accuracy:	80 meters		
UTM:	Zone-10 N4235385 E610250			Elevation (ft):	2		
PLSS:	T05N, R02E, Sec. 22, SE (M)			Acres:	0.0		
Location:	LINDSEY SLOUGH; APPROXIMATELY 1.94 MILES EAST OF HASTINGS CUT, SOUTH END OF HASTINGS TRACT.						
Detailed Location:	IN-CHANNEL ISLAND.						
Ecological:	TREE-DOMINATED ISLAND IN LINDSEY SLOUGH. NATURAL REMNANT VEGETATION WITH EVIDENT BLACK-CROWNED NIGHT HERON PERCHES. ASSOCIATES INCLUDE SALIX LASIOLEPIS, CORNUS SERICEA, ALNUS RHOMBIFOLIA, ROSA CALIFORNICA, VITIS CALIFORNICA, ETC.						
General:	OBSERVED IN 2005 DURING VEGETATION SURVEYS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	232	Map Index:	81157	EO Index:	82154	Element Last Seen:	2005-08-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-22
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.30049 / -121.72915				Accuracy:	80 meters	
UTM:	Zone-10 N4239920 E611122				Elevation (ft):	5	
PLSS:	T05N, R02E, Sec. 02, SE (M)				Acres:	0.0	
Location:	HASS SLOUGH; JUST NORTH OF SYCAMORE SLOUGH BETWEEN MOORE TRACT AND PETERS POCKET.						
Detailed Location:							
Ecological:	ASSOCIATED WITH ALNUS RHOMBIFOLIA, QUERCUS LOBATA, RUBUS DISCOLOR, ROSA CALIFORNICA, SALIX LASIOLEPIS, CORNUS SERICEA, CAREX BARBARAE, SALIX EXIGUA, CEPHALANTHUS OCCIDENTALIS, FRAXINUS LATIFOLIA, LATHYRUS JEPSONII SSP. JEPSONII, ETC.						
General:	OBSERVED IN 2005 DURING VEGETATION SURVEYS.						
Owner/Manager:	UNKNOWN						

Centromadia parryi ssp. parryi

Element Code: PDAST4R0P2

pappose tarplant

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G3T2
	State:	None		State:	S2
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive			
Habitat:	General:	CHAPARRAL, COASTAL PRAIRIE, MEADOWS AND SEEPS, COASTAL SALT MARSH, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	VERNALLY MESIC, OFTEN ALKALINE SITES. 1-500 M.			

Occurrence No.	36	Map Index:	A9123	EO Index:	110957	Element Last Seen:	1972-08-08
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1972-08-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-04-25
Quad Summary:	Courtland (3812135), Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.37158 / -121.53372				Accuracy:	nonspecific area	
UTM:	Zone-10 N4248061 E628087				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 15, N (M)				Acres:	78.0	
Location:	SOUTH EDGE OF COUNTY ROAD 142, MERRITT ISLAND.						
Detailed Location:	MAPPED AS BEST GUESS AROUND THE SOUTH SIDE OF COUNTY ROAD 142.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1972 QUICK COLLECTION.						
Owner/Manager:	UNKNOWN						

Symphotrichum lentum

Element Code: PDASTE8470

Suisun Marsh aster

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G2
	State:	None		State:	S2
	Other:	Rare Plant Rank - 1B.2, SB_RSABG-Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture			
Habitat:	General:	MARSHES AND SWAMPS (BRACKISH AND FRESHWATER).			
	Micro:	MOST OFTEN SEEN ALONG SLOUGHS WITH PHRAGMITES, SCIRPUS, BLACKBERRY, TYPHA, ETC. 0-15 M.			



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Occurrence No.	29	Map Index:	82578	EO Index:	14101	Element Last Seen:	2009-09-18
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-09-18	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-05-18	
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16345 / -121.67196			Accuracy:	specific area		
UTM:	Zone-10 N4224784 E616340			Elevation (ft):	0		
PLSS:	T04N, R03E, Sec. 29, NW (M)			Acres:	1.0		
Location:	BRANNAN ISLAND, 0.6 MILE NORTH OF RIO VISTA BRIDGE ALONG STATE ROUTE 160.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	GROWING ON SEDIMENTS AND FINES DEPOSITED ON SUBSIDED RIPRAP. ASSOCIATES INCLUDE SCIRPUS CALIFORNICUS, VERBENA BONARIENSIS, LILAEOPSIS MASONII, JUNCUS, MIMULUS, AND POLYGONUM.						
General:	30 PLANTS SEEN IN 1990 1/2 MI NORTH OF RIO VISTA BRIDGE ON SR 160. 3 PLANTS OBSERVED IN 2009.						
Owner/Manager:	PVT, BRANNON-ANDRUS LEVEE DIST						

Occurrence No.	50	Map Index:	10855	EO Index:	7762	Element Last Seen:	1990-07-26
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1990-07-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1993-06-02	
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.13517 / -121.68693			Accuracy:	80 meters		
UTM:	Zone-10 N4221627 E615074			Elevation (ft):	0		
PLSS:	T03N, R03E, Sec. 06, NW (M)			Acres:	0.0		
Location:	EAST BANK OF SACRAMENTO RIVER, 1.5 MILES SOUTH OF THE RIO VISTA BRIDGE.						
Detailed Location:	SANDY BEACH 1.5 MILES SOUTH OF JUNCTION OF HWY 160 AND HWY 12 ON THE WEST SHORE OF BRANNAN ISLAND.						
Ecological:	GROWING AMONG LITTORAL VEGETATION IN ASSOCIATION WITH LILAEOPSIS MASONII, LIMOSELLA SUBULATA, MIMULUS, SCIRPUS, JUNCUS, CYPERUS, POLYGONUM, PLANTAGO, CYNODON, HELENIUM, AND PASPALUM. NEAR SHORE ASSOCIATES INCLUDE ARUNDO, SALIX, AND RUBUS.						
General:	OBSERVED IN 1990. AREA BETWEEN THIS SITE AND BRIDGE UNSURVEYED, ADDITIONAL PLANTS MAY OCCUR.						
Owner/Manager:	PVT						



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Occurrence No.	66	Map Index:	37577	EO Index:	32579	Element Last Seen:	2002-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-04-01
Quad Summary:	Bouldin Island (3812115), Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.12717 / -121.57783				Accuracy:	specific area	
UTM:	Zone-10 N4220880 E624649				Elevation (ft):	5	
PLSS:	T03N, R04E, Sec. 07, NE (M)				Acres:	44.8	
Location:	VICINITY OF CONFLUENCE OF MOKELUMNE RIVER AND GEORGIANA SLOUGH.						
Detailed Location:	MAPPED AS FOUR POLYGONS: NORTHERN POLYGON FROM HOL99F0005 (1999), TWO CENTRAL POLYGONS FROM HUD02F0022 (2002), AND SOUTHERN POLYGON FROM PER94U0002 (1994). PLANTS ON SOUTHERN TYLER ISLAND AND NORTHWESTERN BOULDIN ISLAND.						
Ecological:	OUTER LEVEE SLOPE AND INTERTIDAL ZONE.						
General:	OBSERVED IN 1999 AND 2002. EO #127 LUMPED HERE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	125	Map Index:	46574	EO Index:	46574	Element Last Seen:	2000-09-14
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2000-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2001-11-19
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.15259 / -121.50307				Accuracy:	80 meters	
UTM:	Zone-10 N4223804 E631157				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 36, NW (M)				Acres:	0.0	
Location:	WEST SIDE OF BRACK TRACT, EAST SIDE OF THE MOKELUMNE RIVER AT WOODBRIDGE ROAD.						
Detailed Location:	NEAR PUMPING STATION AT MILE 12.						
Ecological:	ELEVATED ABOVE WATER ON WOOD PILINGS.						
General:	MORE THAN 9 PLANTS OBSERVED IN 2000.						
Owner/Manager:	UNKNOWN						

Occurrence No.	126	Map Index:	46575	EO Index:	46575	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-18
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.24559 / -121.50848				Accuracy:	specific area	
UTM:	Zone-10 N4234116 E630516				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 26, SE (M)				Acres:	2.0	
Location:	DELTA CROSS CHANNEL, BETWEEN LOCKE AND WALNUT GROVE.						
Detailed Location:	BOTH SIDES OF THE CHANNEL. MAPPED BY CNDDB AS 2 POLYGONS BASED ON A 2000 HOLLEY & PHILIPP MAP AND 2010 DWR DIGITAL DATA. IN THE SW 1/4 OF THE SW 1/4 OF SECTION 25 AND THE SE 1/4 OF THE SE 1/4 OF SECTION 26.						
Ecological:	RIPARIAN AREA AND AT BASE OF LEVEE.						
General:	MORE THAN 30 PLANTS OBSERVED IN THE WESTERN POLYGON IN 2000. 1 PLANT OBSERVED IN THE EASTERN POLYGON IN 2009.						
Owner/Manager:	STATE						



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Occurrence No.	132	Map Index:	60732	EO Index:	60768	Element Last Seen:	2009-09-14
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.22360 / -121.50643				Accuracy:	specific area	
UTM:	Zone-10 N4231679 E630735				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 02, NE (M)				Acres:	1.0	
Location:	NEAR NORTH TIP OF STATEN ISLAND ALONG NORTH MOKELUMNE RIVER, ON NE SIDE OF BRIDGE BETWEEN STATEN AND TYLER ISLANDS.						
Detailed Location:	PLANTS WERE GROWING ON PILINGS IN NORTH MOKELUMNE RIVER NEAR BRIDGE. MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA IN THE SE 1/4 OF THE NE 1/4 OF SECTION 2.						
Ecological:	GROWING ON EXPOSED PILINGS WITH A LITTLE PEAT ACCUMULATED ON EACH. ASSOCIATED WITH RUMEX, PASPALUM, AND VERBENA.						
General:	6 PLANTS SEEN IN 2003. 3 PLANTS OBSERVED IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	172	Map Index:	82599	EO Index:	83588	Element Last Seen:	2009-08-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20420 / -121.42426				Accuracy:	specific area	
UTM:	Zone-10 N4229646 E637965				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 10, SW (M)				Acres:	1.0	
Location:	ALONG THE NORTH BANK OF BEAVER SLOUGH, APPROXIMATELY HALF A MILE WEST OF INTERSTATE-5, SOUTH OF THORNTON.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SW 1/4 OF THE SW 1/4 OF SECTION 10.						
Ecological:	TIDAL RIPARIAN WITH RUBUS, SALIX EXIGUA, AND PASPALUM.						
General:	APPROXIMATELY 5 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	173	Map Index:	82600	EO Index:	83589	Element Last Seen:	2009-09-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14651 / -121.42314				Accuracy:	specific area	
UTM:	Zone-10 N4223246 E638171				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 34, SW (M)				Acres:	2.0	
Location:	HALF MILE EAST OF CONFLUENCE OF SYCAMORE SLOUGH AND UPLAND CANAL, ~1.2 MILES WEST OF JUNCTION OF I-5 AND W TURNER RD.						
Detailed Location:	MAPPED BY CNDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SOUTH HALF OF THE SW 1/4 OF SECTION 34.						
Ecological:	STEEP BANK.						
General:	POPULATIONS OBSERVED IN 2009 FROM WESTERN TO EASTERN POLYGONS WERE 4, 1, AND 2 PLANTS.						
Owner/Manager:	UNKNOWN						

Occurrence No.	174	Map Index:	82601	EO Index:	83590	Element Last Seen:	2008-01-21
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2008-01-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-12-28
Quad Summary:	Isleton (3812125), Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16614 / -121.62339				Accuracy:	nonspecific area	
UTM:	Zone-10 N4225145 E620592				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 26, W (M)				Acres:	41.0	
Location:	LONG ISLAND AND ALONG HIGHWAY 160 JUST WEST OF ISLETON.						
Detailed Location:	2 POLYGONS MAPPED BY CNDDB. SE POLYGON IS SPECIFIC, BASED ON 2008 BRONNY COORDINATES. NW POLYGON IS NON-SPECIFIC, BASED ON A 1972 NEILSON COLLECTION FROM "LONG ISLAND, SACRAMENTO RIVER, JUST WNW OF ISLETON."						
Ecological:	ON MOUNDS WHICH HAVE BEEN ERODED AND SCoured BY CONTINUOUS WAVE ATTENUATION. ASSOCIATED WITH JUNCUS EFFUSUS.						
General:	SEEN ON LONG ISLAND IN 1972. APPROXIMATELY 3 ROBUST CLUMPS OBSERVED IN SE POLYGON IN 2008.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	175	Map Index:	82602	EO Index:	83591	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24753 / -121.70457			Accuracy:	80 meters		
UTM:	Zone-10 N4234073 E613353			Elevation (ft):	0		
PLSS:	T05N, R02E, Sec. 25 (M)			Acres:	0.0		
Location:	LINDSEY SLOUGH, APPROXIMATELY 0.5 MILE WEST OF WRIGHT CUT, NORTH OF RIO VISTA.						
Detailed Location:	NW END OF IN-CHANNEL ISLAND. NEAR THE CENTER OF SECTION 25.						
Ecological:	ASSOCIATED WITH CORNUS SERICEA, SCIRPUS CALIFORNICUS, RUBUS DISCOLOR, URTICA, PHRAGMITES AUSTRALIS, HYDROCOTYLE VERTICILLATA, JUNCUS EFFUSUS, PASPALUM DILATATUM, AND POLYGONUM PUNCTATUM.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						
Occurrence No.	176	Map Index:	82603	EO Index:	83592	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24435 / -121.69525			Accuracy:	80 meters		
UTM:	Zone-10 N4233731 E614173			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 30, SW (M)			Acres:	0.0		
Location:	LINDSEY SLOUGH BETWEEN WRIGHT CUT AND CACHE SLOUGH, SOUTH OF LITTLE HASTINGS TRACT, NORTH OF RIO VISTA.						
Detailed Location:	IN THE SW 1/4 OF THE SW 1/4 OF SECTION 30.						
Ecological:	IN-CHANNEL ISLAND WITH SALIX LASIOLEPIS, CORNUS SERICEA, CEPHALANTHUS OCCIDENTALIS, ALNUS RHOMBIFOLIA, CONVULVULUS, CYPERUS ERAGROSTIS, EICHHORNIA CRASSIPES, HELENIIUM PUBERULUM, HYDROCOTYLE VERTICILLATA, JUNCUS EFFUSUS, LATHYRUS, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	177	Map Index:	82604	EO Index:	83593	Element Last Seen:	2009-09-04
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24819 / -121.65775				Accuracy:	specific area	
UTM:	Zone-10 N4234204 E617449				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 28, SW (M)				Acres:	1.0	
Location:	MINER SLOUGH, APPROXIMATELY 1.5 MILES FROM ITS CONFLUENCE WITH CACHE SLOUGH, SE SIDE OF PROSPECT ISLAND.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE NW 1/4 OF THE SW 1/4 OF SECTION 28.						
Ecological:	LOG.						
General:	2 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	178	Map Index:	82605	EO Index:	83599	Element Last Seen:	2009-10-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-10-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.22371 / -121.67259				Accuracy:	specific area	
UTM:	Zone-10 N4231470 E616189				Elevation (ft):	10	
PLSS:	T04N, R03E, Sec. 05 (M)				Acres:	66.0	
Location:	ALONG CACHE SLOUGH, MINER SLOUGH, AND THE SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, NORTH OF RIO VISTA.						
Detailed Location:	MAPPED BY CNDDDB AS 11 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SW 1/4 OF SECTION 29 SOUTH THROUGH SECTIONS 32 (WEST 1/2), 5 (WEST 1/2), 8 (NE 1/4) AND ENDING IN THE NW 1/4 OF SECTION 9.						
Ecological:	RIPARIAN MARSHES, TIDAL MARSHES, AND LEVEE RIPRAP. ASSOCIATED WITH SCIRPUS, TYPHA, SALIX LASIOLEPIS, RUBUS DISCOLOR, JUNCUS EFFUSUS, J. XIPHIODES, BIDENS, CYPERUS ERAGROSTIS, LYCOPUS, AND VERBENA.						
General:	TOTAL OF 1091 PLANTS OBSERVED IN 2009.						
Owner/Manager:	DFG, UNKNOWN						



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Occurrence No.	179	Map Index:	82606	EO Index:	83600	Element Last Seen:	2009-10-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-10-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.19340 / -121.65908				Accuracy:	specific area	
UTM:	Zone-10 N4228123 E617421				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 16 (M)				Acres:	34.0	
Location:	CACHE SLOUGH BETWEEN ELKHORN SLOUGH AND STEAMBOAT SLOUGH, NNE OF RIO VISTA.						
Detailed Location:	MAPPED BY CNDDDB AS 5 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	LEVEE RIPRAP AND EXPOSED PILINGS WITH PASPALUM, VERBENA, BIDENS, JUNCUS XIPHIODES, AND CYPERUS ERAGROSTIS.						
General:	TOTAL OF 424 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	180	Map Index:	82611	EO Index:	83601	Element Last Seen:	2009-09-17
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.18622 / -121.64732				Accuracy:	specific area	
UTM:	Zone-10 N4227341 E618463				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 16, S (M)				Acres:	28.0	
Location:	STEAMBOAT SLOUGH, JUST EAST OF ITS JUNCTION WITH CACHE SLOUGH, NE OF RIO VISTA.						
Detailed Location:	NORTH AND SOUTH SHORE OF STEAMBOAT SLOUGH. MAPPED BY CNDDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SOUTH HALF OF SECTION 16 EXTENDING EAST INTO THE SW 1/4 OF SECTION 15 AND EXTENDING SOUTH INTO THE NORTH HALF OF SECTION 21.						
Ecological:	RIPRAP WITH RIPARIAN.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	181	Map Index:	82620	EO Index:	83602	Element Last Seen:	2008-01-21
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2008-01-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.19475 / -121.63204				Accuracy:	specific area	
UTM:	Zone-10 N4228307 E619787				Elevation (ft):	10	
PLSS:	T04N, R03E, Sec. 15, NE (M)				Acres:	3.0	
Location:	STEAMBOAT SLOUGH, ALONG RYER ROAD EAST APPROXIMATELY 1.8 ROAD MILES EAST OF RYER ISLAND FERRY, NE OF RIO VISTA.						
Detailed Location:	IN THE SW 1/4 OF THE NE 1/4 OF SECTION 15.						
Ecological:	ALONG TOE OF LEVEE.						
General:	APPROXIMATELY 50 PLANTS OBSERVED IN 2008. THESE WERE DISCONTINUOUS COLONIES OF PLANTS ALONG A 400 FOOT STRETCH OF LEVEE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	182	Map Index:	82621	EO Index:	83603	Element Last Seen:	2009-09-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17455 / -121.65133				Accuracy:	specific area	
UTM:	Zone-10 N4226042 E618130				Elevation (ft):	10	
PLSS:	T04N, R03E, Sec. 21, S (M)				Acres:	24.0	
Location:	SACRAMENTO RIVER WEST OF IDA ISLAND, BETWEEN GRAND ISLAND AND BRANNAN ISLAND, BETWEEN RIO VISTA AND ISLETON.						
Detailed Location:	BOTH SIDES OF THE SACRAMENTO RIVER. MAPPED BY CNDDDB AS 9 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	LEVEE RIPRAP, PILINGS, TIDAL MUD BANKS, RIPARIAN MARSHES, AND LOGS.						
General:	TOTAL OF 439 PLANTS/CLUMPS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	183	Map Index:	82622	EO Index:	83604	Element Last Seen:	2009-09-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.16513 / -121.68151				Accuracy:	specific area	
UTM:	Zone-10 N4224958 E615501				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 30, NE (M)				Acres:	6.0	
Location:	NW BANK OF THE SACRAMENTO RIVER APPROXIMATELY 0.3 TO 0.7 MILE NW OF THE RIO VISTA BRIDGE.						
Detailed Location:	MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	LEVEE RIPRAP ABOVE HIGH WATER MARK WITH POLYGONUM, ARUNDO, PASPALUM, BIDENS, JUNCUS XIPHIODES, AND CYPERUS ERAGROSTIS.						
General:	IN 2009, NORTHERN POLYGON HAD 3 PLANTS AND SOUTHERN POLYGON HAD 100 WIDELY SCATTERED PLANTS.						
Owner/Manager:	UNKNOWN						

Occurrence No.	184	Map Index:	82623	EO Index:	83605	Element Last Seen:	2009-09-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.15159 / -121.69079				Accuracy:	specific area	
UTM:	Zone-10 N4223445 E614710				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 31, W (M)				Acres:	33.0	
Location:	NW BANK OF THE SACRAMENTO RIVER, FROM JUST SW TO APPROXIMATELY 1.25 MILES SW OF THE RIO VISTA BRIDGE, NEAR RIO VISTA.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SW 1/4 OF SECTION 30 AND THE WEST HALF OF SECTION 31.						
Ecological:	RIPRAP AND PILINGS.						
General:	50 PLANTS OBSERVED SCATTERED ALONG BANK IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	185	Map Index:	82624	EO Index:	83606	Element Last Seen:	2009-09-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.15161 / -121.68226				Accuracy:	specific area	
UTM:	Zone-10 N4223457 E615457				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 31, NE (M)				Acres:	1.0	
Location:	SE BANK OF THE SACRAMENTO RIVER APPROXIMATELY 0.4 MILE SW OF THE RIO VISTA BRIDGE, NEAR RIO VISTA.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE NW 1/4 OF THE NE 1/4 OF SECTION 31.						
Ecological:	RIPRAP AND SHORELINE.						
General:	5 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	186	Map Index:	82625	EO Index:	83607	Element Last Seen:	2005-09-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-09-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33824 / -121.64566				Accuracy:	80 meters	
UTM:	Zone-10 N4244212 E618361				Elevation (ft):	0	
PLSS:	T06N, R03E, Sec. 28, NE (M)				Acres:	0.0	
Location:	SACRAMENTO RIVER DEEP WATER SHIP CHANNEL BETWEEN COURTLAND RD AND ROAD 159, ~1.7 MILES N OF THE YOLO/SOLANO COUNTY LINE.						
Detailed Location:	EAST BANK. IN THE SW 1/4 OF THE NE 1/4 OF SECTION 28.						
Ecological:	ASSOCIATED WITH POPULUS FREMONTII, RUBUS DISCOLOR, SALIX LASIOLEPIS, S. EXIGUA, S. GOODDINGII, ALNUS RHOMBIFOLIA, CORTADERIA SELLOANA, AND FOENICULUM VULGARE.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	187	Map Index:	82626	EO Index:	83608	Element Last Seen:	2009-09-17
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.32762 / -121.64795				Accuracy:	specific area	
UTM:	Zone-10 N4243031 E618178				Elevation (ft):	0	
PLSS:	T06N, R03E, Sec. 33, NE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, ~0.6 MILE SOUTH OF ROAD 159, ~1 MILE NORTH OF THE YOLO / SOLANO COUNTY LINE.						
Detailed Location:	EAST BANK. MAPPED BY CNDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE NW 1/4 OF THE NE 1/4 OF SECTION 33.						
Ecological:	TIDAL RIPARIAN IN SHADE OF ALDERS.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	188	Map Index:	82627	EO Index:	83609	Element Last Seen:	2005-09-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-09-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.31778 / -121.65417				Accuracy:	80 meters	
UTM:	Zone-10 N4241931 E617650				Elevation (ft):	10	
PLSS:	T06N, R03E, Sec. 33, SW (M)				Acres:	0.0	
Location:	IN TOE DRAINAGE W OF SACRAMENTO DEEP WATER SHIP CHANNEL, ~0.25 MI N OF YOLO / SOLANO COUNTY LINE, S END OF YOLO BYPASS.						
Detailed Location:	EAST BANK OF TOE DRAINAGE. IN THE SW 1/4 OF THE SW 1/4 OF SECTION 33.						
Ecological:	ASSOCIATED WITH RUBUS DISCOLOR, SALIX LASIOLEPIS, S. GOODDINGII, ALNUS RHOMBIFOLIA, CAREX BARBARAE, ROSA CALIFORNICA, BROMUS DIANDRUS, ACER NEGUNDO, FRAXINUS LATIFOLIA, JUGLANS CALIFORNICA, LEPIDIUM, LYCOPUS AMERICANUS, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	189	Map Index:	82628	EO Index:	83611	Element Last Seen:	2009-09-17
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.28064 / -121.65913				Accuracy:	specific area	
UTM:	Zone-10 N4237803 E617276				Elevation (ft):	10	
PLSS:	T05N, R03E, Sec. 16 (M)				Acres:	98.0	
Location:	SACRAMENTO DEEP WATER SHIP CHANNEL, APPROX 2.2 TO 4.5 MILES NNE OF JUNCTION WITH CACHE SLOUGH, SOUTH END YOLO BYPASS.						
Detailed Location:	BOTH SIDES OF CHANNEL. MAPPED BY CNDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. IN THE WEST 1/2 OF SECTION 9 SOUTH THROUGH THE SE 1/4 OF SECTION 8, NW 1/4 OF SECTION 16, EAST 1/2 OF SECTION 17, AND THE NE 1/4 OF SECTION 20.						
Ecological:	RIPARIAN AND TIDAL MARSHES. ASSOCIATED WITH RUBUS DISCOLOR, SALIX GOODDINGII, S. EXIGUA, S. LASIOLEPIS, ALNUS RHOMBIFOLIA, CAREX BARBARAE, JUGLANS CALIFORNICA, LEPIDIUM LATIFOLIUM, ROSA CALIFORNICA, ACER NEGUNDO, ALNUS RHOMBIFOLIA, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY. 300 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	190	Map Index:	82629	EO Index:	83612	Element Last Seen:	2009-09-17
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.26166 / -121.66414				Accuracy:	specific area	
UTM:	Zone-10 N4235691 E616869				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 20, SE (M)				Acres:	1.0	
Location:	SACRAMENTO DEEP WATER SHIP CHANNEL, APPROXIMATELY 1.9 MILES NNE OF JUNCTION WITH CACHE SLOUGH, SOUTH END OF YOLO BYPASS.						
Detailed Location:	WESTERN SHORE OF PROSPECT ISLAND, EASTERN SHORE OF CHANNEL. MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE NORTH HALF OF THE SE 1/4 OF SECTION 20.						
Ecological:	RIPRAP.						
General:	FEW SCATTERED PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	191	Map Index:	82630	EO Index:	83614	Element Last Seen:	2005-08-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31897 / -121.74497				Accuracy:	80 meters	
UTM:	Zone-10 N4241951 E609710				Elevation (ft):	0	
PLSS:	T06N, R02E, Sec. 34, SW (M)				Acres:	0.0	
Location:	HASS SLOUGH, APPROXIMATELY 1.1 MILES NW OF DUCK SLOUGH, NE OF DOZIER AND EAST OF VACAVILLE.						
Detailed Location:	IN THE NW 1/4 OF THE SW 1/4 OF SECTION 34.						
Ecological:	ASSOCIATED WITH SCHOENOPLECTUS ACUTUS, POLYGONUM PUNCTATUM, SCIRPUS CALIFORNICUS, RUBUS DISCOLOR, LYCOPUS AMERICANUS, QUERCUS LOBATA, ROSA CALIFORNICA, SALIX EXIGUA, S. LASIOLEPIS, ALNUS RHOMBIFOLIA, CEPHALANTHUS OCCIDENTALIS, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	192	Map Index:	82631	EO Index:	83615	Element Last Seen:	2005-08-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31500 / -121.74016				Accuracy:	80 meters	
UTM:	Zone-10 N4241516 E610137				Elevation (ft):	4	
PLSS:	T06N, R02E, Sec. 34, SW (M)				Acres:	0.0	
Location:	HASS SLOUGH, APPROXIMATELY 0.7 MILE NORTH OF DUCK SLOUGH, NE OF DOZIER AND EAST OF VACAVILLE.						
Detailed Location:	IN THE SE 1/4 OF THE SW 1/4 OF SECTION 34.						
Ecological:	ASSOCIATED WITH CORNUS SERICEA, ROSA CALIFORNICA, QUERCUS LOBATA, TOXICODENDRON DIVERSILOBUM, LYCOPUS AMERICANUS, ALNUS RHOMBIFOLIA, EUTHAMIA OCCIDENTALIS, RUBUS DISCOLOR, MENTHA ARVENSIS, APOCYNUM CANNABINUM, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	193	Map Index:	82632	EO Index:	83616	Element Last Seen:	2008-01-21
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2008-01-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.26992 / -121.70520				Accuracy:	specific area	
UTM:	Zone-10 N4236557 E613264				Elevation (ft):	0	
PLSS:	T05N, R02E, Sec. 13, SW (M)				Acres:	1.0	
Location:	EAST SHORE OF HASTINGS TRACT AND WEST SHORE OF CACHE SLOUGH, APPROXIMATELY 0.6 AIR MILE NW OF FRENCH ISLAND.						
Detailed Location:	IN THE SE 1/4 OF THE SW 1/4 OF SECTION 13.						
Ecological:	ON MOUNDS WHICH HAVE BEEN ERODED AND SCoured BY CONTINUOUS WAVE ATTENUATION. ASSOCIATED WITH JUNCUS EFFUSUS.						
General:	3 ROBUST CLUMPS OBSERVED IN 2008.						
Owner/Manager:	PVT						



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Occurrence No.	194	Map Index:	80964	EO Index:	83617	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.25973 / -121.73982				Accuracy:	80 meters	
UTM:	Zone-10 N4235385 E610250				Elevation (ft):	2	
PLSS:	T05N, R02E, Sec. 22, SE (M)				Acres:	0.0	
Location:	LINDSEY SLOUGH; APPROXIMATELY 2 MILES EAST OF HASTINGS CUT, SOUTH END OF HASTINGS TRACT, EAST OF FAIRFIELD.						
Detailed Location:	IN THE NW 1/4 OF THE SE 1/4 OF SECTION 22.						
Ecological:	IN-CHANNEL ISLAND. ASSOCIATED WITH SALIX LASIOLEPIS, CORNUS SERICEA, ALNUS RHOMBIFOLIA, ROSA CALIFORNICA, VITIS CALIFORNICA, ACER NEGUNDO, FICUS, HOITA MACROSTACHYA, SAMBUCUS MEXICANA, CEPHALANTHUS OCCIDENTALIS, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	198	Map Index:	82636	EO Index:	83642	Element Last Seen:	2009-09-04
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.17753 / -121.67048				Accuracy:	specific area	
UTM:	Zone-10 N4226348 E616448				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 20 (M)				Acres:	13.0	
Location:	NW BANK OF THE SACRAMENTO RIVER ACROSS FROM STEAMBOAT SLOUGH AND GRAND ISLAND, NE OF RIO VISTA.						
Detailed Location:	NEAR THE CONFLUENCE OF STEAMBOAT SLOUGH AND CACHE SLOUGH WITH THE SACRAMENTO RIVER. MAPPED BY CNDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	LEVEE RIPRAP ABOVE HIGH WATER MARK WITH BIDENS, JUNCUS XIPHIODES, AND CYPERUS ERAGROSTIS.						
General:	310 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Plagiobothrys hystriculus

Element Code: PDBOR0V0H0

bearded popcornflower

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2

State: None

State: S2

Other: Rare Plant Rank - 1B.1

Habitat: **General:** VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND.

Micro: WET SITES. 1-275 M.

Occurrence No. 24 **Map Index:** 83524 **EO Index:** 84548 **Element Last Seen:** 2009-04-14

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2009-04-14

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2020-05-08

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.43312 / -121.67004 **Accuracy:** 80 meters

UTM: Zone-10 N4254710 E616078 **Elevation (ft):** 16

PLSS: T07N, R03E, Sec. 20, SW (M) **Acres:** 0.0

Location: SOUTH END OF DFG TULE RANCH, APPROXIMATELY 2.4 AIR MILES SSW OF SAXON, YOLO BYPASS WILDLIFE AREA, SW OF SACRAMENTO.

Detailed Location: MAPPED ACCORDING TO 2009 WITHAM COORDINATES, IN THE SE 1/4 OF THE SW 1/4 OF SECTION 20.

Ecological: VERNAL POOL GRASSLAND MOSAIC PRIMARILY ON CAPAY-CLEAR LAKE SOIL ASSOCIATION WITH SOME INCLUSION OF PESCADERO CLAY. MESIC SWALES ASSOCIATED WITH TRIFOLIUM BARBIGERUM AND LASTHENIA GLABRATA.

General: SITE IS BASED ON A 2003 & 2009 WITHAM COLLECTIONS; DESCRIBED AS "COMMON" IN 2009.

Owner/Manager: DFG-YOLO BYPASS WA

Lepidium latipes var. heckardii

Element Code: PDBRA1M0K1

Heckard's pepper-grass

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G4T1

State: None

State: S1

Other: Rare Plant Rank - 1B.2

Habitat: **General:** VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

Micro: GRASSLAND, AND SOMETIMES VERNAL POOL EDGES. ALKALINE SOILS. 1-30 M.

Occurrence No. 7 **Map Index:** 28792 **EO Index:** 30160 **Element Last Seen:** 1891-07-05

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1891-07-05

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2010-12-01

Quad Summary: Liberty Island (3812136), Dozier (3812137)

County Summary: Solano

Lat/Long: 38.31118 / -121.73559 **Accuracy:** nonspecific area

UTM: Zone-10 N4241098 E610543 **Elevation (ft):** 10

PLSS: T05N, R02E, Sec. 03 (M) **Acres:** 286.6

Location: HAAS SLOUGH.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS ALONG THE FULL EXTENT OF HAAS SLOUGH.

Ecological: IN LOW PLACES RANK WITH MARSH GRASSES.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1891 JEPSON COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



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Occurrence No.	10	Map Index:	54738	EO Index:	54738	Element Last Seen:	2003-04-XX
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		2003-04-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-12-16	

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.45912 / -121.67397	Accuracy:	specific area
UTM:	Zone-10 N4257590 E615693	Elevation (ft):	15
PLSS:	T07N, R03E, Sec. 17, NW (M)	Acres:	1.0

Location: TULE RANCH; JUST SE OF THE JUNCTION OF COUNTY ROAD 38 AND COUNTY ROAD 105.

Detailed Location: MAPPED AS TWO COLONIES IN THE FAR NW CORNER OF THE NW 1/4 OF SECTION 17.

Ecological: MESIC GRASSLAND DOMINATED BY LASTHENIA GLABRATA AND LOLIUM MULTIFLORUM. ASSOCIATES INCLUDE LAYIA CHRYSANTHEMOIDES, BLENNOSPERMA NANUM AND VARIOUS OTHERS. OCCASIONALLY OCCURRING WITH VAR. LATIPES.

General: >1000 OBSERVED BETWEEN THIS SITE AND OCCURRENCE #11 IN 2003.

Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No.	11	Map Index:	54739	EO Index:	54739	Element Last Seen:	2009-04-18
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		2009-04-18	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-07-29	

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.43728 / -121.67065	Accuracy:	specific area
UTM:	Zone-10 N4255171 E616018	Elevation (ft):	15
PLSS:	T07N, R03E, Sec. 20, W (M)	Acres:	7.0

Location: TULE RANCH; APPROXIMATELY 1.5 AIR MILES SSE OF THE JUNCTION OF COUNTY ROAD 38 AND COUNTY ROAD 105, 8 MILES SE OF DAVIS.

Detailed Location: VICINITY OF TWO LARGE PLAYA POOLS. SEVEN COLONIES LOCATED PRIMARILY IN THE CENTER OF THE WESTERN HALF OF SECTION 20.

Ecological: GRASSLAND, VERNAL POOL COMPLEX. CAPAY-CLEAR LAKE SOIL ASSOCIATION. ASSOCIATED WITH LASTHENIA FREMONTII, L. GLABERRIMA, L. GLABRATA, FRANKENIA SALINA, PHALARIS LEMMONII, LUPINUS BICOLOR, MEDICAGO POLYMORPHA, AND LOLIUM MULTIFLORUM.

General: >1000 OBSERVED BETWEEN THIS SITE AND OCCURRENCE #10 IN 2003. >500 PLANTS OBSERVED IN A PORTION OF THE SITE IN 2007. A 2009 COLLECTION BY SOLOMESHCH IS ALSO ATTRIBUTED TO THIS OCCURRENCE. LEPIDIUM LATIPES VAR. LATIPES IS ALSO PRESENT.

Owner/Manager: DFG-YOLO BYPASS WA



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Occurrence No.	12	Map Index:	80988	EO Index:	81938	Element Last Seen:	2010-03-29
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2010-03-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-07-29	

Quad Summary: Clarksburg (3812145)

County Summary: Sacramento

Lat/Long:	38.38236 / -121.50745	Accuracy:	specific area
UTM:	Zone-10 N4249295 E630361	Elevation (ft):	5
PLSS:	T06N, R04E, Sec. 11, SE (M)	Acres:	1.0

Location: JUST SW OF STONE LAKE; APPROXIMATELY 1.75 AIR MILES WNW OF JUNCTION OF I-5 AND HOOD FRANKLIN ROAD, SOUTH OF SACRAMENTO.

Detailed Location: MAPPED ACCORDING TO 2010/2011 DWR DIGITAL DATA.

Ecological: SLOPE ALONGSIDE A DITCH, EDGE OF POOL. ASSOCIATED WITH MEDICAGO, GRINDELIA, PLAGIOBOTHRYIS, HEMIZONIA, AND CERASTIUM.

General: 150 PLANTS OBSERVED IN 2009. 400 PLANTS OBSERVED IN 2010.

Owner/Manager: UNKNOWN

Occurrence No.	15	Map Index:	89790	EO Index:	90798	Element Last Seen:	2010-03-29
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2010-03-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-07-29	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.38002 / -121.50016	Accuracy:	specific area
UTM:	Zone-10 N4249045 E631002	Elevation (ft):	6
PLSS:	T06N, R04E, Sec. 12, SW (M)	Acres:	2.0

Location: JUST SOUTH OF STONE LAKE; ABOUT 1.2 AIR MILES WNW OF JUNCTION OF I-5 AND HOOD FRANKLIN RD, SOUTH OF SACRAMENTO.

Detailed Location: 2 SITES MAPPED BY CNDDDB AS A SINGLE POLYGON ACCORDING TO 2011 DWR DIGITAL DATA. MAPPED IN THE SW 1/4 OF THE SW 1/4 OF SECTION 12.

Ecological: NEAR POOL AND PONDED AREA. ASSOCIATED WITH PLAGIOBOTHRYIS, CERASTIUM, ERODIUM CICUTARIUM, MEDICAGO, GRINDELIA, MYOSURUS, POA ANNUA, HEMIZONIA, LOLIUM, RUMEX, CAMOMILLA, ELEOCHARIS, AND LEPIDIUM LATIPES VAR. LATIPES.

General: 575 PLANTS OBSERVED IN 2010.

Owner/Manager: UNKNOWN



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Brasenia schreberi

Element Code: PDCAB01010

watershield

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G5

State: None

State: S3

Other: Rare Plant Rank - 2B.3

Habitat: **General:** FRESHWATER MARSHES AND SWAMPS.

Micro: AQUATIC KNOWN FROM WATER BODIES BOTH NATURAL AND ARTIFICIAL IN CALIFORNIA. 1-2180 M.

Occurrence No. 11 **Map Index:** 82077 **EO Index:** 83069 **Element Last Seen:** 1976-07-26

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1976-07-26

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2013-11-19

Quad Summary: Bruceville (3812134), Courtland (3812135)

County Summary: Sacramento

Lat/Long: 38.34242 / -121.49128 **Accuracy:** nonspecific area

UTM: Zone-10 N4244885 E631846 **Elevation (ft):** 5

PLSS: T06N, R04E, Sec. 25 (M) **Acres:** 677.0

Location: STONE LAKE DUCK CLUB, 1 MILE N OF LAMBERT ROAD, NEAR COURTLAND.

Detailed Location: IN SECTION 25.

Ecological: LEAVES FLOATING ON WARM STILL WATER 2-3 FT DEEP.

General: UNKNOWN NUMBER OF PLANTS SEEN. ONLY SOURCE OF INFORMATION IS A 1976 FERLATTE COLLECTION.

Owner/Manager: USFWS-STONE LAKES NWR, UNK



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Downingia pusilla

Element Code: PDCAM060C0

dwarf downingia

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: GU
	State: None		State: S2
	Other: Rare Plant Rank - 2B.2		
Habitat:	General: VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.		
	Micro: VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-490 M.		

Occurrence No.	56	Map Index: 26055	EO Index: 5239	Element Last Seen:	2010-05-13
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2010-05-13
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-09-13

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.40858 / -121.48900	Accuracy:	specific area
UTM:	Zone-10 N4252231 E631925	Elevation (ft):	10
PLSS:	T06N, R04E, Sec. 01, NE (M)	Acres:	9.0

Location: WEST OF I-5 AT THE ELK GROVE BLVD INTERCHANGE, ELK GROVE.

Detailed Location: SEVERAL COLONIES MAPPED BY CNDDB AS 7 POLYGONS ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES. IN THE SW 1/4 OF THE SE 1/4 OF SECTION 36 AND THE NORTH HALF OF THE NE 1/4 OF SECTION 1.

Ecological: VERNAL POOLS SURROUNDED BY ANNUAL GRASSLAND. ASSOCIATED WITH ALLOCARYA UNDULATA, A. STIPITATA MICRANTHA, PSILOCARPHUS BREVISSIMUS, ALOPECURUS SACCATUS, ERYNGIUM ARISTULATUM, AND LOLIUM MULTIFLORUM. SOILS ARE SAN JOAQUIN SILTY LOAM.

General: HUNDREDS TO THOUSANDS OF PLANTS OBSERVED IN 1990. 500 PLANTS OBSERVED IN 2009. 1161 PLANTS REPORTED IN 2010.

Owner/Manager: SAC COUNTY-PARKS & REC

Legenere limosa

Element Code: PDCAM0C010

legenere

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_UCBBG-UC Berkeley Botanical Garden		
Habitat:	General: VERNAL POOLS.		
	Micro: IN BEDS OF VERNAL POOLS. 1-1005 M.		



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Occurrence No.	31	Map Index:	26234	EO Index:	14087	Element Last Seen:	1993-05-06
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1993-05-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-04-28
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44134 / -121.38825				Accuracy:	80 meters	
UTM:	Zone-10 N4256015 E640659				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 24, SW (M)				Acres:	0.0	
Location:	NORTH OF SHELDON ROAD AND 0.7 MILE EAST OF HIGHWAY 99, ELK GROVE.						
Detailed Location:	MAPPED ABOUT 1/4 MILE NORTH OF SHELDON ROAD WITHIN THE SW 1/4 OF THE SW 1/4 OF SECTION 24.						
Ecological:	DEEP NORTHERN CLAYPAN VERNAL POOLS ON GALT CLAY SOILS. POOLS DOMINATED BY ERYNGIUM CASTRENSE, DOWNINGIA BICORNUTA, AND LASTHENIA GLABERRIMA. OTHER ASSOCIATES INCLUDE ELEOCHARIS MACROSTACHYS AND PLAGIOBOTHRYS STIPITATUS MICRANTHUS.						
General:	1993: MORE THAN 2500 PLANTS OBSERVED, POOLS IN FAIRLY GOOD SHAPE ALTHOUGH ADJACENT LAND HAD BEEN FARMED. 2009 AERIAL PHOTO SHOWS HOUSING DEVELOPMENT THROUGHOUT ENTIRE AREA.						
Owner/Manager:	PVT						

Occurrence No.	40	Map Index:	29100	EO Index:	30941	Element Last Seen:	1995-05-15
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	1995-05-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-04-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39459 / -121.46990				Accuracy:	1/5 mile	
UTM:	Zone-10 N4250706 E633619				Elevation (ft):	13	
PLSS:	T06N, R05E, Sec. 06, SE (M)				Acres:	0.0	
Location:	ABOUT 1.5 MILES EAST OF STONE LAKE, 1.4 MILES SW OF JUNCTION OF FRANKLIN BLVD & ELK GROVE BLVD.						
Detailed Location:	MAPPED IN THE SE 1/4 OF SECTION 6 AND THE NE 1/4 OF SECTION 7. ORIGINAL MAP IS VAGUE; EXACT LOCATION UNKNOWN. NORTHWEST HALF OF THE OCCURRENCE IS NOW ELLIOTT RANCH ELEMENTARY SCHOOL; REMAINING HALF IS STILL UNDEVELOPED.						
Ecological:	VERNAL POOLS WITH DOWNINGIA ORNATISSIMA, NAVARRETIA LEUCOCEPHALA, CASTILLEJA EXSERTA, AND LEPIDIUM LATIPES.						
General:	50+ PLANTS OBSERVED IN 1995. ABOUT HALF OF THE OCCURRENCE HAS BEEN DEVELOPED ACCORDING TO 2009 AERIAL IMAGERY; NEEDS FIELDWORK TO DETERMINE IF HABITAT/SPECIES IS STILL PRESENT.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	41	Map Index:	29099	EO Index:	30940	Element Last Seen:	1995-05-20
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1995-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1997-03-27
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43901 / -121.45128				Accuracy:	nonspecific area	
UTM:	Zone-10 N4255662 E635162				Elevation (ft):	18	
PLSS:	T07N, R05E, Sec. 20, SE (M)				Acres:	11.7	
Location:	ALONG NORTH SIDE OF SIMS ROAD, 0.15-0.4 MILE EAST OF JUNCTION WITH FRANKLIN BLVD.						
Detailed Location:	300 FT N OF SIMS ROAD.						
Ecological:	VERNAL POOL COMPLEX WITH LASTHENIA GLABERRIMA, RANUNCULUS BONARIENSIS, PLAGIOBOTHRYUS STIPITATUS, DOWNINGIA ORNATISSIMA, D. BICORNUTA AND LEPIDIUM LATIPES.						
General:	300 PLANTS IN 1995. SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT LAND.						
Owner/Manager:	SRCSD-BUFFERLANDS						
Occurrence No.	78	Map Index:	83406	EO Index:	84420	Element Last Seen:	2010-05-13
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-02
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40879 / -121.49166				Accuracy:	specific area	
UTM:	Zone-10 N4252250 E631692				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 01, N (M)				Acres:	8.0	
Location:	JUST WEST OF ELK GROVE BLVD JUNCTION WITH I-5, FROM ABOUT 1.5 TO 2.25 AIR MILES ESE OF CLARKSBURG.						
Detailed Location:	8 COLONIES MAPPED BY CNDDB AS 6 POLYGONS ACCORDING TO 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	ALONG DITCH NEAR FENCE AND SCATTERED IN POOLS & WET DEPRESSIONS. ASSOCIATED WITH CALLITRICHE, PLAGIOBOTHRYUS STIPITATUS, LASTHENIA GLABERRIMA, GRASSES, RUMEX, ERYNGIUM, RANUNCULUS BONARIENSIS, ELEOCHARIS MACROSTACHYA, HORDEUM MARINUM, ETC.						
General:	2010 POPULATION NUMBERS FOR POLYGONS FROM EAST TO WEST: 300, 200, 100, 120, 5150, AND 1000.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	79	Map Index:	83407	EO Index:	84421	Element Last Seen:	2010-05-11
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	2010-05-11		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2011-07-15		
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37680 / -121.49290			Accuracy:	specific area		
UTM:	Zone-10 N4248698 E631642			Elevation (ft):	0		
PLSS:	T06N, R04E, Sec. 13, N (M)			Acres:	27.0		
Location:	NORTH SIDE OF HOOD FRANKLIN ROAD, FROM 0.3 TO 1.3 MILES EAST OF I-5, SOUTH OF STONE LAKE.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDDB AS 6 POLYGONS ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	POOLS, ROADSIDE DITCHES, AND SWALES. ASSOC W/ PLAGIOBOTHRYIS SP., ELEOCHARIS MACROSTACHYA, E. ACICULARIS, GRATIOLA EBRACTEATA, RANUNCULUS AQUATILIS, LASTHENIA GLABERRIMA, GLYCERIA DECLINATA, LILAEA SCILLOIDES, PHYLLODENDRON, ETC.						
General:	2009: 70 PLANTS OBSERVED ALONG THE ROAD AT THE SOUTH END OF THE WESTERN POLYGON. 2010 POPULATION NUMBERS FOR POLYGONS FROM WEST TO EAST: 4117, 100, 500, 1, 10, AND 51.						
Owner/Manager:	UNKNOWN						

Extriplex joaquinana

Element Code: PDCHE041F3

San Joaquin spearscale

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G2
	State:	None		State:	S2
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden			
Habitat:	General:	CHENOPOD SCRUB, ALKALI MEADOW, PLAYAS, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	IN SEASONAL ALKALI WETLANDS OR ALKALI SINK SCRUB WITH DISTICHLIS SPICATA, FRANKENIA, ETC. 0-800 M.			

Occurrence No.	22	Map Index:	20319	EO Index:	16736	Element Last Seen:	1891-09-16
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1891-09-16		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2014-04-07		
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.15872 / -121.69617				Accuracy:	3/5 mile	
UTM:	Zone-10 N4224228 E614228				Elevation (ft):		
PLSS:	T04N, R02E, Sec. 25 (M)				Acres:	0.0	
Location:	RIO VISTA.						
Detailed Location:							
Ecological:							
General:	SITE BASED ON AN 1891 JEPSON COLLECTION. ONLY NOTES ON HERBARIUM LABEL ARE: "EXHIBITING A TENDENCY TOWARD DIOECISM." SITE POSSIBLY EXTIRPATED BY DEVELOPMENT.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	26	Map Index:	20320	EO Index:	16735	Element Last Seen:	1891-07-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1891-07-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1993-03-12
Quad Summary:	Liberty Island (3812136), Dozier (3812137)						
County Summary:	Solano						
Lat/Long:	38.30674 / -121.75728				Accuracy:	1 mile	
UTM:	Zone-10 N4240580 E608653				Elevation (ft):	5	
PLSS:	T05N, R02E, Sec. 04 (M)				Acres:	0.0	
Location:	MAIN PRAIRIE.						
Detailed Location:							
Ecological:	DAMP, BARREN SPOTS.						
General:	1891 JEPSON COLLECTIONS ARE THE ONLY SOURCES OF INFORMATION FOR THIS SITE. NEEDS FIELDWORK.						
Owner/Manager:	UNKNOWN						

Occurrence No.	71	Map Index:	60327	EO Index:	60363	Element Last Seen:	2001-06-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2001-06-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-03-04
Quad Summary:	Saxon (3812146), Davis (3812156)						
County Summary:	Yolo						
Lat/Long:	38.49860 / -121.68619				Accuracy:	1/10 mile	
UTM:	Zone-10 N4261955 E614565				Elevation (ft):	40	
PLSS:	T08N, R03E, Sec. 31, N (M)				Acres:	0.0	
Location:	EAST OF DAVIS, 3.5 MILES SOUTH OF I-80 ON MACE BLVD, THEN 0.5 MILE EAST ALONG ENTRANCE ROAD, THEN SOUTH 400 YARDS.						
Detailed Location:	10 YARDS WEST OF DEPARTMENT OF DEFENSE FENCE. MAPPED ACCORDING TO COORDINATES PROVIDED IN SOURCE.						
Ecological:	ASSOCIATED WITH HORDEUM, LOLIUM, BROMUS HORDEACEUS, AND PLAGIOBOTHRYIS.						
General:	TWO PLANTS OBSERVED IN 2001.						
Owner/Manager:	DOD						



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Occurrence No.	105	Map Index:	81165	EO Index:	82143	Element Last Seen:	2016-04-05
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2016-04-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-12-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.42998 / -121.65726				Accuracy:	80 meters	
UTM:	Zone-10 N4254378 E617200				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 29, NE (M)				Acres:	5.0	
Location:	GLIDE TULE RANCH; ABOUT 2 AIR MILES EAST OF THE JUNCTION OF COUNTY RD 104 AND THOMSEN RD, YOLO BYPASS WILDLIFE AREA.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2016 LAZAR COORDINATES, IN THE FAR NE 1/4 OF THE NE 1/4 OF SECTION 29.						
Ecological:	IN ALKALI GRASSLAND. ASSOCIATED WITH ANTHEMIS COTULA, LASTHENIA GLABRATA, MEDICAGO POLYMORPHA, LOLIUM MULTIFLORUM, HEMIZONIA CONGESTA, HESPEREVAX CAULESCENS, TRIFOLIUM WILLDENOVII, LOTUS WRANGELIANUS, ETC.						
General:	ABOUT 50 PLANTS OBSERVED IN 2016; POSSIBLY MORE SMALL PLANTS. 2002 SOLOMESHCH COLLECTION FROM "GLIDE RANCH, 2.5 MI SSE FROM INTERSECTION OF RD 105 & RD 38" AND 2002 SHAFFER COLLECTION ARE ALSO ATTRIBUTED TO THIS SITE.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	133	Map Index:	B2621	EO Index:	114552	Element Last Seen:	2017-06-10
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2017-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2019-03-18
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48039 / -121.69549				Accuracy:	80 meters	
UTM:	Zone-10 N4259924 E613784				Elevation (ft):	28	
PLSS:	T07N, R02E, Sec. 1, SE (M)				Acres:	5.0	
Location:	WEST OF HYDE ROAD AT THE SOLONO/YOLO COUNTY LINE, SOUTH OF COUNTY ROAD 36 AT TERMINUS OF MACE BLVD.						
Detailed Location:	MAPPED ACCORDING TO 2017 DEAN COORDINATES, IN THE NE 1/4 OF THE SE 1/4 OF SECTION 1.						
Ecological:	UPLANDS TO THE EAST OF LARGE PLAYA POOL. ALKALINE PRAIRIE DOMINATED BY TALL LOLIUM THAT HAS NOW LODGED AND IS COVERING GROUND WITH THICK THATCH THROUGH WHICH FRANKENIA IS POKING. N-S TRENDING SHALLOW DITCH/SWALE.						
General:	1000 OR MORE PLANTS IN UPLANDS IN 2017.						
Owner/Manager:	PVT						



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Cuscuta obtusiflora var. glandulosa

Element Code: PDCUS01111

Peruvian dodder

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G5T4?

State: None

State: SH

Other: Rare Plant Rank - 2B.2

Habitat: **General:** MARSHES AND SWAMPS (FRESHWATER).

Micro: FRESHWATER MARSH. 15-280 M.

Occurrence No. 6 **Map Index:** 83838 **EO Index:** 84869 **Element Last Seen:** 1995-06-02

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1995-06-02

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2011-10-05

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.41454 / -121.43301 **Accuracy:** specific area

UTM: Zone-10 N4252973 E636803 **Elevation (ft):**

PLSS: T07N, R05E, Sec. 33, SE (M) **Acres:** 1.0

Location: 6104 DOUBLOON COURT, LAGUNA LAKE, NORTH OF ELK GROVE BLVD, WEST OF FOULKS RANCH ROAD, ELK GROVE.

Detailed Location: MAPPED AS BEST GUESS BY CNDDDB TO ENCOMPASS THE BACKYARD LAGUNA LAKE SHORELINE OF THE GIVEN ADDRESS.

Ecological: SUBMERGED ON MYRIOPHYLLUM SIBRICUM IN FRESHWATER POND.

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1995 BARBE COLLECTION ANNOTATED ONLY TO THE SPECIES. ID OF THIS SPECIMEN IS QUESTIONABLE, NEEDS FIELDWORK.

Owner/Manager: PVT

Astragalus tener var. tener

Element Code: PDFAB0F8R1

alkali milk-vetch

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2T1

State: None

State: S1

Other: Rare Plant Rank - 1B.2

Habitat: **General:** ALKALI PLAYA, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

Micro: LOW GROUND, ALKALI FLATS, AND FLOODED LANDS; IN ANNUAL GRASSLAND OR IN PLAYAS OR VERNAL POOLS. 0-170 M.



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Occurrence No.	31	Map Index:	24741	EO Index:	7754	Element Last Seen:	1978-05-08
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2002-05-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-02
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45952 / -121.65795				Accuracy:	1/5 mile	
UTM:	Zone-10 N4257654 E617091				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NE (M)				Acres:	0.0	
Location:	1/4 MILE SOUTH OF SAXON STATION.						
Detailed Location:	MAPPED IN THE NE 1/4 OF THE NE 1/4 OF SECTION 17.						
Ecological:	GROWING IN A LARGE VERNAL MEADOW, ON CAPAY SOIL, WITH LASTHENIA GLABRATA, DOWNINGIA INSIGNIS, ALLOCARYA STIPITATA, BOISDUVALIA CLEISTOGAMA, PSILOCARPHUS BREVISSIMUS, P. OREGANUS, MYOSURUS MINIMIS.						
General:	SITE BASED ON A COLLECTION BY CRAMPTON IN 1978 (#9578). WITHAM VISITED SITE IN MAR & APR 2002, DID NOT SEE PLANTS BUT BELIEVES SITE IS EXTANT. BITTMAN VISITED SITE 5/16/02, BUT NO PLANTS FOUND. WITHAM WILL RESURVEY IN 2003.						
Owner/Manager:	UNKNOWN						

Occurrence No.	32	Map Index:	24742	EO Index:	7753	Element Last Seen:	2003-04-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45668 / -121.67393				Accuracy:	specific area	
UTM:	Zone-10 N4257320 E615701				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	4.2	
Location:	1 MILE SOUTHWEST OF SAXON STATION, 0.5 MILE WEST OF RR TRACKS, YOLO BYPASS AREA.						
Detailed Location:	SEVERAL COLONIES MAPPED WITHIN THE NW 1/4 OF SECTION 17. 1960 COLLECTION BY CRAMPTON FROM 1.25 MILE SOUTHWEST OF SAXON STATION ALSO ATTRIBUTED TO THIS SITE.						
Ecological:	GROWING IN VALLEY GRASSLAND ON ADOBE SOIL, ALKALI VERNAL POOLS AND SWALES. DOMINATED BY LOLIUM MULTIFLORUM, LASTHENIA GLABRATA. ASSOC: LAYIA CHRYSANTHEMOIDES, BLENNOSPERMA NANUM, DOWNINGIA, ALOPECURUS HOWELLII, ET AL.						
General:	ORIGINAL SOURCE OF INFORMATION IS 1966 COLLECTION BY B. CRAMPTON IN DITCH ALONG ROAD. PLANTS FOUND IN APRIL 2002 BUT NOT ON 5/16/02. >100 PLANTS OBSERVED IN 2003 BETWEEN THIS & OCCURRENCES #64 & #70.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	33	Map Index:	24740	EO Index:	7746	Element Last Seen:	1979-04-09
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	2002-03-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-02
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.49520 / -121.72071				Accuracy:	nonspecific area	
UTM:	Zone-10 N4261536 E611560				Elevation (ft):	40	
PLSS:	T08N, R02E, Sec. 35 (M)				Acres:	459.7	
Location:	SSE OF DAVIS ALONG TREMONT ROAD.						
Detailed Location:	MAPPED ALONG TREMONT ROAD IN SECTIONS 34, 35, AND 36.						
Ecological:	GROWING ON A LEVELED ALKALINE FLAT.						
General:	SITE BASED ON A 1979 COLLECTION BY B. CRAMPTON. WITHAM SEARCHED THE AREA IN 1990 BUT DID NOT FIND ANY PLANTS. IN 2002, WITHAM FOUND NO PLANTS AND NO NATURAL HABITAT ALONG TREMONT ROAD.						
Owner/Manager:	UNKNOWN						
Occurrence No.	34	Map Index:	24738	EO Index:	19248	Element Last Seen:	1959-04-13
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2002-03-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-14
Quad Summary:	Saxon (3812146), Dixon (3812147)						
County Summary:	Solano						
Lat/Long:	38.45978 / -121.75096				Accuracy:	1 mile	
UTM:	Zone-10 N4257569 E608976				Elevation (ft):	50	
PLSS:	T07N, R02E, Sec. 16 (M)				Acres:	0.0	
Location:	6 MILES SOUTH OF DAVIS.						
Detailed Location:							
Ecological:							
General:	SITE BASED ON A 1959 COLLECTION BY B. CRAMPTON. WITHAM SEARCHED THE AREA IN 1990 AND 2002 BUT DID NOT OBSERVE ANY PLANTS. NO NATURAL HABITAT FOUND ALONG SIKES, HACKMAN, & TREMONT RDS; ALL AG LAND.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	44	Map Index:	24806	EO Index:	25844	Element Last Seen:	2004-04-06
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-04-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-03
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48980 / -121.68505				Accuracy:	specific area	
UTM:	Zone-10 N4260981 E614678				Elevation (ft):	25	
PLSS:	T08N, R03E, Sec. 31, SE (M)				Acres:	11.7	
Location:	AIR FORCE COMMUNICATIONS FACILITY, SOUTH OF DAVIS.						
Detailed Location:	DAVIS COMMUNICATIONS ANNEX. EAST OF ROAD 104 AND BETWEEN ROADS 35 AND 36. MANY SMALL COLONIES MAPPED BY CNDDB AS 5 POLYGONS.						
Ecological:	ON PESCADERO SOIL ADJACENT TO PONDED AREAS, IN AREAS OF LOWER PLANT COVER. ASSOCIATES INCLUDE SEVERAL ALKALINE WETLAND SPECIES SUCH AS FRANKENIA, PLAGIOBOTHRYX STIPITATA STIPITATA, AND POGOGYNE ZIZYPHOROIDES. OTHER RARE PLANTS ALSO HERE.						
General:	65 PLANTS OBSERVED OVER 2.5 ACRES IN 1993 IN THE SOUTHERNMOST POLYGON. NONE FOUND IN 1995, 1996, OR 2002. 912 OBSERVED IN 2004 IN THE 4 NORTHERN POLYGONS.						
Owner/Manager:	DOD-MCCLELLAN AFB						

Occurrence No.	64	Map Index:	51708	EO Index:	51708	Element Last Seen:	2003-04-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-04-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43951 / -121.67286				Accuracy:	specific area	
UTM:	Zone-10 N4255415 E615822				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20, NW (M)				Acres:	15.0	
Location:	DFG GLIDE-TULE RANCH ECOLOGICAL RESERVE, APPROXIMATELY 2 MILES SOUTHWEST OF SAXON.						
Detailed Location:	MAPPED AS 3 POLYGONS IN THE WESTERN PORTION OF SECTION 20. INCLUDES GLIDE SITE #2.						
Ecological:	ALKALI VERNAL POOLS AND SWALES ON DEEPLY CHURNING SOILS OF THE PESCADERO CLAY AND CLEAR LAKE CLAY SERIES. ASSOCIATES INCLUDE LASTHENIA FREMONTII, LOLIUM MULTIFLORUM, TRIPHYSARIA ERIANTHA SSP. ERIANTHA, AND LUPINUS BICOLOR.						
General:	5 PLANTS OBSERVED OVER SEVERAL VISITS AS PART OF THE KINDER-MORGAN PIPELINE SURVEY (2002). >100 PLANTS OBSERVED IN 2003 BETWEEN THIS & OCC #32 & 70. RECENTLY ACQUIRED BY DFG AS PART OF THE YOLO BASIN ECOLOGICAL AREA. INCLUDES FORMER EO #69.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	70	Map Index:	54633	EO Index:	54633	Element Last Seen:	2003-04-XX
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45262 / -121.67215				Accuracy:	specific area	
UTM:	Zone-10 N4256871 E615863				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	0.8	
Location:	DFG GLIDE-TULE RANCH ER, ABOUT 0.25 MILE WEST OF RAILROAD TRACKS ALONG SLOUGH, 1.9 AIR MILES SOUTHWEST OF GLIDE RANCH.						
Detailed Location:	ONE SMALL COLONY MAPPED IN THE SW 1/4 OF THE NW 1/4 OF SECTION 17.						
Ecological:	MESIC GRASSLAND DOMINATED BY LASTHENIA GLABRATA AND LOLIUM MULTIFLORUM. ASSOCIATES INCLUDE LAYIA CHRYSANTHEMOIDES, BLENNOSPERMA NANUM ET AL.						
General:	FEWER THAN 100 PLANTS OBSERVED IN 2003 BETWEEN THIS OCCURRENCE & OCCURRENCES #32 & #64.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Astragalus tener var. ferrisiae

Element Code: PDFAB0F8R3

Ferris' milk-vetch

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** G2T1

State: None

State: S1

Other: Rare Plant Rank - 1B.1

Habitat: **General:** MEADOWS AND SEEPS, VALLEY AND FOOTHILL GRASSLAND.

Micro: SUBALKALINE FLATS ON OVERFLOW LAND IN THE CENTRAL VALLEY; USUALLY SEEN IN DRY, ADOBE SOIL. 4-80 M.

Occurrence No.	6	Map Index:	22755	EO Index:	19963	Element Last Seen:	1978-05-08
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			2002-05-16
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2013-08-01

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.45543 / -121.66126	Accuracy:	nonspecific area
UTM:	Zone-10 N4257197 E616808	Elevation (ft):	15
PLSS:	T07N, R03E, Sec. 17, NE (M)	Acres:	168.0

Location: 1/4 MILE SOUTH OF SAXON.

Detailed Location: AREA IMMEDIATELY SOUTH OF SAXON STATION PART OF THE DFG GLIDE TULE RANCH. MAPPED BY CNDDB ACCORDING TO TRS INFORMATION ON 1978 CRAMPTON COLLECTION LABEL IN THE NE 1/4 OF SECTION 17.

Ecological: LARGE VERNAL MEADOW. AREA CATTLE GRAZED (2002).

General: SITE BASED ON A 1978 CRAMPTON COLLECTION. 1959 CRAMPTON COLLECTION ALSO ATTRIB HERE. SITE VISITED 3/21/02, 4/8/02, & 5/16/02, NO PLANTS FOUND. ACC TO WITHAM, HABITAT PRESENT AND RELATIVELY NATURAL LANDSCAPE; WILL BE SURVEYED AGAIN IN 2003.

Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No.	14	Map Index:	53728	EO Index:	53728	Element Last Seen:	2009-04-18
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:			2009-04-18
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2013-07-26

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.43650 / -121.66991	Accuracy:	specific area
UTM:	Zone-10 N4255085 E616084	Elevation (ft):	15
PLSS:	T07N, R03E, Sec. 20, SW (M)	Acres:	11.0

Location: GLIDE TULE ER; PLAYA POOL ABOUT 1.4 AIR MILES NNE OF VAUGHN RANCH, EAST OF THE SACRAMENTO NORTHERN CANAL, YOLO BYPASS.

Detailed Location: MAPPED WITHIN THE SW 1/4 OF SECTION 20 ACCORDING TO 2007 DEAN DIGITAL DATA.

Ecological: VERNAL POOL/GRASSLAND MOSAIC ON CAPAY-CLEAR LAKE SOIL. SOME PESCADERO CLAY. MESIC GRASSLAND ON MARGIN OF PLAYA POOL. ASSOCIATES INCLUDE LASTHENIA GLABRATA, LOLIUM MULTIFLORUM, HESPEREVAX CAULESCENS, AND POGOGYNE ZIZYPHOROIDES.

General: 12 VERY SCATTERED PLANTS OBSERVED IN 2003. >2000 PLANTS OBSERVED IN 2007. 2002 AND 2009 COLLECTIONS BY SOLOMESHCH ARE ALSO ATTRIBUTED TO THIS OCCURRENCE.

Owner/Manager: DFG-YOLO BYPASS WA

Lathyrus jepsonii var. jepsonii

Element Code: PDFAB250D2

Delta tule pea

Listing Status: **Federal:** None

CNDDB Element Ranks: **Global:** G5T2

State: None

State: S2

Other: Rare Plant Rank - 1B.2, SB_BerrySB-Berry Seed Bank, SB_RSABG-Rancho Santa Ana Botanic Garden



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Habitat:	General:	MARSHES AND SWAMPS.					
	Micro:	IN FRESHWATER AND BRACKISH MARSHES. OFTEN FOUND WITH TYPHA, ASTER LENTUS, ROSA CALIFORNICA, JUNCUS SPP., SCIRPUS, ETC. USUALLY ON MARSH AND SLOUGH EDGES. 0-5 M.					
Occurrence No.	3	Map Index:	11226	EO Index:	19249	Element Last Seen:	1980-10-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1980-10-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-03-08
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.18394 / -121.65511				Accuracy:	nonspecific area	
UTM:	Zone-10 N4227078 E617784				Elevation (ft):	2	
PLSS:	T04N, R03E, Sec. 21 (M)				Acres:	69.6	
Location:	STEAMBOAT SLOUGH NEAR JUNCTION WITH SACRAMENTO RIVER.						
Detailed Location:	UNKNOWN WHICH SIDE OF RIVER THE PLANTS WERE SEEN. SITE MAPPED TO ENCOMPASS ALL LIKELY HABITAT ALONG BOTH SIDES OF THE SLOUGH UP TO 0.5 MILE UPSTREAM FROM CONFLUENCE WITH THE SACRAMENTO RIVER. ACTUAL POP SIZE SMALLER THAN DEPICTED AT CNDDB.						
Ecological:	EDGE OF SLOUGH JUST ABOVE HIGH WATER LINE. ASSOCIATED WITH EQUISETUM, VITUS CALIFORNICA, AND ROSA, QUERCUS LOBATA, PLATANUS RACEMOSA, ALNUS RHOMBIFOLIA, FRAXINUS, AND RUBUS.						
General:	5 PLANTS.						
Owner/Manager:	PVT						
Occurrence No.	22	Map Index:	11250	EO Index:	20063	Element Last Seen:	2009-07-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-15
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25376 / -121.49979				Accuracy:	specific area	
UTM:	Zone-10 N4235035 E631262				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 25, NW (M)				Acres:	7.0	
Location:	SNODGRASS SLOUGH, 0.6 TO 0.8 MILE NORTH OF DELTA CROSS CHANNEL, SE PORTION OF DELTA MEADOWS PARK, NE OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDB AS 4 POLYGONS. 3 SMALL EASTERN POLYGONS BASED ON SPECIFIC GIS DATA FROM DWR. 1 WESTERN POLYGON REPRESENTS THE CENTER OF A <5 ACRE VEGETATION SAMPLING PLOT; THIS POINT LOCATION IS SLIGHTLY LESS SPECIFIC THAN THE OTHERS.						
Ecological:	COASTAL/VALLEY FRESHWATER MARSH WITH SALIX LUCIDA, CORNUS SERICEA, QUERCUS LOBATA, RUBUS DISCOLOR, ALNUS RHOMBIFOLIA, CEPHALANTHUS OCCIDENTALIS, SCIRPUS ACUTUS, HIBISCUS LASIOCARPUS, CAREX BARBARAE, CONVULVULUS ARVENSIS, PASPALUM DILATATUM.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 1987. L. J. JEPSONII REPRESENTED LESS THAN 1% OF THE VEGETATION AT WESTERN SITE IN 2005. IN 2009 THE 3 EASTERN POLYGONS HAD 1, 1, AND 20 PLANTS IN THEM RESPECTIVELY, GOING FROM THE NORTH TO SOUTH SITES.						
Owner/Manager:	DPR-DELTA MEADOWS, UNKNOWN						



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Occurrence No.	23	Map Index:	11269	EO Index:	20064	Element Last Seen:	1987-08-30
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1987-08-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-02-10
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25956 / -121.49499				Accuracy:	80 meters	
UTM:	Zone-10 N4235685 E631672				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24 (M)				Acres:	0.0	
Location:	WEST SIDE OF SNODGRASS SLOUGH; ABOUT 1.2 AIR MILES SOUTH OF TWIN CITIES ROAD.						
Detailed Location:							
Ecological:	PLANTS IN COASTAL/VALLEY FRESHWATER MARSH ASSOCIATED WITH CEPHALANTHUS OCCIDENTALIS, ALNUS RHOMBIFOLIA, SCIRPUS ACUTUS, AND HIBISCUS LASIOCARPUS. IN SUNNY AREAS, ESPECIALLY SOUTH-FACING, NEAR THE WATERS EDGE.						
General:	PLANTS WERE TOO TANGLED TO ESTIMATE POPULATION SIZE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	24	Map Index:	11277	EO Index:	15640	Element Last Seen:	2009-08-10
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-15
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26881 / -121.49321				Accuracy:	specific area	
UTM:	Zone-10 N4236714 E631811				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, N (M)				Acres:	25.0	
Location:	ALONG SNODGRASS SLOUGH AND SIDE CHANNELS, FROM TWIN CITIES ROAD TO 3/4 MILE SOUTH OF ROAD, NORTH OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDDB AS 9 POLYGONS.						
Ecological:	COASTAL/VALLEY FRESHWATER MARSH ASSOCIATED WITH CEPHALANTHUS OCCIDENTALIS, ALNUS RHOMBIFOLIA, SCIRPUS ACUTUS, HIBISCUS LASIOCARPUS, RUBUS DISCOLOR, CORNUS, ROSA CALIFORNICA, VITUS CALIFORNICA, SALIX EXIGUA, TYPHA.						
General:	36 PLANTS OBSERVED IN 2009. INCLUDES FORMER OCCURRENCE #25.						
Owner/Manager:	DPR, TNC, UNKNOWN						



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Occurrence No.	48	Map Index:	24968	EO Index:	29611	Element Last Seen:	1994-01-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1994-01-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18882 / -121.48503			Accuracy:	80 meters		
UTM:	Zone-10 N4227850 E632672			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 18 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER, ON ISLAND 0.5 MILE SOUTHWEST OF BEAVER SLOUGH.						
Detailed Location:	SMALL ISLAND JUST NORTH OF RIVER MILE 15.						
Ecological:	ASSOCIATED WITH LIMOSELLA SUBULATA, SCIRPUS AMERICANUS, SCIRPUS ACUTUS OCCIDENTALIS, VERBENA, SALIX, CEPHALANTHUS, AND ALNUS.						
General:	1-5 PLANTS OBSERVED IN 1987. LATHYRUS JEPSONII VAR. CALIFORNICA OCCURS NEARBY ON RIPRAP BANK.						
Owner/Manager:	UNKNOWN						

Occurrence No.	49	Map Index:	24967	EO Index:	15642	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-02-10
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24109 / -121.66332			Accuracy:	specific area		
UTM:	Zone-10 N4233409 E616974			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 32 (M)			Acres:	15.6		
Location:	RYER ISLAND ALONG MINER SLOUGH, APPROXIMATELY 0.5 MILE FROM THE SOUTHWEST TIP OF PROSPECT ISLAND.						
Detailed Location:	ALONG WATER SIDE OF LEVEE NEAR MOUTH OF MINER SLOUGH.						
Ecological:							
General:	MAP DETAIL IS ONLY SOURCE OF INFORMATION FOR THIS SITE. SITE QUALITY, POPULATION TRENDS, AND ECOLOGICAL INFORMATION NEEDED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	50	Map Index:	24966	EO Index:	6303	Element Last Seen:	1988-10-31
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1988-10-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1993-12-27
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29658 / -121.50904			Accuracy:	nonspecific area		
UTM:	Zone-10 N4239773 E630376			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 11 (M)			Acres:	10.1		
Location:	SNODGRASS SLOUGH, SOUTHERN TIP OF ISLAND LOCATED 1.2 MILE NORTH OF TWIN CITIES ROAD.						
Detailed Location:	SITE IS 3/4 MILE NORTH OF THE "DURBIN" TRIANGULATION POINT.						
Ecological:	FRESHWATER MARSH. SEVERAL POPULATIONS OF HIBISCUS LASIOCARPUS AREA LOCATED NEARBY.						
General:	ONE 10' X 10' COLONY OBSERVED IN 1988. SITE QUALITY AND ADDITIONAL ECOLOGICAL INFORMATION NEEDED FOR THIS SITE.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	53	Map Index:	24962	EO Index:	6306	Element Last Seen:	2005-08-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-16
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.30028 / -121.73065			Accuracy:	specific area		
UTM:	Zone-10 N4239895 E610991			Elevation (ft):	5		
PLSS:	T05N, R02E, Sec. 02 (M)			Acres:	64.0		
Location:	HASS SLOUGH AND CACHE SLOUGH, ADJACENT TO THE SOUTHEAST END OF PETERS POCKET.						
Detailed Location:	MAPPED BY CNDDDB AS 13 POLYGONS. THE POLYGON 0.3 MILE NORTH OF SYCAMORE SLOUGH WAS MAPPED BASED ON 2005 VEGETATION MAPPING DATA. THE OTHER 12 POLYGONS CAME FROM 1988 MAPPING DATA.						
Ecological:	ASSOCIATED WITH ALNUS RHOMBIFOLIA, QUERCUS LOBATA, RUBUS DISCOLOR, SALIX LASIOLEPIS, CORNUS SERICEA, CAREX BARBARAE, SALIX EXIGUA, CEPHALANTHUS OCCIDENTALIS, FRAXINUS LATIFOLIA, LEERSIA ORYZOIDES, POPULUS FREMONTII, SALIX GOODDINGII, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 1988. L. J. VAR. JEPSONII ACCOUNTED FOR LESS THAN 1% OF THE ISLAND VEGETATION AT THE SITE SURVEYED IN 2005.						
Owner/Manager:	PVT, UNKNOWN						

Occurrence No.	54	Map Index:	24961	EO Index:	6305	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-12-15
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.29670 / -121.74571			Accuracy:	specific area		
UTM:	Zone-10 N4239479 E609680			Elevation (ft):	5		
PLSS:	T05N, R02E, Sec. 10 (M)			Acres:	10.1		
Location:	CACHE SLOUGH, NORTH BANK OF SLOUGH 1.2 MILES WEST OF THE SOUTHEAST TIP OF PETERS POCKET.						
Detailed Location:							
Ecological:							
General:	MAP DETAIL IS ONLY SOURCE OF INFORMATION FOR THIS SITE. ECOLOGICAL AND SITE QUALITY INFORMATION NEEDED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	123	Map Index:	46487	EO Index:	46487	Element Last Seen:	2000-06-22
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2000-06-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2001-11-13
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19321 / -121.47996				Accuracy:	80 meters	
UTM:	Zone-10 N4228344 E633108				Elevation (ft):	2	
PLSS:	T04N, R05E, Sec. 18 (M)				Acres:	0.0	
Location:	EAST SIDE OF STATEN ISLAND, JUST SOUTH OF CONFLUENCE OF BEAVER SLOUGH AND MOKELUMNE RIVER.						
Detailed Location:	IN BACKWATER MARSH OR SLOUGH.						
Ecological:	IN WATER (?) ADJACENT TO ISLAND. SURROUNDED BY LARGE RIPARIAN FOREST.						
General:	1 PLANT OBSERVED IN 2000.						
Owner/Manager:	UNKNOWN						
Occurrence No.	134	Map Index:	56159	EO Index:	56175	Element Last Seen:	2004-07-09
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2004-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-07-20
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.15179 / -121.59560				Accuracy:	80 meters	
UTM:	Zone-10 N4223588 E623050				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 36, NE (M)				Acres:	0.0	
Location:	WATER SIDE OF THE NORTHERN LEVEE ALONG GEORGIANA SLOUGH, JUST UPSTREAM OF THE OXBOW, SOUTH OF ISLETON.						
Detailed Location:	FOUND ON OUTSIDE OF RIPARIAN CORRIDOR NEAR LEVEE TOE.						
Ecological:	RIPARIAN SCRUB HABITAT. DOMINANTS INCLUDE SALIX EXIGUA, S. GOODINGII, AND S. LASIOLEPIS. ASSOCIATES INCLUDE LEYMUS TRITICOIDES AND JUNCUS.						
General:	1 PLANT SEEN IN 2004.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	156	Map Index:	80963	EO Index:	84297	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2005-08-16	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-06-30	

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long:	38.24718 / -121.70333	Accuracy:	80 meters
UTM:	Zone-10 N4234035 E613462	Elevation (ft):	2
PLSS:	T05N, R02E, Sec. 25, SE (M)	Acres:	0.0

Location: LINDSEY SLOUGH, APPROXIMATELY 0.4 MILE WEST OF WRIGHT CUT, SE END OF HASTINGS TRACT.

Detailed Location: ON A MID-CHANNEL ISLAND WITHIN SLOUGH, JUST WEST OF HASTINGS ISLAND ROAD BRIDGE.

Ecological: HARD CLAY BENCHES WITH A LOT OF HERBS. ASSOCIATES INCLUDE CORNUS SERICEA, RUBUS DISCOLOR, SALIX EXIGUA, SALIX LASIOLEPIS, SCHOENOPLECTUS ACUTUS, SALIX BABYLONICA, ALNUS RHOMBIFOLIA, PHRAGMITES AUSTRALIS, ETC.

General: L. J. VAR. JEPSONII ACCOUNTED FOR LESS THAN 1% OF THE PLANT COVER FOUND DURING A VEGETATION SURVEY AT THIS SITE IN 2005.

Owner/Manager: UNKNOWN

Occurrence No.	157	Map Index:	83262	EO Index:	84298	Element Last Seen:	2009-06-01
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-06-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-06-30	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.26398 / -121.45814	Accuracy:	80 meters
UTM:	Zone-10 N4236229 E634887	Elevation (ft):	4
PLSS:	T05N, R05E, Sec. 20, SW (M)	Acres:	0.0

Location: 0.4 AIR MILE WEST OF I-5 BRIDGE OVER COSUMNES RIVER.

Detailed Location: NEAR A DIRT ROAD AT THE BOUNDARY BETWEEN AN AGRICULTURAL FIELD AND RIPARIAN FOREST, BETWEEN CHANNELS OF COSUMNES RIVER AND MOKELUMNE RIVER.

Ecological: RIPARIAN FOREST.

General: 3 PLANTS OBSERVED IN 2009.

Owner/Manager: STATE



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Occurrence No.	158	Map Index:	83265	EO Index:	84299	Element Last Seen:	2009-08-12
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-18
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.33034 / -121.57940				Accuracy:	specific area	
UTM:	Zone-10 N4243423 E624165				Elevation (ft):	1	
PLSS:	T06N, R04E, Sec. 31, N (M)				Acres:	6.0	
Location:	CHANNEL BETWEEN SUTTER SLOUGH / ELK SLOUGH AND THE SACRAMENTO RIVER, WEST OF COURTLAND, AT SW END OF MERRITT ISLAND.						
Detailed Location:	ON THE NORTH SIDE OF THE CHANNEL.						
Ecological:	RIPRAP ABOVE HIGH WATER.						
General:	APPROXIMATELY 20 PLANTS OBSERVED IN 2009, IN SCATTERED CLUMPS.						
Owner/Manager:	UNKNOWN						

Occurrence No.	159	Map Index:	83277	EO Index:	84301	Element Last Seen:	2005-08-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-30
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.30301 / -121.57868				Accuracy:	80 meters	
UTM:	Zone-10 N4240391 E624275				Elevation (ft):	1	
PLSS:	T05N, R04E, Sec. 07, NE (M)				Acres:	0.0	
Location:	NW SHORE OF STEAMBOAT SLOUGH, 0.3 MILE SW OF ITS CONFLUENCE WITH THE SACRAMENTO RIVER, ON WEST SIDE OF SUTTER ISLAND.						
Detailed Location:							
Ecological:	WELL-DEVELOPED REMNANT STAND OF QUERCUS LOBATA, Q. AGRIFOLIA, AND ALNUS RHOMBIFOLIA, WITH FRAXINUS LATIFOLIA, ARTEMISIA DOUGLASIANA, ROSA CALIFORNICA, RUBUS URSINUS, VITIS CALIFORNICA, ACER NEGUNDO, SALIX EXIGUA, APOCYNUM CANNABINUM, ETC.						
General:	L. J. VAR. JEPSONII ACCOUNTED FOR LESS THAN 1% OF THE PLANT COVER FOUND DURING A VEGETATION SURVEY AT THIS SITE IN 2005.						
Owner/Manager:	UNKNOWN						

<i>Trifolium hydrophilum</i>					Element Code: PDFAB400R5		
saline clover							
Listing Status:	Federal:	None		CNDDB Element Ranks:	Global:	G2	
	State:	None			State:	S2	
	Other:	Rare Plant Rank - 1B.2					
Habitat:	General:	MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.					
	Micro:	MESIC, ALKALINE SITES. 1-335 M.					



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Occurrence No.	36	Map Index:	83562	EO Index:	84595	Element Last Seen:	1974-04-24
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1974-04-24	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-19	

Quad Summary: Liberty Island (3812136), Dozier (3812137)

County Summary: Solano

Lat/Long:	38.35810 / -121.74937	Accuracy:	1/5 mile
UTM:	Zone-10 N4246289 E609267	Elevation (ft):	15
PLSS:	T06N, R02E, Sec. 22, NW (M)	Acres:	0.0

Location: 1 MILE NE OF BUNKER STATION; SWAN X SIKES ROADS, SACRAMENTO VALLEY.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AT SWAN ROAD AND SIKES ROAD INTERSECTION, ABOUT 0.7 MILE NORTHEAST OF BUNKER.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1974 COLLECTION BY CRAMPTON. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	37	Map Index:	83564	EO Index:	84596	Element Last Seen:	2009-04-27
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-04-27	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-19	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.41575 / -121.48629	Accuracy:	specific area
UTM:	Zone-10 N4253030 E632149	Elevation (ft):	10
PLSS:	T07N, R04E, Sec. 36, E (M)	Acres:	1.0

Location: WEST SIDE OF I-5, ABOUT 0.5 AIR MILE NNW OF INTERSECTION WITH ELK GROVE BLVD.

Detailed Location: MAPPED IN THE APPROXIMATE CENTER OF THE EAST HALF OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.

Ecological: DRIED DEPRESSION DOMINATED BY LOLIUM MULTIFLORUM.

General: 100 PLANTS OBSERVED IN 2009.

Owner/Manager: UNKNOWN



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Occurrence No.	38	Map Index:	83566	EO Index:	84598	Element Last Seen:	2010-05-13
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40805 / -121.49098				Accuracy:	specific area	
UTM:	Zone-10 N4252169 E631753				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 01, N (M)				Acres:	34.0	
Location:	EAST SIDE OF ELK GROVE BLVD INTERSECTION WITH I-5, NORTH OF STONE LAKE.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDDB AS 11 POLYGONS ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES. WITHIN THE NORTH HALF OF SECTION 1 AND THE SOUTH HALF OF SECTION 36.						
Ecological:	SEASONALLY WET GRASSLANDS, SWALES, AND DEPRESSIONS. ASSOCIATED WITH HORDEUM MARINUM, LASTHENIA CALIFORNICA, L. GLABERRIMA, LOLIUM MULTIFLORUM, DOWNINGIA BICORNUTA VAR. BICORNUTA, CRESSA TRUXILLENSIS, ERYNGIUM SP., CONVOLVULUS ARVENSIS, ETC.						
General:	26,134 PLANTS OBSERVED IN 2009. 4,622 PLANTS OBSERVED IN 2010.						
Owner/Manager:	DPR, UNKNOWN						
Occurrence No.	39	Map Index:	83567	EO Index:	84599	Element Last Seen:	2009-04-28
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39652 / -121.48464				Accuracy:	specific area	
UTM:	Zone-10 N4250899 E632328				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 01, S (M)				Acres:	14.0	
Location:	BETWEEN STONE LAKE AND I-5, FROM ABOUT 1.8 TO 2.5 AIR MILES NORTHWEST OF FRANKLIN.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDDB AS 9 POLYGONS ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES. WITHIN THE SOUTH HALF OF SECTION 1 AND THE NORTH HALF OF THE NE 1/4 OF SECTION 12.						
Ecological:	SEASONALLY WET GRASSLANDS, VERNAL POOLS, AND DEPRESSIONS. ASSOC W/ PLAGIOBOTHRYIS, JUNCUS BUFONIS, HORDEUM MARINUM, DOWNINGIA BICORNUTA, MATRICARIA, ERYNGIUM CASTRENSE, VULPIA BROMOIDES, LEPIDIUM LATIPES LATIPES, LASTHENIA GLABERRIMA, ETC.						
General:	2580 PLANTS OBSERVED IN 2009.						
Owner/Manager:	DPR						



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Occurrence No.	40	Map Index:	83568	EO Index:	84600	Element Last Seen:	2010-05-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-05-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-22
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37894 / -121.49197			Accuracy:	specific area		
UTM:	Zone-10 N4248937 E631719			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 13, N (M)			Acres:	12.0		
Location:	NORTH SIDE OF HOOD FRANKLIN ROAD, FROM ABOUT 1.2 TO 1.9 AIR MILES ENE OF HOOD.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDDB AS 7 POLYGONS ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES. WITHIN THE NORTH HALF OF SECTION 13 AND THE SE 1/4 OF SW 1/4 OF SECTION 12.						
Ecological:	GRASSLAND FIELDS, SWALES, VERNAL POOLS, AND DITCHES. ASSOCIATED WITH HORDEUM MARINUM, LOLIUM MULTIFLORUM, LASTHENIA CALIFORNICA, L. CHRYSANTHA, AND PLAGIOBOTHRYIS.						
General:	710 PLANTS OBSERVED IN 2009. 200 PLANTS OBSERVED IN NORTHERNMOST POLYGON IN 2010.						
Owner/Manager:	UNKNOWN						

Occurrence No.	41	Map Index:	83569	EO Index:	84601	Element Last Seen:	2009-04-30
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-22
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.40331 / -121.50255			Accuracy:	specific area		
UTM:	Zone-10 N4251626 E630752			Elevation (ft):	10		
PLSS:	T06N, R04E, Sec. 02, NE (M)			Acres:	1.0		
Location:	NORTHWEST OF STONE LAKE, ABOUT 1.3 AIR MILES SOUTHEAST OF CLARKSBURG AND ABOUT 1 AIR MILE NORTHEAST OF ROSEBUD LANDING.						
Detailed Location:	TWO COLONIES MAPPED IN THE SE 1/4 OF THE NE 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	GRASSLAND SWALES.						
General:	30 PLANTS OBSERVED IN NORTHERN COLONY AND 10,000 PLANTS OBSERVED IN SOUTHERN COLONY IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	42	Map Index:	83570	EO Index:	84602	Element Last Seen:	2003-04-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-12
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43659 / -121.66740				Accuracy:	nonspecific area	
UTM:	Zone-10 N4255099 E616303				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20 (M)				Acres:	2128.0	
Location:	DFG TULE RANCH VERNAL POOLS, SOUTHEAST OF JUNCTION OF COUNTY ROADS 38 & 105, ABOUT 8 MILES SOUTHEAST OF DAVIS.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB AS A NON-SPECIFIC POLYGON AROUND THE SOUTHWEST PORTION OF DFG'S TULE RANCH TO ENCOMPASS VERNAL POOL HABITAT IN VICINITY.						
Ecological:	VERNAL POOL GRASSLAND MOSAIC PRIMARILY ON CAPAY-CLEAR LAKE SOIL ASSOCIATION WITH SOME INCLUSION OF PESCADERO CLAY. PLANTS OCCURRING PRIMARILY IN VERNAL POOLS.						
General:	OCCURRENCE BASED ON A 1966 CRAMPTON COLLECTION FROM "1 MILE SW OF SAXON STATION" AND A 2003 WITHAM COLLECTION FROM "DFG TULE RANCH VERNAL POOLS, ~8 MI SE OF DAVIS, SE OF JCT OF CR 38 & 105." NEEDS MAP DETAIL.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Scutellaria galericulata

Element Code: PDLAM1U0J0

marsh skullcap

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G5

State: None

State: S2

Other: Rare Plant Rank - 2B.2

Habitat: **General:** MARSHES AND SWAMPS, LOWER MONTANE CONIFEROUS FOREST, MEADOWS AND SEEPS.

Micro: SWAMPS AND WET PLACES. 0-1950 M.

Occurrence No.	29	Map Index:	83680	EO Index:	84708	Element Last Seen:	2009-08-10
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-08-10	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-09-14	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.26835 / -121.48239	Accuracy:	specific area
UTM:	Zone-10 N4236679 E632758	Elevation (ft):	5
PLSS:	T05N, R05E, Sec. 19, NW (M)	Acres:	1.0

Location: JUST EAST OF DELTA MEADOWS; ~0.9 AIR MILE SE OF JUNCTION OF SNODGRASS SLOUGH AND TWIN CITIES ROAD, NNE OF WALNUT GROVE.

Detailed Location: MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA.

Ecological: TIDAL MARSH, ON EXPOSED LOG TOPS. ASSOCIATED WITH ALNUS, HELENIUM, EPILOBIUM, JUNCUS EFFUSUS, LYCOPUS, PASPALUM, AND VERBENA.

General: IN 2009, 1 PLANT WAS OBSERVED IN THE WESTERN POLYGON AND 20 PLANTS WERE OBSERVED IN THE EASTERN POLYGON.

Owner/Manager: TNC

Occurrence No.	30	Map Index:	83681	EO Index:	84709	Element Last Seen:	2009-07-31
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-07-31	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-09-14	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.25734 / -121.49740	Accuracy:	specific area
UTM:	Zone-10 N4235435 E631465	Elevation (ft):	0
PLSS:	T05N, R04E, Sec. 25, N (M)	Acres:	1.0

Location: EAST SIDE OF DELTA MEADOWS AND WEST SIDE OF SNODGRASS SLOUGH, ABOUT 0.8 AIR MILE NE OF LOCKE, NE OF WALNUT GROVE.

Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA.

Ecological: EXPOSED LOG TOPS WITH CEPHALANTHUS, JUNCUS EFFUSUS, CAREX DENSA, AND RUMEX CRISPUS.

General: PLANTS WERE CONSIDERED UNCOMMON AT THIS SITE IN 2009.

Owner/Manager: DPR-DELTA MEADOWS RIVER PARK

Scutellaria lateriflora

Element Code: PDLAM1U0Q0

side-flowering skullcap

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G5

State: None

State: S2

Other: Rare Plant Rank - 2B.2

Habitat: **General:** MEADOWS AND SEEPS, MARSHES AND SWAMPS.



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Micro: WET MEADOWS AND MARSHES. IN THE DELTA, OFTEN FOUND ON LOGS. 0-500 M.					
Occurrence No.	2	Map Index: 37124	EO Index: 32121	Element Last Seen:	1892-09-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1892-09-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-04-22
Quad Summary:	Terminous (3812114), Bouldin Island (3812115), Isleton (3812125)				
County Summary:	San Joaquin				
Lat/Long:	38.10350 / -121.53293		Accuracy:	nonspecific area	
UTM:	Zone-10 N4218315 E628626		Elevation (ft):		
PLSS:	T03N, R04E, Sec. 15 (M)		Acres:	6035.0	
Location:	BOULDIN ISLAND.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS AROUND BOULDIN ISLAND.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS AN 1892 COLLECTION BY BRANDEGEE. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				
Occurrence No.	3	Map Index: 66826	EO Index: 66985	Element Last Seen:	2009-08-10
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-08-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2013-09-09
Quad Summary:	Bruceville (3812134), Courtland (3812135)				
County Summary:	Sacramento				
Lat/Long:	38.25875 / -121.50156		Accuracy:	specific area	
UTM:	Zone-10 N4235586 E631098		Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, SW (M)		Acres:	8.0	
Location:	DELTA MEADOWS, JUST NE OF LOCKE.				
Detailed Location:	MAPPED BY CNDDDB AS 8 SMALL POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. MOSTLY LOCATED ALONG A DEAD END SLOUGH THAT BRANCHES OFF OF SNODGRASS SLOUGH TO THE WEST AND THEN THE NORTH.				
Ecological:	ON LOGS OR PARTIALLY SUBMERGED LOGS WITH VERBENA, JUNCUS EFFUSUS, SOLANUM, MENTHA, BUTTONWILLOW, PASPALUM, LYCOPUS, AND CENTAURIUM.				
General:	24 PLANTS IN TOTAL OBSERVED IN 2009 (INDIVIDUAL POPULATIONS RANGED IN SIZE FROM 1 TO 4 PLANTS). 1992 HRUSA AND 1993 BOWCUTT COLLECTIONS FROM "IMMEDIATELY EAST OF LOCKE, DELTA MEADOWS RIVER PARK" ARE ALSO ATTRIBUTED TO THIS SITE.				
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK				



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Occurrence No.	4	Map Index:	79775	EO Index:	80763	Element Last Seen:	2009-09-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14652 / -121.43250				Accuracy:	specific area	
UTM:	Zone-10 N4223232 E637351				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 33, SE (M)				Acres:	1.0	
Location:	ALONG SYCAMORE SLOUGH BETWEEN BRACK TRACT AND TERMINOUS TRACT, ABOUT 4.2 AIR MILES NE OF TERMINUS.						
Detailed Location:	ON LOG IN MIDDLE OF SLOUGH.						
Ecological:	ON LOG INTERMIXED WITH GALIUM.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	5	Map Index:	79776	EO Index:	80764	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20834 / -121.48669				Accuracy:	specific area	
UTM:	Zone-10 N4230014 E632491				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 07, SW (M)				Acres:	1.0	
Location:	ALONG SOUTH MOKELUMNE RIVER BETWEEN STATEN ISLAND AND NEW HOPE TRACT, ABOUT 1.4 AIR MILES SOUTH OF NEW HOPE LANDING.						
Detailed Location:	NORTH SIDE OF RIVER.						
Ecological:	EXPOSED LOG WITH MANY OTHER MARSH SPECIES INCLUDING SPERGULARIA MARINUM, LYCOPUS, JUNCUS EFFUSUS, ETC.						
General:	6 PLANTS WERE OBSERVED ON A FEW EXPOSED LOGS IN THIS AREA IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	6	Map Index:	79777	EO Index:	80765	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21229 / -121.49369				Accuracy:	specific area	
UTM:	Zone-10 N4230442 E631870				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 12, NE (M)				Acres:	1.0	
Location:	ALONG SOUTH MOKELUMNE RIVER BETWEEN STATEN ISLAND AND NEW HOPE TRACT, ABOUT 1 AIR MI SOUTH OF NEW HOPE LANDING.						
Detailed Location:	EAST SIDE OF RIVER.						
Ecological:	EXPOSED LOG WITH MANY OTHER MARSH SPECIES INCLUDING SPERGULARIA MARINUM, LYCOPUS, JUNCUS EFFUSUS, ETC.						
General:	5 PLANTS WERE OBSERVED GROWING ON THREE EXPOSED LOGS IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	7	Map Index:	79778	EO Index:	80766	Element Last Seen:	2009-09-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.22763 / -121.49784				Accuracy:	specific area	
UTM:	Zone-10 N4232138 E631479				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 01, NW (M)				Acres:	1.0	
Location:	ALONG NORTH MOKELUMNE RIVER BETWEEN DEAD HORSE ISLAND AND STATEN ISLAND, JUST WEST OF NEW HOPE LANDING.						
Detailed Location:	SOUTH SIDE OF RIVER.						
Ecological:	EXPOSED LOG AT WATER'S EDGE WITH VERBENA, JUNCUS EFFUSUS, AND LYCOPUS.						
General:	12 PLANTS OBSERVED IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE?						

Occurrence No.	8	Map Index:	79779	EO Index:	80768	Element Last Seen:	2009-09-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23906 / -121.48757				Accuracy:	specific area	
UTM:	Zone-10 N4233421 E632358				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 36, NW (M)				Acres:	1.0	
Location:	ALONG MOKELUMNE RIVER AT THE NW END OF NEW HOPE TRACT, ABOUT 0.78 AIR MILE NORTH OF NEW HOPE LANDING.						
Detailed Location:	WEST SIDE OF RIVER.						
Ecological:	ON LOG EDGE OF RIPARIAN.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	TNC?						

Occurrence No.	9	Map Index:	79780	EO Index:	80769	Element Last Seen:	2009-09-14
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.22729 / -121.50951				Accuracy:	specific area	
UTM:	Zone-10 N4232084 E630459				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 02, NE (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH BETWEEN DEAD HORSE ISLAND AND TYLER ISLAND, ABOUT 1 AIR MILE WEST OF NEW HOPE LANDING.						
Detailed Location:	EAST SIDE OF SLOUGH.						
Ecological:	EXPOSED LOG TOP AT WATER'S EDGE.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	10	Map Index:	79781	EO Index:	80770	Element Last Seen:	2009-07-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26092 / -121.49386				Accuracy:	specific area	
UTM:	Zone-10 N4235838 E631767				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, SE (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH ON THE EAST SIDE OF THE MEADOWS, ABOUT 1.1 AIR MILES NE OF LOCKE.						
Detailed Location:	WEST SIDE OF THE SLOUGH.						
Ecological:	GROWING ON EXPOSED LOG TOPS WITH JUNCUS EFFUSUS.						
General:	10 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	11	Map Index:	79783	EO Index:	80772	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27046 / -121.49625				Accuracy:	specific area	
UTM:	Zone-10 N4236893 E631542				Elevation (ft):	10	
PLSS:	T05N, R04E, Sec. 24, N (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH AT THE NORTH END OF THE MEADOWS, ABOUT 1.5 AIR MILES NNE OF LOCKE.						
Detailed Location:							
Ecological:	UP ON LOG WITH LOTS OF CEPHALANTHUS.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	12	Map Index:	79784	EO Index:	80773	Element Last Seen:	2009-09-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27018 / -121.47621				Accuracy:	specific area	
UTM:	Zone-10 N4236891 E633295				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 19, N (M)				Acres:	13.0	
Location:	ALONG THE PORTION OF SNODGRASS SLOUGH BETWEEN TWIN CITIES RD AND THE MOKELUMNE RIVER, EAST OF THE MEADOWS, NE OF LOCKE.						
Detailed Location:	MAPPED BY CNDDB AS 17 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	MOSTLY ON PARTIALLY SUBMERGED OR FALLEN LOGS. ASSOCIATES INCLUDE SOLANUM AMERICANUM, LYCOPUS, HELENIUM, JUNCUS EFFUSUS, AGROSTIS EXARATA, ETC.						
General:	68 PLANTS IN TOTAL OBSERVED IN 2009 (INDIVIDUAL POPULATIONS RANGED IN SIZE FROM 1 PLANT TO 20 PLANTS).						
Owner/Manager:	UNKNOWN						



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Occurrence No.	13	Map Index:	79785	EO Index:	80774	Element Last Seen:	2009-08-11
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-08-11	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-08-31	
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28049 / -121.49776				Accuracy:	specific area	
UTM:	Zone-10 N4238004 E631391				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 13, SW (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH ~0.25 AIR MI N OF TWIN CITIES ROAD ON THE WEST SIDE OF SOUTHERN PACIFIC RR TRACKS, N OF LOCKE.						
Detailed Location:							
Ecological:	TIDAL MARSH. GROWING ON STUMPS STICKING OUT OF THE WATER AT WATER'S EDGE WITH ALDER, VERBENA, EPILOBIUM, AND JUNCUS EFFUSUS.						
General:	40 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

<i>Hibiscus lasiocarpus var. occidentalis</i>				Element Code: PDMAL0H0R3	
woolly rose-mallow					
Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G5T3
	State:	None		State:	S3
	Other:	Rare Plant Rank - 1B.2, SB_RSABG-Rancho Santa Ana Botanic Garden, SB_UCBBG-UC Berkeley Botanical Garden			
Habitat:	General:	MARSHES AND SWAMPS (FRESHWATER).			
	Micro:	MOIST, FRESHWATER-SOAKED RIVER BANKS & LOW PEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAP AND LEVEES. IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-155 M.			

Occurrence No.	36	Map Index:	10841	EO Index:	20816	Element Last Seen:	1891-09-16
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1974-07-15		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2013-03-14		
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.14963 / -121.69328				Accuracy:	1/5 mile	
UTM:	Zone-10 N4223223 E614495				Elevation (ft):		
PLSS:	T04N, R03E, Sec. 31 (M)				Acres:	0.0	
Location:	SACRAMENTO RIVER NEAR RIO VISTA.						
Detailed Location:							
Ecological:							
General:	SPECIES SEEN IN 1887 AND 1891. ALSO SEEN AT THIS LOCATION BY HOOD (DATE UNKNOWN). NO PLANTS OBSERVED DURING A 1974 SITE VISIT.						
Owner/Manager:	PVT						



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Occurrence No.	61	Map Index:	11304	EO Index:	19497	Element Last Seen:	1973-08-XX
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1987-09-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-01-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16779 / -121.47193			Accuracy:	nonspecific area		
UTM:	Zone-10 N4225535 E633857			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 30 (M)			Acres:	38.5		
Location:	HOG SLOUGH BETWEEN CANAL RANCH & BRACK TRACT. ABOUT 4.75 AIR MILES SW OF THORNTON.						
Detailed Location:							
Ecological:							
General:	ONE PLANT WAS SEEN IN 1973, BUT IN 1987 SEARCH IT WAS REPORTED THAT THE ISLANDS THAT ONCE OCCURRED HERE ARE NOW UNDER WATER. OCCURRENCE IS NOW CONSIDERED EXTIRPATED.						
Owner/Manager:	PVT						

Occurrence No.	88	Map Index:	11362	EO Index:	19496	Element Last Seen:	1987-08-19
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1987-08-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-10-25
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.15525 / -121.44049			Accuracy:	80 meters		
UTM:	Zone-10 N4224189 E636635			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 33 (M)			Acres:	0.0		
Location:	WOODBIDGE ECOLOGICAL RESERVE SOUTH OF WOODBRIDGE ROAD.						
Detailed Location:							
Ecological:	ON BERM IN ANNUALLY FLOODED POND GROWING WITH COCKLEBURRS AND GRASSES.						
General:	FEWER THAN 10 PLANTS FOUND IN 1987.						
Owner/Manager:	DFG-WOODBRIDGE ER						

Occurrence No.	89	Map Index:	11258	EO Index:	22272	Element Last Seen:	1992-07-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1992-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-01-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.17900 / -121.49518			Accuracy:	80 meters		
UTM:	Zone-10 N4226746 E631801			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 24 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER, 1 MILE NORTH OF JUNCTION WITH HOG SLOUGH, WEST OF CANAL RANCH.						
Detailed Location:	SMALL BERM ISLAND IN RIVER BETWEEN STATEN ISLAND AND CANAL RANCH; MAPPED NEAR RIVER MILE 14.						
Ecological:	ON UPSTREAM END OF ISLAND GROWING WITH SALIX, CEPHALANTHUS, AND CORNUS STOLONIFERA. SOIL APPEARS TO BE PEAT OR PEAT/CLAY.						
General:	2 PLANTS FOUND IN 1987 BY DAINS. 3-4 PLANTS OBSERVED BY CLEMONS IN 1992.						
Owner/Manager:	PVT						



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Occurrence No.	90	Map Index:	11254	EO Index:	20782	Element Last Seen:	2009-07-31
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-07-31	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-05-25	
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25585 / -121.49904			Accuracy:	specific area		
UTM:	Zone-10 N4235268 E631324			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 25, NW (M)			Acres:	22.0		
Location:	SNODGRASS SLOUGH, FROM ABOUT 0.4 TO 1.1 AIR MILES NORTHEAST OF LOCKE.						
Detailed Location:	7 COLONIES MAPPED IN THE NW 1/4 OF SECTION 25 AND THE SW 1/4 OF THE SE 1/4 OF SECTION 24 ACCORDING TO MAPS FROM 1984, 1987, AND 1990, 2005 VEGCAMP COORDINATES, AND 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	TIDAL MARSH AT WATER'S EDGE. ASSOCIATED WITH CEPHALANTHUS OCCIDENTALIS, SALIX LASIOLEPIS, S. LUCIDA, S. EXIGUA, SCIRPUS ACUTUS, CONVOLVULUS SEPIUM, POLYGONUM, CORNUS SERICEA, RUBUS DISCOLOR, ALNUS RHOMBIFOLIA, FRAXINUS LATIFOLIA, ETC.						
General:	<10 PLANTS OBSERVED IN THE SW COLONY IN 1984. 9-15 PLANTS OBSERVED IN 1987. 6 PLANTS IN THE WESTERNMOST AND 8 IN THE SW COLONY IN 1990. 0.2% COVER OF HIBISCUS IN 1-5 ACRES IN CENTER OF EO IN 2005. 6 PLANTS IN 2009. INCLUDES FORMER EO #109.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						

Occurrence No.	91	Map Index:	11281	EO Index:	21533	Element Last Seen:	2017-07-24
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2017-07-24	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2018-01-23	
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27069 / -121.49655			Accuracy:	specific area		
UTM:	Zone-10 N4236919 E631515			Elevation (ft):	1		
PLSS:	T05N, R04E, Sec. 24 (M)			Acres:	32.0		
Location:	SNODGRASS SLOUGH AND LOST SLOUGH, ABOUT 1.1-2 AIR MILES NORTHEAST OF LOCKE.						
Detailed Location:	SEVERAL COLONIES MAPPED ALONG SLOUGH BANKS AND ISLANDS IN VICINITY OF THE CONFLUENCE OF SLOUGHS. MAPPED AS MANY POLYGONS BY CNDDDB PRIMARILY ACCORDING TO DWR DIGITAL DATA. INCLUDES FORMER OCCURRENCES #92 AND #180.						
Ecological:	TIDAL MARSH. OCCURRING ON BORDER OF TULES AND UPLAND VEGETATION. ASSOCIATED WITH CEPHALANTHUS OCCIDENTALIS, SALIX LASIOLEPIS, S. HINDSIANA, SCIRPUS ACUTUS, CORNUS SERICEA, CONVOLVULUS SEPIUM, TYPHA, RUBUS DISCOLOR, JUNCUS, ETC.						
General:	~50 PLANTS OBSERVED AT TWIN CITIES RD BRIDGE IN 1985. FOUR COLONIES OBSERVED IN 1987 WITH 3-5 PLANTS PER COLONY. UNKNOWN NUMBER SEEN IN 2005. 134 PLANTS SEEN THROUGHOUT SITE IN 2009. HUNDREDS OF PLANTS IN 2014. 1 IN N-MOST POLY IN 2017.						
Owner/Manager:	DPR-DELTA MEADOWS, TNC, UNK						



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Occurrence No.	107	Map Index:	24963	EO Index:	6304	Element Last Seen:	2009-09-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-01
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29492 / -121.50875				Accuracy:	specific area	
UTM:	Zone-10 N4239589 E630404				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 11, E (M)				Acres:	28.0	
Location:	SNODGRASS SLOUGH, 0.6 TO 2 AIR MILES NNW OF TWIN CITIES ROAD BRIDGE.						
Detailed Location:	MAPPED BY CNDDB AS 7 POLYGONS ON BOTH SIDES OF THE SLOUGH. BASED ON A 1988 MAP BY DAINS, 2005 VEGCAMP COORDINATES, AND 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	ON THE EDGE OF SLOUGH AMONG TULE; NO LEVEE & NO OVERSTORY AT SITE. ASSOCIATES INCLUDE SCHOENOPLECTUS ACUTUS, SCIRPUS CALIFORNICUS, TYPHA LATIFOLIA, SALIX EXIGUA, S. LASIOLEPIS, ALNUS RHOMBIFOLIA, CEPHALANTHUS OCCIDENTALIS, & RUBUS.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 1988 AND 2005. 19 PLANTS OBSERVED IN 2009. 2001 HRUSA COLLECTION FROM "MIDDLE SNODGRASS SLOUGH, BETWEEN LAMBERT RD CROSSING AND TWIN CITIES RD CROSSING" ATTRIBUTED HERE. INCLUDES FORMER EO #108.						
Owner/Manager:	UNKNOWN						

Occurrence No.	136	Map Index:	50158	EO Index:	50158	Element Last Seen:	2016-07-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2016-07-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-22
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14141 / -121.48873				Accuracy:	specific area	
UTM:	Zone-10 N4222584 E632434				Elevation (ft):	0	
PLSS:	T03N, R04E, Sec. 1, NE (M)				Acres:	16.0	
Location:	SYCAMORE SLOUGH, BETWEEN 0.5-1.2 MILES EAST OF CONFLUENCE WITH SOUTH MOKELUMNE RIVER.						
Detailed Location:	SEVERAL COLONIES ALONG LEVEES AND CHANNEL ISLANDS. MAPPED BY CNDDB AS 10 POLYGONS ACCORDING TO A 1998 MAP BY HOLLEY, 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES, AND 2016 KWONG COORDINATES.						
Ecological:	TIDAL MARSH AND LEVEE RIPRAP ABOVE HIGH WATER MARK. ASSOCIATED WITH SCIRPUS, CYPERUS ERAGROSTIS, AND SORGHUM.						
General:	UNKNOWN NUMBER OF PLANTS SEEN IN SOUTHWESTERN POLYGON IN 1998. 2010 POPULATION NUMBERS FOR THE REMAINING POLYGONS FROM WEST TO EAST: 2, 5, 1, 12, 4, 5, 6, 3, AND 1. 2 PLANTS OBSERVED ON WESTERNMOST ISLAND IN 2016.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	137	Map Index:	50159	EO Index:	50159	Element Last Seen:	1998-10-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1998-10-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-02-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14508 / -121.43669			Accuracy:	80 meters		
UTM:	Zone-10 N4223066 E636987			Elevation (ft):	0		
PLSS:	T03N, R05E, Sec. 04, NW (M)			Acres:	0.0		
Location:	SYCAMORE SLOUGH, ABOUT 3.7 AIR MILES EAST OF THE SOUTH MOKELUMNE RIVER, NORTH EDGE OF TERMINOUS TRACT.						
Detailed Location:	NEAR THE BASE OF A LEVEE IN DISTURBED AREA SUBJECT TO PERPETUAL TIDAL AND RECREATIONAL WAVE FORCES.						
Ecological:							
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 1998.						
Owner/Manager:	UNKNOWN						
Occurrence No.	140	Map Index:	63298	EO Index:	63390	Element Last Seen:	2014-08-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2014-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-22
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25691 / -121.42673			Accuracy:	specific area		
UTM:	Zone-10 N4235491 E637650			Elevation (ft):	0		
PLSS:	T05N, R05E, Sec. 27, NW (M)			Acres:	6.0		
Location:	COSUMNES RIVER, 0.4 MILE EAST OF CROSSING OF WESTERN PACIFIC RR, JUST NORTHEAST OF MOKELUMNE CITY.						
Detailed Location:	ON EXPOSED MUD FLAT IN THE NW 1/4 OF NW 1/4 OF SECTION 27.						
Ecological:	MUD FLAT. FOUND WITH SCIRPUS ACUTUS, CEPHALANTHUS OCCIDENTALIS, AND LUDWIGIA PEPLOIDES.						
General:	WEST POLYGON: 4 INDIVIDUALS OBSERVED IN 2005 AND 2011, 5 IN 2014. EAST POLYGON: 1 PLANT SEEN IN 2014.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	141	Map Index:	63299	EO Index:	63391	Element Last Seen:	2014-08-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2014-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-19
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25756 / -121.43721			Accuracy:	specific area		
UTM:	Zone-10 N4235547 E636731			Elevation (ft):	0		
PLSS:	T05N, R05E, Sec. 28, N (M)			Acres:	1.0		
Location:	COSUMNES RIVER, 0.25 MILE WEST OF CROSSING OF WESTERN PACIFIC RR, NORTH OF MOKELUMNE CITY.						
Detailed Location:	MAPPED NEAR THE NORTH EDGE OF THE N 1/2 OF SECTION 28 ACCORDING TO 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	BARE SOIL OF EXPOSED MUD FLAT. LOWER STEMS IN WATER OF THE COSUMNES RIVER. ASSOCIATED WITH SALIX EXIGUA, ACER, QUERCUS LOBATA, AND GRAPES.						
General:	1 INDIVIDUAL OBSERVED IN 2005 AND 2010. 2 PLANTS OBSERVED IN 2014.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	142	Map Index:	63324	EO Index:	63416	Element Last Seen:	2005-08-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31859 / -121.74364				Accuracy:	specific area	
UTM:	Zone-10 N4241910 E609827				Elevation (ft):	0	
PLSS:	T06N, R02E, Sec. 34, SW (M)				Acres:	30.7	
Location:	ALONG SOUTHERN EDGE OF HASS SLOUGH, ON NORTH SIDE OF PETERS POCKET; 1.0-1.4 MI NORTHWEST OF DUCK SLOUGH.						
Detailed Location:	MAPPED IN THE NW 1/4 OF THE SE 1/4 OF SECTION 33 ACCORDING TO COORDINATES AND SITE DESCRIPTION PROVIDED BY HICKSON.						
Ecological:	SCATTERED INDIVIDUALS ALONG SLOUGH BANK RIGHT AT WATER LINE. FOUND WITH POLYGONUM PUNCTATUM, SCIRPUS ACUTUS, JUNCUS XIPHIODES, MENTHA ARVENSIS, PLUCHEA ODORATA, AND ROSA CALIFORNICA.						
General:	ABOUT 10 SCATTERED INDIVIDUALS OBSERVED IN 2005.						
Owner/Manager:	PVT						

Occurrence No.	149	Map Index:	70656	EO Index:	71566	Element Last Seen:	2007-08-23
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2007-08-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-07
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.22132 / -121.60111				Accuracy:	80 meters	
UTM:	Zone-10 N4231296 E622451				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 01, E (M)				Acres:	0.0	
Location:	E BANK OF STEAMBOAT SLOUGH NEAR RIVER MILE 19.5, APPROXIMATELY 0.5 MILE UPSTREAM OF HOGBACK ISLAND RECREATION FACILITY.						
Detailed Location:	GROWING IN RIPRAP ALONG THE LEVEE NEAR THE WATERLINE. MAPPED ACCORDING TO COORDINATE INFORMATION PROVIDED BY STRINGER 2007.						
Ecological:	THE LEVEE SLOPE IS VEGETATED PRIMARILY WITH EQUISETUM AND THE BOTTOM OF THE LEVEE HAS SCATTERED BUTTON BUSH, OREGON ASH, AND BOX ELDER SAPLINGS.						
General:	1 PLANT SEEN IN 2007. IT WAS THRIVING IN 2007 WITH SEVERAL FLOWERS.						
Owner/Manager:	PVT						



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Occurrence No.	150	Map Index:	70657	EO Index:	71567	Element Last Seen:	2007-09-12
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2007-09-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-14
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.27635 / -121.54129			Accuracy:	80 meters		
UTM:	Zone-10 N4237484 E627591			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 15, SW (M)			Acres:	0.0		
Location:	LEFT BANK OF SACRAMENTO RIVER AT RIVER MILE 29.8.						
Detailed Location:	GROWING IN RIPRAP ALONG THE LEVEE NEAR THE WATERLINE. MAPPED ACCORDING TO COORDINATE INFORMATION PROVIDED BY STRINGER 2007.						
Ecological:	ASSOCIATES INCLUDE WILLOW AND BUTTON BUSH.						
General:	1 PLANT IN 2007. LEVEE SEGMENT IS SCHEDULED TO BE REHABILITATED, WHICH WILL DESTROY THE ROSE MALLOW.						
Owner/Manager:	UNKNOWN						
Occurrence No.	176	Map Index:	82656	EO Index:	83659	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento						
Lat/Long:	38.24133 / -121.49759			Accuracy:	specific area		
UTM:	Zone-10 N4233659 E631477			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 36, NW (M)			Acres:	1.0		
Location:	SNODGRASS SLOUGH JUST SOUTH OF DELTA CROSS CHANNEL CONFLUENCE, EAST OF WALNUT GROVE.						
Detailed Location:	MAPPED ON THE WEST SIDE OF THE SLOUGH IN THE NE 1/4 OF THE NW 1/4 OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPARIAN ON RIPRAP.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	177	Map Index:	82657	EO Index:	83660	Element Last Seen:	2009-08-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-14
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.22316 / -121.49261			Accuracy:	specific area		
UTM:	Zone-10 N4231649 E631946			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 01, NE (M)			Acres:	1.0		
Location:	SOUTH MOKELUMNE RIVER, ABOUT 0.35 AIR MILE SSW OF NEW HOPE LANDING.						
Detailed Location:	MAPPED IN THE SW 1/4 OF THE NE 1/4 OF SECTION 1 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EXPOSED LOG JUST OFF SHORE. TIDAL MARSH WITH JUNCUS EFFUSUS AND EPILOBIUM.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	178	Map Index:	82658	EO Index:	83661	Element Last Seen:	2009-08-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14403 / -121.47584				Accuracy:	specific area	
UTM:	Zone-10 N4222893 E633558				Elevation (ft):	0	
PLSS:	T03N, R05E, Sec. 06, NW (M)				Acres:	3.0	
Location:	SYCAMORE SLOUGH, ABOUT 1.5 AIR MILES EAST OF CONFLUENCE WITH SOUTH MOKELUMNE RIVER.						
Detailed Location:	ALONG NORTH SIDE OF SLOUGH AND ON THE NORTH SIDE OF AN ISLAND WITHIN THE SLOUGH. THREE COLONIES MAPPED BY CNDDDB AS TWO POLYGONS IN THE NE 1/4 OF THE NW 1/4 OF SECTION 6 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	NORTHERN POLYGON: LEVEE RIPRAP ABOVE HIGH WATER MARK. SOUTHERN POLYGON: TIDAL MARSH WITH SCIRPUS, GROWING IN MIDDLE OF A TULE DOMINATED ISLAND.						
General:	3 PLANTS OBSERVED IN NORTHERN POLYGON AND 4 PLANTS OBSERVED IN SOUTHERN POLYGON IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	179	Map Index:	82659	EO Index:	83662	Element Last Seen:	2009-09-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26995 / -121.47710				Accuracy:	specific area	
UTM:	Zone-10 N4236864 E633218				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 19, NW (M)				Acres:	1.0	
Location:	UNNAMED WATERWAY ABOUT 1 AIR MILE EAST OF CONFLUENCE OF SNODGRASS SLOUGH, ABOUT 2.6 AIR MILES NORTHEAST OF WALNUT GROVE.						
Detailed Location:	TWO COLONIES MAPPED IN THE APPROXIMATE SE 1/4 OF THE NW 1/4 OF SECTION 19 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EASTERN COLONY: FALLEN LOG. WESTERN COLONY: TIDAL MARSH WITH TYPHA, SALIX EXIGUA, AND PASPALUM.						
General:	1 PLANT OBSERVED IN EASTERN COLONY AND 3 PLANTS OBSERVED IN WESTERN COLONY IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	181	Map Index:	82661	EO Index:	83664	Element Last Seen:	2009-08-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.37332 / -121.52226				Accuracy:	specific area	
UTM:	Zone-10 N4248270 E629083				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 15, NE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.4 MILE NORTH OF HOOD.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE APPROXIMATE SE 1/4 OF THE NE 1/4 OF SECTION 15 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	ABOVE RIPRAP BANK. ASSOCIATED WITH SALIX GOODDINGII AND CEPHALANTHUS.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	182	Map Index:	82662	EO Index:	83665	Element Last Seen:	2009-08-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.34024 / -121.56315				Accuracy:	specific area	
UTM:	Zone-10 N4244544 E625569				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 29, SE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.7 AIR MILE NNE OF COURTLAND.						
Detailed Location:	MAPPED ON THE NORTHWEST BANK OF THE RIVER IN THE NW 1/4 OF THE SE 1/4 OF SECTION 29 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP BANK WITH CEPHALANTHUS AND PASPALUM.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	183	Map Index:	82663	EO Index:	83667	Element Last Seen:	2009-08-12
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2009-08-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32668 / -121.57457				Accuracy:	specific area	
UTM:	Zone-10 N4243023 E624594				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 32, NW (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER JUST SOUTH OF COURTLAND, EAST OF MORGANS LANDING.						
Detailed Location:	TWO COLONIES MAPPED ON THE EAST BANK OF THE RIVER IN THE SW 1/4 OF THE NW 1/4 OF SECTION 32 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAPPED LEVEE.						
General:	1 PLANT OBSERVED IN EACH COLONY IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	184	Map Index:	82665	EO Index:	83669	Element Last Seen:	2009-08-12
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2009-08-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31991 / -121.57689				Accuracy:	specific area	
UTM:	Zone-10 N4242269 E624402				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 31, SE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER JUST WEST OF PAINTERSVILLE, ABOUT 0.7 AIR MILE SSW OF COURTLAND.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE APPROXIMATE SE 1/4 OF THE SE 1/4 OF SECTION 31 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAPED LEVEE.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	185	Map Index:	82669	EO Index:	83673	Element Last Seen:	2017-07-18
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2017-07-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31776 / -121.50180				Accuracy:	specific area	
UTM:	Zone-10 N4242133 E630970				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 02, NE (M)				Acres:	1.0	
Location:	ABOUT 2.25 AIR MILES WSW OF POINT PLEASANT AND 2 AIR MILES NORTHWEST OF KUHN RANCH, SOUTH OF STONE LAKE.						
Detailed Location:	THREE COLONIES MAPPED BY CNDDDB AS ONE POLYGON IN THE NE 1/4 OF THE NE 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPARIAN. ASSOCIATES INCLUDE SCHOENOPLECTUS, TYPHA, SALIX, QUERCUS LOBATA, LUDWIGIA PEPLOIDES, WATER HYACINTH, ETC.						
General:	5 PLANTS OBSERVED IN 2009, 5-10 OBSERVED IN 2017.						
Owner/Manager:	USFWS-STONE LAKES NWR?						



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Occurrence No.	186	Map Index:	82670	EO Index:	83674	Element Last Seen:	2009-08-11
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25628 / -121.51468				Accuracy:	specific area	
UTM:	Zone-10 N4235293 E629955				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 26, NE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.4-0.5 AIR MILE NNW OF LOCKE.						
Detailed Location:	TWO COLONIES MAPPED ON THE EAST BANK OF THE RIVER IN THE NW 1/4 OF THE NE 1/4 OF SECTION 26 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP ABOVE HIGH WATER MARK. ASSOCIATED WITH CEPHALANTHUS, ROSA, AND PLATANUS.						
General:	1 PLANT OBSERVED IN NORTHWEST COLONY AND 2 PLANTS OBSERVED IN SOUTHEAST COLONY IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	187	Map Index:	82671	EO Index:	83675	Element Last Seen:	2009-09-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33088 / -121.64884				Accuracy:	specific area	
UTM:	Zone-10 N4243392 E618095				Elevation (ft):	0	
PLSS:	T06N, R03E, Sec. 28, S (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, ABOUT 2 AIR MILES WEST OF VALDEZ.						
Detailed Location:	MAPPED ON THE WEST SIDE OF THE CHANNEL AT THE BOTTOM OF THE S 1/2 OF SECTION 28 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	CHANNEL BANK, FAIRLY HIGH ABOVE WATER LINE.						
General:	2 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	189	Map Index:	82674	EO Index:	83678	Element Last Seen:	2009-08-25
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42509 / -121.49989				Accuracy:	specific area	
UTM:	Zone-10 N4254046 E630944				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 25, SW (M)				Acres:	4.0	
Location:	STONE LAKES NATIONAL WILDLIFE REFUGE, ABOUT 1.5 AIR MILES ENE OF CLARKSBURG.						
Detailed Location:	5 COLONIES MAPPED BY CNDDDB AS 4 POLYGONS IN THE WEST 1/2 OF THE SW 1/4 OF SECTION 25 AND THE NW 1/4 OF THE NW 1/4 OF SECTION 36.						
Ecological:	FRESHWATER MARSH AND RIPARIAN HABITATS. ASSOCIATED WITH SALIX EXIGUA, SCIRPUS, CEPHALANTHUS, AND VITIS.						
General:	2009 POPULATION NUMBERS FOR POLYGONS FROM NORTH TO SOUTH: 19, 5, 2, AND 3.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	190	Map Index:	82676	EO Index:	83679	Element Last Seen:	2009-06-08
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42331 / -121.48754				Accuracy:	specific area	
UTM:	Zone-10 N4253867 E632026				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 36, NE (M)				Acres:	1.0	
Location:	STONE LAKES NATIONAL WILDLIFE REFUGE, WEST SIDE OF I-5, ABOUT 2.2 AIR MILES EAST OF CLARKSBURG.						
Detailed Location:	MAPPED IN THE NW 1/4 OF THE NE 1/4 OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	TYPHA MARSH NEAR FREEWAY.						
General:	7 PLANTS OBSERVED IN 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	191	Map Index:	82677	EO Index:	83681	Element Last Seen:	2009-08-25
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41816 / -121.50007				Accuracy:	specific area	
UTM:	Zone-10 N4253278 E630941				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 36, NW (M)				Acres:	1.0	
Location:	STONE LAKES NATIONAL WILDLIFE REFUGE, ABOUT 1.4 AIR MILES EAST OF CLARKSBURG.						
Detailed Location:	MAPPED IN THE SW 1/4 OF THE NW 1/4 OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	FRESHWATER MARSH WITH SALIX GOODDINGII, VITIS, AND SCIRPUS ACUTUS.						
General:	12 LARGE CLUMPS OF PLANTS OBSERVED IN 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	192	Map Index:	82679	EO Index:	83682	Element Last Seen:	2009-09-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-14
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.43114 / -121.60406				Accuracy:	specific area	
UTM:	Zone-10 N4254576 E621840				Elevation (ft):	5	
PLSS:	T07N, R03E, Sec. 25, NW (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, ABOUT 3.35 AIR MILES SSW OF ARCADE.						
Detailed Location:	MAPPED ON THE WEST BANK OF THE CHANNEL IN THE NW 1/4 OF THE NW 1/4 OF SECTION 25 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	CHANNEL BANK.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	193	Map Index:	82680	EO Index:	83683	Element Last Seen:	2009-08-25
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-25
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.41318 / -121.51926				Accuracy:	specific area	
UTM:	Zone-10 N4252698 E629275				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 34, SE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER JUST SOUTHEAST OF CLARKSBURG, ABOUT 0.5 AIR MILE SOUTHEAST OF CLARKSBURG MARINA.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE NE 1/4 OF THE SE 1/4 OF SECTION 34 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP.						
General:	2 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	194	Map Index:	82681	EO Index:	83684	Element Last Seen:	2009-08-25
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-25
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.40761 / -121.51564				Accuracy:	specific area	
UTM:	Zone-10 N4252085 E629600				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 02, NW (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.9 AIR MILE SSE OF CLARKSBURG MARINA.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE NW 1/4 OF THE NW 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP.						
General:	2 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	195	Map Index:	82682	EO Index:	83685	Element Last Seen:	2009-08-25
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-25
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.39963 / -121.51248				Accuracy:	specific area	
UTM:	Zone-10 N4251204 E629890				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 02, SW (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.65 AIR MILE NORTH OF ROSEBUD LANDING.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE NE 1/4 OF THE SW 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	PILING.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	200	Map Index:	A8139	EO Index:	109923	Element Last Seen:	2013-08-24
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:	2013-08-24	Record Last Updated:	2018-01-19
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14195 / -121.46784				Accuracy:	specific area	
UTM:	Zone-10 N4222674 E634264				Elevation (ft):	0	
PLSS:	T03N, R05E, Sec. 6, NE (M)				Acres:	1.0	
Location:	NORTH SIDE OF SYCAMORE SLOUGH, ABOUT 1.9 AIR MILES EAST OF THE MOKELUMNE RIVER AND 0.9 AIR MILE SOUTH OF WOODBRIDGE RD.						
Detailed Location:	MAPPED BY CNDDB FROM 2013 SLAKEY COORDINATES, IN THE NE 1/4 OF THE NE 1/4 OF PROJECTED SECTION 6.						
Ecological:	TIDAL MARSH. GROWING AT WATER LEVEL ON A RIP-RAP LEVEE. ASSOCIATED WITH SCHOENOPLECTUS ACUTUS VAR. OCCIDENTALIS AND CYPERUS.						
General:	8 PLANTS OBSERVED IN 2013.						
Owner/Manager:	PVT						



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Sidalcea keckii

Element Code: PDMAL110D0

Keck's checkerbloom

Listing Status: **Federal:** Endangered **CNDDB Element Ranks:** **Global:** G2
State: None **State:** S2
Other: Rare Plant Rank - 1B.1, SB_RSABG-Rancho Santa Ana Botanic Garden
Habitat: **General:** CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.
Micro: GRASSY SLOPES IN BLUE OAK WOODLAND. ON SERPENTINE-DERIVED, CLAY SOILS, AT LEAST SOMETIMES. 85-505 M.

Occurrence No. 21 **Map Index:** B3674 **EO Index:** 116587 **Element Last Seen:** 2002-04-30
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2002-04-30
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2019-08-12

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.4221 / -121.66581 **Accuracy:** 3/5 mile
UTM: Zone-10 N4253492 E616466 **Elevation (ft):** 12
PLSS: T07N, R03E, Sec. 29 (M) **Acres:** 776.0

Location: GLIDE RANCH; 2.5 MILES SSE FROM INTERSECTION OF ROAD 105 AND ROAD 38.

Detailed Location: MAPPED AS BEST GUESS ABOUT 2.5 AIR MILES SSE OF INTERSECTION OF ROAD105/ROAD 38 WITHIN THE GLIDE TULE RANCH UNIT OF THE YOLO BYPASS WILDLIFE AREA.

Ecological: FLAT PLAIN, VERTISOLS, GRASSLANDS. LOLIUM MULTIFLORUM, HEMIZONIA CONGESTA, HESPEREVAX CAULESCENS, TRIFOLIUM WILDENOVII, LOTUS WRANGELIANUS, AND LASTHENIA GLABRATA.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2002 SOLOMESHCH COLLECTION. IDENTIFIED AS SIDALCEA KECKII BY STEVEN HILL IN 2015.

Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No. 22 **Map Index:** B3675 **EO Index:** 116589 **Element Last Seen:** 2007-04-20
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2007-04-20
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2019-08-12

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.43602 / -121.67027 **Accuracy:** 80 meters
UTM: Zone-10 N4255031 E616055 **Elevation (ft):** 18
PLSS: T07N, R03E, Sec. 20, SW (M) **Acres:** 5.0

Location: TULE RANCH PROPERTY; APPROXIMATELY 2.2 AIR MILES SW OF THE INTERSECTION OF ROAD 106 AND ROAD 38.

Detailed Location: MAPPED ACCORDING TO 2007 DEAN COORDINATES.

Ecological: IN GRASSLANDS CONNECTING VERNAL POOLS. GROWING WITH BROMUS HORDEACEUS, HORDEUM MARINUM, LOLIUM MULTIFLORUM.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2007 DEAN ET AL. COLLECTION; PLANTS NOTED AS "MEDIUM-ABUNDANT." IDENTIFIED AS SIDALCEA KECKII BY STEVEN HILL IN 2015.

Owner/Manager: DFG-YOLO BYPASS WA



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Navarretia leucocephala ssp. bakeri

Element Code: PDPLM0C0E1

Baker's navarretia

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G4T2
State: None **State:** S2
Other: Rare Plant Rank - 1B.1
Habitat: **General:** CISMONTANE WOODLAND, MEADOWS AND SEEPS, VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND, LOWER MONTANE CONIFEROUS FOREST.
Micro: VERNAL POOLS AND SWALES; ADOBE OR ALKALINE SOILS. 3-1680 M.

Occurrence No. 27 **Map Index:** 53720 **EO Index:** 53720 **Element Last Seen:** 2009-04-19
Occ. Rank: Excellent **Presence:** Presumed Extant **Site Last Seen:** 2009-04-19
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2013-09-05

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.43679 / -121.67070 **Accuracy:** specific area
UTM: Zone-10 N4255116 E616015 **Elevation (ft):** 15
PLSS: T07N, R03E, Sec. 20, W (M) **Acres:** 105.0

Location: GLIDE TULE ECOLOGICAL RESERVE, EAST OF THE SACRAMENTO NORTHERN CANAL, WEST EDGE OF THE YOLO BYPASS.
Detailed Location: NUMEROUS PLANTS SCATTERED THROUGHOUT THE SE 1/4 OF SECTION 19 AND THE W 1/2 OF SECTION 20.
Ecological: OCCURRING IN VERNAL POOLS AND IN MESIC GRASSLAND. ASSOCIATES INCLUDE POGOGYNE DOUGLASII, LASTHENIA FREMONTII, L. GLABRATA, AND LOLIUM MULTIFLORUM.
General: MORE THAN 1000 PLANTS OBSERVED IN 2003. UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.
Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No. 47 **Map Index:** 83671 **EO Index:** 84700 **Element Last Seen:** 2005-06-13
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2005-06-13
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2011-09-12

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.45755 / -121.67412 **Accuracy:** 80 meters
UTM: Zone-10 N4257415 E615683 **Elevation (ft):** 20
PLSS: T07N, R03E, Sec. 17, NW (M) **Acres:** 0.0

Location: YOLO BYPASS WILDLIFE AREA; JUST SOUTH OF JUNCTION OF ROAD 38 (COUNTY ROAD 106) AND COUNTY ROAD 105, ~1 MILE SW OF SAXON.
Detailed Location: MAPPED BY CNDDB IN THE NW 1/4 OF THE NW 1/4 OF SECTION 17 ACCORDING TO 2005 COORDINATES.
Ecological: VERNAL POOL WITH RELATIVELY DENSE CENTER. ASSOCIATED WITH ERYNGIUM, DOWNINGIA BICORNUTA, ELEOCHARIS, EPILOBIUM, MALVA, PLAGIOBOTHRYIS STIPITATUS, AND PSILOCARPUS BREVISSIMUS.
General: OBSERVED IN 2005 DURING A VEGETATION SURVEY; 7% COVER OF NAVARRETIA LEUCOCEPHALA SSP. BAKERI IN PLOT.
Owner/Manager: DFG-YOLO BYPASS WA

Limosella australis

Element Code: PDSCR10030

Delta mudwort

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G4G5
State: None **State:** S2
Other: Rare Plant Rank - 2B.1
Habitat: **General:** RIPARIAN SCRUB, MARSHES AND SWAMPS.



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Micro: USUALLY ON MUD BANKS OF THE DELTA IN MARSHY OR SCRUBBY RIPARIAN ASSOCIATIONS; OFTEN WITH LILAEOPSIS MASONII. 0-5 M.

Occurrence No.	7	Map Index:	10883	EO Index:	9611	Element Last Seen:	1990-08-20
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1990-08-20		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1995-11-13		

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long:	38.23361 / -121.66967	Accuracy:	specific area
UTM:	Zone-10 N4232571 E616430	Elevation (ft):	5
PLSS:	T05N, R03E, Sec. 32 (M)	Acres:	95.4

Location: MINER SLOUGH WILDLIFE AREA, CONFLUENCE OF MINER SLOUGH AND CACHE SLOUGH, SOUTH OF LIBERTY ISLAND.

Detailed Location:

Ecological: ON SOUTH-FACING BANKS OF TULE ISLANDS, INUNDATED AT HIGH TIDE AND EXPOSED AT LOW TIDE. ASSOCIATED WITH LILAEOPSIS MASONII, HYDROCOTYLE VERTICILLATA, SAMOLUS FLORIBUNDUS, SCIRPUS, PASPALUM, JUNCUS CYPERUS, ELEOCHARIS, AND HYPERICUM.

General: OBSERVED 1985 AND 1990 DURING LILAEOPSIS MASONII SURVEYS.

Owner/Manager: DFG-MINER SLOUGH WA

Occurrence No.	21	Map Index:	10855	EO Index:	7761	Element Last Seen:	1990-07-26
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1990-07-26		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1993-12-29		

Quad Summary: Rio Vista (3812126)

County Summary: Sacramento

Lat/Long:	38.13517 / -121.68693	Accuracy:	80 meters
UTM:	Zone-10 N4221627 E615074	Elevation (ft):	0
PLSS:	T03N, R03E, Sec. 06, NW (M)	Acres:	0.0

Location: EAST BANK OF SACRAMENTO RIVER, 2.5 KM (1.5 MI) SOUTH OF THE RIO VISTA BRIDGE.

Detailed Location: SANDY BEACH 1.5 MILES SOUTH OF JUNCTION OF HWY 160 AND HWY 12 ON THE WEST SHORE OF BRANNON ISLAND.

Ecological: GROWING IN ASSOCIATION WITH SYMPHYOTRICHUM LENTUM, LILAEOPSIS MASONII, MIMULUS GUTTATUS, SCIRPUS, PHRAGMITES, POLYGONUM, JUNCUS, CYPERUS, PLANTAGO, CYNODON, HELENIUM, PASPALUM, ARUNDO, SALIX, DISTICHLIS, VERBENA, AND EQUISETUM.

General: OBSERVED DURING LILAEOPSIS MASONII SURVEY IN 1990. AREA BETWEEN SITE AND BRIDGE IS UNSURVEYED, ADDITIONAL PLANTS MAY OCCUR.

Owner/Manager: PVT



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Occurrence No.	27	Map Index:	24968	EO Index:	29610	Element Last Seen:	1994-01-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-01-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-28
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18882 / -121.48503				Accuracy:	80 meters	
UTM:	Zone-10 N4227850 E632672				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, SW (M)				Acres:	0.0	
Location:	SOUTH MOKELUMNE RIVER, ON ISLAND 0.7 KM SW OF BEAVER SLOUGH.						
Detailed Location:	SMALL ISLAND JUST NORTH OF RIVER MILE 15.						
Ecological:	ASSOCIATED WITH LATHYRUS JEPSONII JEPSONII AND SAGITTARIA SP.						
General:	2' BY 3' PATCH GROWING WITH SAGITTARIA SP IN 1994.						
Owner/Manager:	UNKNOWN						

Occurrence No.	28	Map Index:	28358	EO Index:	29532	Element Last Seen:	1994-01-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-01-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19318 / -121.48079				Accuracy:	80 meters	
UTM:	Zone-10 N4228340 E633035				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, SW (M)				Acres:	0.0	
Location:	SOUTH MOKELUMNE RIVER, ABOUT 0.1 MI S OF BEAVER SLOUGH, 0.45 MI N OF RIVER MILE 15.						
Detailed Location:	PLANTS FOUND UNDER A LARGE SALIX SP.						
Ecological:							
General:	UNKNOWN HOW MANY PLANTS SEEN IN 1994.						
Owner/Manager:	UNKNOWN						

Occurrence No.	29	Map Index:	23237	EO Index:	22584	Element Last Seen:	1994-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-01
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.15735 / -121.53594				Accuracy:	80 meters	
UTM:	Zone-10 N4224286 E628268				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 34, NW (M)				Acres:	0.0	
Location:	ISLAND IN NORTH MOKELUMNE RIVER, APPROX 6 KM (3.6 MI) DUE EAST OF ISLETON.						
Detailed Location:	ALONG SW SHORELINE OF ISLAND.						
Ecological:	ASSOCIATED WITH SAGITTARIA SANFORDII AND LILAEOPSIS MASONII.						
General:	UNKNOWN HOW MANY PLANTS SEEN IN 1994.						
Owner/Manager:	PVT						



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Occurrence No.	42	Map Index:	50172	EO Index:	50172	Element Last Seen:	2001-04-14
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2001-04-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-02-12
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento						
Lat/Long:	38.23061 / -121.49440			Accuracy:	80 meters		
UTM:	Zone-10 N4232473 E631776			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 36, SE (M)			Acres:	0.0		
Location:	LOCATED ON SOUTHWEST SIDE OF MCCORMACK-WILLIAMSON ALONG DEAD HORSE CUT, 0.5 MILE SOUTH OF SNODGRASS SLOUGH.						
Detailed Location:	AT BASE OF LEVEE.						
Ecological:	AT BASE OF LEVEE ABOVE THE LOW TIDE MARK, WHERE IT MAY BE INUNDATED DURING TIDAL CYCLES.						
General:	1 PLANT SEEN IN 2000.						
Owner/Manager:	TNC, UNKNOWN						
Occurrence No.	59	Map Index:	82558	EO Index:	83572	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-16
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20808 / -121.48565			Accuracy:	specific area		
UTM:	Zone-10 N4229987 E632582			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 07, SW (M)			Acres:	1.0		
Location:	MOKELUMNE RIVER, ABOUT 1.3 RIVER MI NW OF CONFLUENCE WITH BEAVER SLOUGH, IN BETWEEN STATEN ISLAND AND NEW HOPE TRACT.						
Detailed Location:	MAPPED AS TWO POLYGONS BASED ON 2010 DIGITAL DATA FROM CA DEPT OF WATER RESOURCES.						
Ecological:	ON EXPOSED LOG STUMPS AT WATERS EDGE WITH JUNCUS EFFUSUS, CYPERUS ERAGROSTIS AND PASPALUM.						
General:	THREE DENSE PATCHES OF APPROXIMATELY 1 SQ M EACH SEEN IN BOTH POLYGONS IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	60	Map Index:	82559	EO Index:	83577	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-16
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21493 / -121.49628			Accuracy:	specific area		
UTM:	Zone-10 N4230731 E631639			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 12, NW (M)			Acres:	1.0		
Location:	MOKELUMNE RIVER, ABOUT 0.95 AIR MI SSW OF NEW HOPE LANDING, IN BETWEEN STATEN ISLAND AND NEW HOPE TRACT.						
Detailed Location:	MAPPED BASED ON 2010 DIGITAL DATA FROM CA DEPT OF WATER RESOURCES.						
Ecological:	EXPOSED LOGS.						
General:	SMALL DENSE PATCHES ON LOGS SEEN IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	62	Map Index:	90215	EO Index:	91225	Element Last Seen:	1993-07-16
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1993-07-16	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-29	
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.27320 / -121.49676				Accuracy:	2/5 mile	
UTM:	Zone-10 N4237197 E631492				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 24, N (M)				Acres:	0.0	
Location:	DELTA MEADOWS RIVER PARK, 2 AIR MILES NORTHEAST OF LOCKE, JUST SOUTH OF TWIN CITIES BRIDGE, SNODGRASS SLOUGH.						
Detailed Location:	LOCALITY CONTINUED: "ALONG NW EDGE OF N-MOST ISLAND IN PARK." EXACT LOCATION UNKNOWN. UNSURE IF N-MOST ISLAND REFERS TO PENINSULA JUST SOUTH OF BRIDGE OR FIRST ISLAND TO THE SOUTH; MAPPED BY CNDDB TO INCLUDE BOTH OPTIONS.						
Ecological:	FRESHWATER MARSH. ASSOCIATED WITH GREEN ALGAE.						
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1993 COLLECTION BY BOWCUTT. NEEDS FIELDWORK.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						

Sagittaria sanfordii

Element Code: PMALI040Q0

Sanford's arrowhead

Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G3
	State:	None		State:	S3
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive			
Habitat:	General:	MARSHES AND SWAMPS.			
	Micro:	IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-605 M.			

Occurrence No.	16	Map Index:	24535	EO Index:	4949	Element Last Seen:	2004-07-08
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2004-07-08	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-08-12	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47838 / -121.39739			Accuracy:	specific area		
UTM:	Zone-10 N4260111 E639789			Elevation (ft):	35		
PLSS:	T07N, R05E, Sec. 11 (M)			Acres:	19.6		
Location:	ALONG AND BETWEEN BEACON CREEK AND ELDER CREEK, EAST OF POWER INN ROAD, ELK GROVE.						
Detailed Location:	MAPPED AS FIVE POLYGONS: TWO ALONG BEACON CREEK BETWEEN POWER INN ROAD AND RR TRACKS, ONE BETWEEN THE TWO CREEKS, AND TWO ALONG ELDER CREEK ON EITHER SIDE OF RR TRACKS. MAPPED FROM THE SW 1/4 OF SECTION 11 TO THE SW 1/4 OF SECTION 1.						
Ecological:	GROWING IN FLOWING STREAM, IN CEMENT-LINED CHANNEL WITH MUD, AND DRAINAGE CHANNEL. ASSOCIATED WITH ALISMA PLANTAGO-AQUATICUM, LUDWIGIA PEPLOIDES, LEPTOCHLOA FASCICULARIS, ECHINOCHLOA CRUS-GALLII, TYPHA LATIFOLIA, LEMNA, ETC.						
General:	ALONG ELDER CREEK, 400+ PLANTS SEEN IN 1992 AND "HUNDREDS" IN 2004. ABOUT 100 PLANTS EACH SEEN IN 2004 AT EASTERN BEACON CREEK SITE AND AT SITE BETWEEN THE TWO CREEKS. SEE CNDDB FOR FULL POPULATION DETAIL. INCLUDES FORMER EO #17.						
Owner/Manager:	PVT, ELK GROVE SCHOOL DIST						



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Occurrence No.	18	Map Index:	24539	EO Index:	17243	Element Last Seen:	1996-08-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1996-08-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:	2009-02-17		

Quad Summary: Elk Grove (3812143), Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.45161 / -121.38856	Accuracy:	specific area
UTM:	Zone-10 N4257154 E640611	Elevation (ft):	40
PLSS:	T07N, R05E, Sec. 24, N (M)	Acres:	148.0

Location: STRAWBERRY CREEK. NORTHWEST & SOUTH OF CALVINE RD/ELK GROVE-FLORIN RD INTERSECTION, ELK GROVE.

Detailed Location: TRUE EXTENT OF POPULATION UNKNOWN. MAPPED ALONG STRAWBERRY CREEK STARTING ~0.25 MILE EAST OF POWER INN ROAD (HRUSA, 1993). EAST PORTION OF EO BASED ON MORE SPECIFIC MAP DATA.

Ecological: COLONY NEAR BAY TOWN CREEK IS CEMENT LINED CHANNEL. CENTER COLONIES ARE ALONG DRIED CREEK CHANNEL.

General: PORTION OF EO TRANSPLANTED INTO A GIANT GARTER SNAKE SITE. POP IN SEC 24 REPLANTED AT SITE AFTER STRAWBERRY CR REALIGNMENT (1990). 133,000 AT TRANSPLANTED SITE IN 1994 DECLINING TO 972 IN 1996. NEEDS FIELDWORK. FORMER EO #19 & #20 HERE.

Owner/Manager: SAC COUNTY-PUBLIC WORKS, PVT

Occurrence No.	21	Map Index:	24540	EO Index:	17101	Element Last Seen:	1992-08-20
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1992-08-20		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1993-11-18		

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.45765 / -121.41798	Accuracy:	80 meters
UTM:	Zone-10 N4257779 E638033	Elevation (ft):	20
PLSS:	T07N, R05E, Sec. 15, SE (M)	Acres:	0.0

Location: STRAWBERRY CREEK AT BRUCEVILLE ROAD, SACRAMENTO.

Detailed Location: JUST NORTH OF COSUMNES RIVER BLVD IN CREEK ALONG BOTH SIDES OF BRUCEVILLE ROAD, JUST WITHIN SACRAMENTO CITY LIMITS.

Ecological: IN SHALLOW SLOW MOVING WATER.

General: SEVERAL HUNDRED PLANTS OBSERVED IN 1992.

Owner/Manager: PVT



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Occurrence No.	22	Map Index:	24534	EO Index:	19286	Element Last Seen:	1992-07-19
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1992-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-11-13
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43689 / -121.49674				Accuracy:	specific area	
UTM:	Zone-10 N4255360 E631198				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 25 (M)				Acres:	11.0	
Location:	BEACH LAKE, ALONG DIKE ADJACENT TO MORRISON CREEK, 2 KM (1.8 MILES) SOUTH OF FREEPORT.						
Detailed Location:	HISTORIC BEACH LAKE EXTENDED ALONG EITHER SIDE OF WHAT IS NOW I-5. THIS PORTION OF BEACH LAKE REFERS TO MARSHY AREA SOUTH OF FREEPORT AND BETWEEN I-5 AND THE SACRAMENTO RIVER.						
Ecological:	GROWING JUST OFFSHORE IN 1-2 FEET OF WATER. ASSOCIATES INCLUDE TYPHA LATIFOLIA, LUDWIGIA PEPLOIDES, AND SCIRPUS ACUTUS. GIANT GARTER SNAKE (THAMNOPHIS GIGAS) OBSERVED JUST EAST OF THE SAGITTARIA.						
General:	3-4 COLONIES OBSERVED IN 1992. LAKE OWNED BY BEACH LAKE PROPERTIES BUT MAY BECOME PART OF A COUNTY PRESERVE. CALTRANS RECREATED WETLANDS MITIGATION BANK IS LOCATED TO THE EAST, BETWEEN BEACH LAKE AND I-5.						
Owner/Manager:	PVT-BEACH LAKE PROPERTIES						
Occurrence No.	40	Map Index:	30130	EO Index:	4954	Element Last Seen:	1993-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1993-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-09-27
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49620 / -121.45163				Accuracy:	specific area	
UTM:	Zone-10 N4262007 E635025				Elevation (ft):	20	
PLSS:	T08N, R05E, Sec. 32, SE (M)				Acres:	11.0	
Location:	MORRISON CREEK AT FLORIN ROAD, SACRAMENTO.						
Detailed Location:	ALONG EITHER SIDE OF FLORIN ROAD, ABOUT 0.4 MILE EAST OF FRANKLIN BLVD.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	41	Map Index:	30131	EO Index:	4953	Element Last Seen:	1993-XX-XX
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:	2005-07-02		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2005-10-03		
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47613 / -121.45121			Accuracy:	specific area		
UTM:	Zone-10 N4259781 E635099			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 08, NE (M)			Acres:	12.2		
Location:	ELDER CREEK AT FRANKLIN BLVD, SACRAMENTO.						
Detailed Location:	ALONG EITHER SIDE OF FRANKLIN BLVD, ABOUT 0.15 MILE NORTH OF MACK ROAD.						
Ecological:	CONCRETE CHANNEL. THE ONLY VEGETATION OBSERVED IN 1995 WAS VERY SPARSE LUDWIGIA PEPLOIDES. VERY LITTLE AVAILABLE SUBSTRATE.						
General:	UNKNOWN NUMBER OF PLANTS REPORTED AT THIS SITE BY NORTON IN 1993. REPEATED HIGH WATER EVENTS OR CHANNEL MAINTENANCE MAY HAVE SCOURED PLANTS FROM THIS CHANNEL; SHOULD BE MONITORED FOR RECOLONIZATION. NO PLANTS SEEN IN 2005.						
Owner/Manager:	CITY OF SACRAMENTO						

Occurrence No.	42	Map Index:	30132	EO Index:	4952	Element Last Seen:	1993-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1993-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1994-08-04		
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47068 / -121.41815			Accuracy:	specific area		
UTM:	Zone-10 N4259225 E637993			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 10, SW (M)			Acres:	16.7		
Location:	BEACON CREEK AT HWY 99 & STOCKTON ROAD, SACRAMENTO.						
Detailed Location:	MAPPED ABOUT 0.3 MILE SOUTHEAST OF ELSIE AVE AND EXTENDING FROM EAST OF STOCKTON ROAD TO JUST WEST OF HWY 99.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	43	Map Index:	30133	EO Index:	4947	Element Last Seen:	2011-05-06
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		2011-05-06	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-07-05	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41240 / -121.38828			Accuracy:	specific area		
UTM:	Zone-10 N4252803 E640712			Elevation (ft):	36		
PLSS:	T07N, R05E, Sec. 36, SW (M)			Acres:	9.0		
Location:	ELK GROVE CREEK ON BOTH SIDES OF HIGHWAY 99 IN BETWEEN LAGUNA SPRINGS DRIVE AND EMERALD VISTA DRIVE.						
Detailed Location:	ABOUT 0.25 MILE NORTH OF ELK GROVE BLVD IN CHANNEL BEHIND WALMART. SEVERAL COLONIES MAPPED BY CNDDB AS 4 POLYGONS IN THE SE 1/4 OF SECTION 35 AND THE SW 1/4 OF SECTION 36.						
Ecological:	IN THE ORDINARY HIGH WATER MARK OF THE CREEK; MAJORITY OF PLANTS FOUND IN THE DRY PORTIONS OF THE CREEK.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED AT THIS LOCATION ACCORDING TO A 1993 MAP, UNKNOWN WHEN PLANTS SEEN. NO PLANTS OBSERVED IN 1998. 166 PLANTS OBSERVED IN 2011. SITE OWNED BY THE COSUMNES COMMUNITY SERVICES DISTRICT.						
Owner/Manager:	COSUMNES CSD						
Occurrence No.	47	Map Index:	23237	EO Index:	32757	Element Last Seen:	1994-08-02
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		1994-08-02	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1997-12-23	
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.15735 / -121.53594			Accuracy:	80 meters		
UTM:	Zone-10 N4224286 E628268			Elevation (ft):	5		
PLSS:	T04N, R04E, Sec. 34 (M)			Acres:	0.0		
Location:	ISLAND IN NORTH MOKELUMNE RIVER, APPROX 6 KM (3.6 MI) DUE EAST OF ISLETON.						
Detailed Location:	ALONG SW SHORELINE OF ERODING ISLAND.						
Ecological:	ASSOCIATED WITH LIMOSSELLA SUBULATA AND LILAEOPSIS MASONII.						
General:	MANY THOUSANDS OF PLANTS BETWEEN TWO CHANNEL ISLANDS. ENTIRE POPULATION COVERING 500+ SQUARE FEET.						
Owner/Manager:	PVT						



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Occurrence No.	59	Map Index:	62284	EO Index:	62321	Element Last Seen:	2004-07-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-08-11
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45719 / -121.40680				Accuracy:	80 meters	
UTM:	Zone-10 N4257745 E639009				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 14, SW (M)				Acres:	0.0	
Location:	STRAWBERRY CREEK, ABOUT 0.3 MILE NNE OF INTERSECTION OF HIGHWAY 99 AND CALVINE ROAD.						
Detailed Location:	MAPPED IN THE NW 1/4 OF THE SW 1/4 OF SECTION 14.						
Ecological:							
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 2004.						
Owner/Manager:	UNKNOWN						

Occurrence No.	61	Map Index:	62786	EO Index:	62840	Element Last Seen:	2005-06-27
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-06-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-10-04
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45055 / -121.48776				Accuracy:	80 meters	
UTM:	Zone-10 N4256889 E631957				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 24, NE (M)				Acres:	0.0	
Location:	MORRISON CREEK, EAST OF HIGHWAY 5, ABOUT 0.85 AIR MILE SOUTHEAST OF FREEPORT.						
Detailed Location:	ALONG PORTION OF MORRISON CREEK WHICH WAS REROUTED TO THE WEST OF THE BUFFERLANDS CELL, SEASONAL WETLANDS.						
Ecological:	THE PLANT COMMUNITY WITHIN THIS CREEK IS PREDOMINATELY LUDWIGIA SP. BOTH UP AND DOWNSTREAM OF THE ABOVE LOCATION. PERENNIAL AND ANNUAL SMARTWEEDS, POLYGONUM AMPHIBIUM VAR. EMERUM AND POLYGONUM PERSICARIA, ALSO OCCUR WITHIN THIS DRAINAGE.						
General:	5 PLANTS OBSERVED IN 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	63	Map Index:	70038	EO Index:	70892	Element Last Seen:	2008-08-XX
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2008-08-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-08-12
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47102 / -121.49698				Accuracy:	1/10 mile	
UTM:	Zone-10 N4259148 E631115				Elevation (ft):	15	
PLSS:	T07N, R04E, Sec. 12, SW (M)				Acres:	0.0	
Location:	DITCH ADJACENT TO HOUSING DEVELOPMENT, 0.6 AIR MILE SOUTH OF MEADOWVIEW ROAD, JUST EAST OF I-5, SACRAMENTO.						
Detailed Location:							
Ecological:	FRESHWATER MARSH.						
General:	OVER 300 PLANTS OBSERVED IN 2005. SITE GRADED IN 2008; ALL HABITAT WAS LIKELY DESTROYED.						
Owner/Manager:	PVT?						



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Occurrence No.	76	Map Index:	83263	EO Index:	84295	Element Last Seen:	2009-09-03
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-30
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23488 / -121.48786				Accuracy:	specific area	
UTM:	Zone-10 N4232957 E632340				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 36, SE (M)				Acres:	1.0	
Location:	MOKELUMNE RIVER; ABOUT 0.5 AIR MILE NNE OF NEW HOPE LANDING.						
Detailed Location:	MAPPED IN THE NE 1/4 OF THE SE 1/4 OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SANDY SHORE.						
General:	50 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	77	Map Index:	83272	EO Index:	84300	Element Last Seen:	2009-09-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-30
Quad Summary:	Thornton (3812124), Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.22787 / -121.49731				Accuracy:	specific area	
UTM:	Zone-10 N4232166 E631526				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 01, N (M)				Acres:	8.0	
Location:	NORTH AND SOUTH MOKELUMNE RIVER; SOUTH SIDE OF DEAD HORSE ISLAND AND JUST WEST OF NEW HOPE LANDING.						
Detailed Location:	7 COLONIES MAPPED IN THE N 1/2 OF SECTION 1 AND THE SE 1/4 OF THE NE 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EXPOSED TIDAL MUD FLATS, SANDY SHORE LINES, AND SANDY MUDFLAT BEHIND SMALL LEVEE RIPRAP SETBACK. ASSOCIATED WITH TYPHA AND POLYGONUM AMPHIBIUM.						
General:	2009 POPULATION NUMBERS FOR COLONIES FROM EAST TO WEST: 2, 10, 3, "MANY PATCHES", 4, 40, AND 2.						
Owner/Manager:	TNC, UNKNOWN						



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Occurrence No.	78	Map Index:	83298	EO Index:	84303	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20989 / -121.49127				Accuracy:	specific area	
UTM:	Zone-10 N4230179 E632087				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 12, NE (M)				Acres:	5.0	
Location:	SOUTH MOKELUMNE RIVER; ABOUT 0.75 TO 1.3 MILES SOUTH OF NEW HOPE LANDING.						
Detailed Location:	7 COLONIES MAPPED IN THE SE 1/4 OF SW 1/4 OF SECTION 1, NE 1/4 OF SECTION 12, AND NW 1/4 OF SW 1/4 OF SECTION 7 ACCORDING TO 2010 DIGITAL DATA PROVIDED BY THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SANDY MUDFLATS/BEACHES AT LOW WATER'S EDGE. ASSOCIATED WITH JUNCUS EFFUSUS, LUDWIGIA, AND CYPERUS.						
General:	2009 POPULATION NUMBERS FOR COLONIES FROM EAST TO WEST: 20, 50, 20, 20, 20, 10, AND 10.						
Owner/Manager:	TNC, UNKNOWN						

Occurrence No.	79	Map Index:	83299	EO Index:	84304	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19500 / -121.47789				Accuracy:	specific area	
UTM:	Zone-10 N4228546 E633285				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, NW (M)				Acres:	2.0	
Location:	AT BEAVER SLOUGH AND SOUTH MOKELUMNE RIVER CONFLUENCE; ABOUT 2.25 AIR MILES SSE OF NEW HOPE LANDING.						
Detailed Location:	3 COLONIES MAPPED IN THE SE 1/4 OF THE NW 1/4 OF SECTION 18 ACCORDING TO 2010 DIGITAL DATA PROVIDED BY THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SANDY MUDFLATS AND BEACHES AT LOW WATER'S EDGE, ON IN-CHANNEL ISLAND, AND BEHIND SMALL LEVEE RIPRAP SETBACK. EDGE OF RIPARIAN SCRUB WITH JUNCUS EFFUSUS.						
General:	2009 POPULATION NUMBERS FOR COLONIES FROM NORTH TO SOUTH: 100, 100, AND 150.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	80	Map Index:	83300	EO Index:	84305	Element Last Seen:	2010-06-08
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-06-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18890 / -121.48509				Accuracy:	specific area	
UTM:	Zone-10 N4227859 E632666				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, SW (M)				Acres:	2.0	
Location:	MILE 15 OF SOUTH MOKELUMNE RIVER; ABOUT 0.35 TO 0.65 MILE SSW OF CONFLUENCE WITH BEAVER SLOUGH.						
Detailed Location:	THREE COLONIES MAPPED IN THE SW 1/4 OF THE SW 1/4 OF SECTION 18 AND THE NW 1/4 OF THE NW 1/4 OF SECTION 19 ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	TIDAL MUD FLATS WITH SCIRPUS ACUTUS AND LUDWIGIA PEPLOIDES.						
General:	2009: 100 PLANTS OBSERVED IN NORTHERN POLYGON AND 200 PLANTS OBSERVED IN SOUTHERN POLYGON. 2010: 70 PLANTS OBSERVED IN MIDDLE POLYGON.						
Owner/Manager:	TNC, UNKNOWN						

Occurrence No.	81	Map Index:	83301	EO Index:	84306	Element Last Seen:	2010-07-08
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2010-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.23747 / -121.51715				Accuracy:	specific area	
UTM:	Zone-10 N4233202 E629771				Elevation (ft):	10	
PLSS:	T05N, R04E, Sec. 35, NW (M)				Acres:	1.0	
Location:	EAST SIDE OF GEORGIANA SLOUGH, JUST SOUTH OF WALNUT GROVE.						
Detailed Location:	ADJACENT TO BRIDGE CONNECTING RIVER ROAD AND ISLETON ROAD. MAPPED IN THE SE 1/4 OF THE NW 1/4 OF SECTION 35 ACCORDING TO 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	ASSOCIATED WITH COONTAIL.						
General:	2 PLANTS OBSERVED IN 2010.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	82	Map Index:	83302	EO Index:	84307	Element Last Seen:	2005-08-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24521 / -121.65906				Accuracy:	80 meters	
UTM:	Zone-10 N4233873 E617340				Elevation (ft):	4	
PLSS:	T05N, R03E, Sec. 28, SW (M)				Acres:	0.0	
Location:	MINER SLOUGH ON EAST SIDE OF PROSPECT ISLAND, ABOUT 1 AIR MILE NNE OF CONFLUENCE WITH CACHE SLOUGH.						
Detailed Location:	MAPPED IN THE NW 1/4 OF THE SW 1/4 OF SECTION 28 ACCORDING TO 2005 VEGCAMP COORDINATES.						
Ecological:	LOW RIPRAP ON LEVEE NORTH OF BEND. MODERATELY FINE SILTY CLAY LOAM. ASSOCIATED WITH RUBUS DISCOLOR, SALIX EXIGUA, S. LASIOLEPIS, ALNUS RHOMBIFOLIA, CEPHALANTHUS OCCIDENTALIS, ROSA CALIFORNICA, RUBUS URSINUS, VITIS CALIFORNICA, ETC.						
General:	0.2% COVER OF SAGITTARIA SEEN IN >5 ACRES IN 2005.						
Owner/Manager:	UNKNOWN						

Occurrence No.	83	Map Index:	83303	EO Index:	84308	Element Last Seen:	2009-10-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-10-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.23391 / -121.67010				Accuracy:	specific area	
UTM:	Zone-10 N4232604 E616391				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 32, SW (M)				Acres:	1.0	
Location:	MINER SLOUGH; TIDAL FLAT JUST EAST OF CONFLUENCE WITH CACHE SLOUGH.						
Detailed Location:	MAPPED IN THE NE 1/4 OF THE SW 1/4 OF SECTION 32 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	GROWING ALONE ON AN EXPOSED TIDAL MUD FLAT.						
General:	30 PLANTS OBSERVED IN 2009 IN A 6 FT BY 4 FT PATCH.						
Owner/Manager:	DFG-MINER SLOUGH WA						



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Occurrence No.	84	Map Index:	83304	EO Index:	84309	Element Last Seen:	2009-09-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17503 / -121.65992				Accuracy:	specific area	
UTM:	Zone-10 N4226084 E617377				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 20, SE (M)				Acres:	2.0	
Location:	SOUTH SIDE OF SACRAMENTO RIVER, ABOUT 1 MILE WEST OF WESTERN END OF IDA ISLAND.						
Detailed Location:	TWO COLONIES MAPPED IN THE NE 1/4 OF THE SE 1/4 OF SECTION 20 AND THE NW 1/4 OF THE SW 1/4 OF SECTION 21 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EXPOSED TIDAL SANDY SHORELINE WITH SCIRPUS AND POLYGONUM. THE RARE LILAEOPSIS MASONII ALSO OCCURS AT THIS SITE.						
General:	40 PLANTS OBSERVED IN WESTERN POLYGON AND 50 PLANTS OBSERVED IN EASTERN POLYGON IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	85	Map Index:	83305	EO Index:	84310	Element Last Seen:	2017-07-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2017-07-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-09-22
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31896 / -121.50089				Accuracy:	specific area	
UTM:	Zone-10 N4242268 E631050				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 1, NW (M)				Acres:	5.0	
Location:	ABOUT 2 AIR MILES WSW OF POINT PLEASANT AND 2 AIR MILES NORTHWEST OF KUHN RANCH, SOUTH OF STONE LAKE.						
Detailed Location:	MAPPED BY CNDDDB AS 5 POLYGONS IN THE NW 1/4 OF THE NW 1/4 OF SECTION 1 AND THE NE 1/4 OF THE NE 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES AND 2017 KWONG COORDINATES.						
Ecological:	ALONG EDGE OF WATERWAY AND IN BED OF SUNKEN TRUCK. RIPARIAN AND MARSH HABITAT. MIX OF NATIVE (TULE, PENNYWORT, CATTAILS, WILLOWS, VALLEY OAKS, OTHER HERBS) AND NON-NATIVE VEGETATION (WATER PRIMROSE, WATER HYACINTH, EGERIA Densa, ETC.).						
General:	2009 POPULATION NUMBERS FOR POLYGONS FROM NORTH TO SOUTH: 355, 300, 125, 25, AND 300.10-15 PLANTS SEEN IN SOUTHERNMOST POLYGON IN 2017.						
Owner/Manager:	USFWS-STONE LAKES NWR, DWR?						



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Occurrence No.	86	Map Index:	83306	EO Index:	84311	Element Last Seen:	2009-08-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27824 / -121.49848				Accuracy:	specific area	
UTM:	Zone-10 N4237753 E631332				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 13, SW (M)				Acres:	2.0	
Location:	WEST SIDE OF SNODGRASS SLOUGH; JUST NORTH AND SOUTH OF TWIN CITIES ROAD BRIDGE.						
Detailed Location:	TWO COLONIES MAPPED IN THE EAST 1/2 OF THE SW 1/4 OF SECTION 13 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	TIDAL MARSH AND EXPOSED TIDAL MUDFLATS, SOME SUBMERGED. ASSOCIATED WITH SCIRPUS.						
General:	2009: 30 PLANTS OBSERVED IN SCATTERED CLUMPS IN NORTHERN COLONY, 10 PLANTS OBSERVED IN A 4 SQ M PATCH IN SOUTHERN COLONY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	87	Map Index:	83307	EO Index:	84312	Element Last Seen:	2009-09-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26856 / -121.48363				Accuracy:	specific area	
UTM:	Zone-10 N4236700 E632649				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 19, N (M)				Acres:	22.0	
Location:	SNODGRASS SLOUGH AND UNNAMED WATERWAY TO THE EAST; FROM 0.3 TO 2 AIR MILES ESE OF KXTL RADIO TOWER.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDB AS 21 POLYGONS IN THE NORTH 1/2 OF SECTION 19 AND THE NORTH 1/2 OF SECTION 24 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SHALLOW AND EXPOSED TIDAL MUDFLATS, MUD BANKS, INSTREAM ISLANDS, ETC. ASSOCIATED WITH SCIRPUS.						
General:	2009 POPULATION NUMBERS FOR POLYGONS FROM EAST TO WEST: 60, 55, 30, 40, 300, 100, 30, 40, 180, 10, 10, 80, 10, 16, 55, 42, 60, 200, 100, 55 IN 2ND NORTHERNMOST POLY, AND 100 IN NORTHERNMOST POLY.						
Owner/Manager:	DPR, TNC, STATE, UNKNOWN						



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Occurrence No.	88	Map Index:	83308	EO Index:	84313	Element Last Seen:	2009-07-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25556 / -121.49911				Accuracy:	specific area	
UTM:	Zone-10 N4235236 E631318				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 25, NW (M)				Acres:	1.0	
Location:	SNODGRASS SLOUGH; ABOUT 0.6 AIR MILE NORTHEAST OF LOCKE.						
Detailed Location:	MAPPED IN THE NE 1/4 OF THE NW 1/4 OF SECTION 25 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EXPOSED TIDAL MUDFLAT WITH SCIRPUS AND JUNCUS EFFUSUS.						
General:	TWO SEPARATE 10 FT X 4 FT PATCHES OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	89	Map Index:	83309	EO Index:	84314	Element Last Seen:	2014-08-16
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2014-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-09-28
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25762 / -121.43058				Accuracy:	specific area	
UTM:	Zone-10 N4235564 E637312				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 28, NE (M)				Acres:	20.0	
Location:	COSUMNES RIVER JUST NORTH OF MOKELUMNE CITY, ON EITHER SIDE OF THE RAILROAD BRIDGE CROSSING.						
Detailed Location:	SEVERAL SITES MAPPED BY CNDDB AS 12 POLYGONS IN THE NORTH HALF OF THE NE 1/4 OF SECTION 28 AND THE NW 1/4 OF THE NW 1/4 OF SECTION 27 ACCORDING TO 2011 DWR DIGITAL DATA, 2011 SLAKEY DIGITAL DATA, AND 2014 SLAKEY COORDINATES.						
Ecological:	RELATIVELY SHALLOW MUD FLATS ALONG EDGE OF RIVER AND SLOUGHS. MOST PLANTS DEEPLY SUBMERGED AT TIME OF SURVEY. ASSOCIATED WITH MYRIOPHYLLUM, LUDWIGIA PEPLOIDES, SCIRPUS ACUTUS, CEPHALANTHUS OCCIDENTALIS, CAREX BARBARAE, ETC.						
General:	305 PLANTS OBSERVED IN 2010. >2000 PLANTS OBSERVED IN 2011, OCCURRING IN ABOUT 30 COLONIES RANGING IN SIZE FROM A FEW INDIVIDUALS TO >250 INDIVIDUALS. ~140 PLANTS OBSERVED IN THE 2 NE-MOST POLYGONS IN 2014.						
Owner/Manager:	TNC						



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Occurrence No.	90	Map Index:	83310	EO Index:	84315	Element Last Seen:	2005-08-22
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2005-08-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-07-05	
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.29214 / -121.63307			Accuracy:	80 meters		
UTM:	Zone-10 N4239113 E619537			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 10, SE (M)			Acres:	0.0		
Location:	NORTH BANK OF MINER SLOUGH; ABOUT 0.6 MILE EAST OF FIVE POINTS.						
Detailed Location:	JUST WEST OF BRIDGE ACROSS SLOUGH. MAPPED ACCORDING TO 2005 COORDINATES FROM VEGCAMP.						
Ecological:	MIXED HARDWOOD WOODLAND; TREE CANOPY NEARLY CONTINUOUS, THOUGH MORE OPEN AT E END WITH MORE FORBS. MEDIUM TO VERY FINE, LOAMY SAND. ASSOCIATED WITH ALNUS RHOMBIFOLIA, ACER NEGUNDO, FRAXINUS LATIFOLIA, CEPHALANTHUS OCCIDENTALIS, ETC.						
General:	0.2% COVER OF SAGITTARIA OBSERVED IN 1-5 ACRES IN 2005.						
Owner/Manager:	UNKNOWN						

Occurrence No.	91	Map Index:	83311	EO Index:	84316	Element Last Seen:	2009-09-04
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-09-04	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-07-05	
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.27887 / -121.63891			Accuracy:	specific area		
UTM:	Zone-10 N4237633 E619047			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 15, NW (M)			Acres:	1.0		
Location:	MINER SLOUGH; ABOUT 0.85 AIR MILE SSE OF FIVE POINTS.						
Detailed Location:	MAPPED IN THE SE 1/4 OF THE NW 1/4 OF SECTION 15 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP INTERMIXED WITH JUNCUS XIPHIODES.						
General:	40 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	92	Map Index:	83312	EO Index:	84317	Element Last Seen:	2009-09-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-05
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.25744 / -121.65218				Accuracy:	specific area	
UTM:	Zone-10 N4235238 E617921				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 21, SW (M)				Acres:	1.0	
Location:	MINER SLOUGH; ABOUT 1 AIR MILE SOUTHWEST OF LENTS LANDING AND 0.3 MILE NORTHEAST OF DC STEWART LANDING.						
Detailed Location:	MAPPED IN THE SE 1/4 OF THE SW 1/4 OF SECTION 21 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SANDY SHORE.						
General:	60 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	93	Map Index:	83313	EO Index:	84318	Element Last Seen:	2009-06-22
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-06-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-05
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37716 / -121.48987				Accuracy:	specific area	
UTM:	Zone-10 N4248743 E631906				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 13, NE (M)				Acres:	3.0	
Location:	DRAINAGE CHANNEL BETWEEN 0.05 AND 0.5 MILE NORTH OF HOOD FRANKLIN ROAD, ABOUT 0.7 MILE WEST OF I-5.						
Detailed Location:	4 COLONIES MAPPED IN THE WEST 1/2 OF THE NE 1/4 OF SECTION 13 AND THE SW 1/4 OF THE SE 1/4 OF SECTION 12 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SEASONALLY INUNDATED CHANNEL CONNECTION TO OPEN WATER AREA. ALSO FOUND IN EMERGENT MARSH WITH MOSTLY TYPHA.						
General:	2009 POPULATION NUMBERS FOR COLONIES FROM NORTH TO SOUTH: 4, 12, 150, AND 5.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	96	Map Index:	89324	EO Index:	90318	Element Last Seen:	2012-05-21
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2012-05-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-06-06
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47556 / -121.43826				Accuracy:	80 meters	
UTM:	Zone-10 N4259737 E636229				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 09, NW (M)				Acres:	0.0	
Location:	NORTH BANK OF ELDER CREEK, APPROXIMATELY 200 FT WEST OF THE CENTER PARKWAY BRIDGE OVER ELDER CREEK.						
Detailed Location:	NEAR A CITY OF SACRAMENTO SUMP OUTFALL. MAPPED IN THE SE 1/4 OF THE NW 1/4 OF SECTION 9 ACCORDING TO 2012 COORDINATES FROM ORSOLINI.						
Ecological:	ELDER CREEK IS LINED WITH CONCRETE; GROWING OUT OF CRACKS IN THE CONCRETE. VEGETATION IS SPARSE IN THE BED OF THE CREEK. ASSOCIATED WITH CYPERUS SP. AND LUDWIGIA SP.						
General:	5 PLANTS OBSERVED IN 2012.						
Owner/Manager:	UNKNOWN						
Occurrence No.	105	Map Index:	A6494	EO Index:	108255	Element Last Seen:	2014-08-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2014-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-09-22
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26174 / -121.41992				Accuracy:	specific area	
UTM:	Zone-10 N4236037 E638236				Elevation (ft):	7	
PLSS:	T05N, R05E, Sec. 22, SW (M)				Acres:	1.0	
Location:	NEAR THE NORTHERN END OF WOOD DUCK SLOUGH, ON THE EAST BANK OF THE SLOUGH, ABOUT 1 AIR MILE NE OF MOKELUMNE CITY.						
Detailed Location:	MAPPED IN THE SE 1/4 OF THE SW 1/4 OF SECTION 22 ACCORDING TO 2014 SLAKEY COORDINATES.						
Ecological:	FRESHWATER MARSH AT EDGE OF SLOUGH. ASSOCIATED WITH TYPHA, RUBUS, AZOLLA FILICULOIDES, AND LUDWIGIA.						
General:	ABOUT 20 PLANTS OBSERVED IN 2014.						
Owner/Manager:	BLM						



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Occurrence No.	106	Map Index:	A6495	EO Index:	108257	Element Last Seen:	2014-05-26
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2014-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-09-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48541 / -121.44018				Accuracy:	80 meters	
UTM:	Zone-10 N4260828 E636045				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 4, SW (M)				Acres:	5.0	
Location:	FLORIN CREEK PARK AND EDGES OF FLORIN CREEK BELOW PARK, BETWEEN PERSIMMON AVE AND CIRCLE PARKWAY, FLORIN.						
Detailed Location:	MAPPED NEAR THE CENTER OF THE SW 1/4 OF SECTION 4.						
Ecological:	AROUND SHALLOW FRINGES OF A POND IN ACTIVE PARK AND ALONG EDGES OF FLORIN CREEK IMMEDIATELY BELOW OUTFALL FROM POND. CREEK IS CONCRETE LINED - PLANTS IN SEAMS AND OTHER OPENINGS.						
General:	50 PLANTS OBSERVED IN 2014; PLANTS HAVE BEEN THERE FOR 10 YEARS. BASED ON 2016-2017 AERIAL IMAGERY, THE PONDS IN THE PARK AND THE ADJACENT PORTION OF FLORIN CREEK HAVE BEEN SCRAPED AND RECONSTRUCTED, PLANTS POSSIBLY EXTIRPATED.						
Owner/Manager:	SAC COUNTY						

Carex comosa

Element Code: PMCYP032Y0

bristly sedge

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G5
	State:	None		State:	S2
	Other:	Rare Plant Rank - 2B.1			
Habitat:	General:	MARSHES AND SWAMPS, COASTAL PRAIRIE, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	LAKE MARGINS, WET PLACES; SITE BELOW SEA LEVEL IS ON A DELTA ISLAND. -5-1010 M.			

Occurrence No.	11	Map Index:	67109	EO Index:	67259	Element Last Seen:	2009-06-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-06-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25052 / -121.50669				Accuracy:	specific area	
UTM:	Zone-10 N4234666 E630664				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 26, SE (M)				Acres:	1.0	
Location:	SW END OF DELTA MEADOWS RIVER PARK, JUST EAST OF LOCKE.						
Detailed Location:	MAPPED BY CNDDDB IN THE NE 1/4 OF THE SE 1/4 OF SECTION 26 ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA.						
Ecological:	ON A PARTIALLY SUBMERGED LOG.						
General:	5 PLANTS OBSERVED IN 2009.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						



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Occurrence No.	15	Map Index:	83578	EO Index:	84611	Element Last Seen:	2009-06-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36023 / -121.49025				Accuracy:	specific area	
UTM:	Zone-10 N4246864 E631904				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 24, N (M)				Acres:	11.0	
Location:	NE END OF SOUTH STONE LAKE; ABOUT 1.2 AIR MILES EAST OF HOOD JUNCTION, WEST SIDE OF I-5, SOUTH OF SACRAMENTO.						
Detailed Location:	MAPPED BY CNDDB AS 7 POLYGONS MOSTLY IN THE NE 1/4 OF SECTION 24 ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA.						
Ecological:	IN RIPARIAN AREAS, EDGES OF MARSH, AND EDGES OF OPEN WATER. ASSOCIATES INCLUDE TYPHA LATIFOLIA, SCIRPUS ACUTUS, RUBUS DISCOLOR, SALIX GOODINGII, AND POPULUS FREMONTII.						
General:	ABOUT 92 PLANTS OBSERVED IN 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR, UNK						
Occurrence No.	16	Map Index:	83579	EO Index:	84613	Element Last Seen:	2009-06-23
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-06-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-24
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34442 / -121.49301				Accuracy:	specific area	
UTM:	Zone-10 N4245105 E631691				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 25, NW (M)				Acres:	1.0	
Location:	EAST ARM OF SOUTH STONE LAKE; ABOUT 1.7 AIR MILES SSE OF HOOD JUNCTION, WEST SIDE OF I-5, SOUTH OF SACRAMENTO.						
Detailed Location:	NORTH SHORE OF LAKE. MAPPED BY CNDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SE 1/4 OF THE NW 1/4 OF SECTION 25.						
Ecological:	MARSH. ON WATER'S EDGE WITH SCIRPUS ACUTUS.						
General:	7 PLANTS OBSERVED IN 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	17	Map Index:	83580	EO Index:	84614	Element Last Seen:	2009-06-23
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-06-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.32849 / -121.49900				Accuracy:	specific area	
UTM:	Zone-10 N4243329 E631196				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 36, NW (M)				Acres:	1.0	
Location:	SOUTH END OF SOUTH STONE LAKE; ABOUT 1.9 AIR MILES WNW OF THE I-5 OVERPASS AT LAMBERT ROAD, SOUTH OF SACRAMENTO.						
Detailed Location:	ON THE EASTERN LAKE SHORE. MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE NW 1/4 OF SECTION 36.						
Ecological:	MARSH.						
General:	40 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	18	Map Index:	83581	EO Index:	84615	Element Last Seen:	2009-06-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32006 / -121.49851				Accuracy:	specific area	
UTM:	Zone-10 N4242394 E631254				Elevation (ft):	10	
PLSS:	T05N, R04E, Sec. 01, NW (M)				Acres:	1.0	
Location:	SOUTH END OF SOUTH STONE LAKE JUST S OF LAMBERT RD ABOUT 1.8 & 2 MILES W OF I-5 OVERPASS AT LAMBERT RD, S OF SACRAMENTO.						
Detailed Location:	MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE NW 1/4 OF THE NW 1/4 OF SECTION 1 AND IN THE NE 1/4 OF THE NE 1/4 OF SECTION 2.						
Ecological:	RIPARIAN EDGE WITH SCIRPUS.						
General:	IN 2009, 20 PLANTS WERE OBSERVED IN THE WESTERN POLYGON AND 5 PLANTS WERE OBSERVED IN THE EASTERN POLYGON.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	19	Map Index:	83583	EO Index:	84616	Element Last Seen:	2009-08-10
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26618 / -121.46264				Accuracy:	specific area	
UTM:	Zone-10 N4236466 E634489				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 20, SW (M)				Acres:	1.0	
Location:	EAST OF DELTA MEADOWS RIVER PARK; ABOUT 1.1 AIR MILES NW OF I-5 BRIDGE AT MOKELUMNE RIVER, SOUTH OF SACRAMENTO.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE NW 1/4 OF THE SW 1/4 OF SECTION 20.						
Ecological:	TIDAL MARSH AT WATER'S EDGE. AT BASE OF BLACKBERRY THICKET WITH VITIS.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	TNC						

Occurrence No.	20	Map Index:	83584	EO Index:	84617	Element Last Seen:	2009-09-08
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27005 / -121.46826				Accuracy:	specific area	
UTM:	Zone-10 N4236888 E633991				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 19, NE (M)				Acres:	1.0	
Location:	EAST OF DELTA MEADOWS RIVER PARK; ABOUT 1.5 AIR MILES NNW OF THE JUNCTION OF I-5 AND THE MOKELUMNE RIVER.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SE 1/4 OF THE NE 1/4 OF SECTION 19.						
Ecological:	FALLEN LOG.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	STATE						



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Occurrence No.	21	Map Index:	83585	EO Index:	84618	Element Last Seen:	2009-09-09
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26768 / -121.48741				Accuracy:	specific area	
UTM:	Zone-10 N4236597 E632320				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24 (M)				Acres:	3.0	
Location:	EAST OF DELTA MEADOWS RIVER PARK; UNNAMED SLOUGH 0.3 TO 0.7 MILE EAST OF SNODGRASS SLOUGH, NE OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDB AS 4 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE NW 1/4 OF SECTION 19 AND IN THE SE 1/4 OF THE NE 1/4 OF SECTION 24.						
Ecological:	TIDAL MARSH ON EXPOSED LOGS WITH LYCOPUS, JUNCUS EFFUSUS, AND AGROSTIS.						
General:	1 PLANT OBSERVED IN EACH POLYGON IN 2009.						
Owner/Manager:	TNC, UNKNOWN						

Occurrence No.	22	Map Index:	83586	EO Index:	84619	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25917 / -121.49505				Accuracy:	specific area	
UTM:	Zone-10 N4235642 E631666				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, SE (M)				Acres:	1.0	
Location:	EAST EDGE OF DELTA MEADOWS RIVER PARK, ABOUT 0.9 AIR MILE NE OF LOCKE, NORTH OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDB AS 2 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE SE 1/4 OF SECTION 24 AND IN THE NW 1/4 OF THE NE 1/4 OF SECTION 25.						
Ecological:	TIDAL MARSH. ISOLATED EXPOSED CLUMP ON WATER'S EDGE.						
General:	1 PLANT OBSERVED IN EACH POLYGON IN 2009.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						

Occurrence No.	23	Map Index:	83587	EO Index:	84620	Element Last Seen:	2009-06-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25902 / -121.50389				Accuracy:	specific area	
UTM:	Zone-10 N4235613 E630893				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, SW (M)				Acres:	1.0	
Location:	WEST EDGE OF DELTA MEADOWS RIVER PARK, ABOUT 0.7 AIR MILE NORTH OF LOCKE, NORTH OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDB AS 2 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE SW 1/4 OF SECTION 24 AND IN THE SE 1/4 OF THE SE 1/4 OF SECTION 23.						
Ecological:	ALONG SCIRPUS ACUTUS BANK AND BANK OF OPEN WATER.						
General:	20 PLANTS OBSERVED IN EACH POLYGON IN 2009.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						



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Occurrence No.	24	Map Index:	83589	EO Index:	84621	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.26697 / -121.50280				Accuracy:	specific area	
UTM:	Zone-10 N4236497 E630974				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, NW (M)				Acres:	1.0	
Location:	NW EDGE OF DELTA MEADOWS RIVER PARK; ALONG THE MEADOWS SLOUGH, ABOUT 1.2 AIR MILES NORTH OF LOCKE, N OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE NW 1/4 OF SECTION 24.						
Ecological:	TIDAL MARSH.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						
Occurrence No.	25	Map Index:	83590	EO Index:	84622	Element Last Seen:	2010-06-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-06-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28172 / -121.49823				Accuracy:	specific area	
UTM:	Zone-10 N4238140 E631348				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 13, NW (M)				Acres:	1.0	
Location:	SNODGRASS SLOUGH, 0.3 MI N OF THE N EDGE OF DELTA MEADOWS RIVER PARK, ABOUT 2.2 AIR MI NNE OF LOCKE, N OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2011 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SE 1/4 OF THE NW 1/4 OF SECTION 13.						
Ecological:	FRESHWATER MARSH.						
General:	17 PLANTS OBSERVED IN 2010.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	26	Map Index:	83591	EO Index:	84624	Element Last Seen:	2009-07-28
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-30
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.30365 / -121.51180				Accuracy:	specific area	
UTM:	Zone-10 N4240554 E630122				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 11, NW (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH, APPROX 0.75 AIR MILE SSE OF END OF RUSSEL RD AT SNODGRASS SLOUGH, ~3.3 AIR MILES NORTH OF LOCKE.						
Detailed Location:	ABOUT 0.3 MILE NORTH OF "PUMPING STATION" ON TOPO. MAPPED BY CNDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE NE 1/4 OF THE NW 1/4 OF SECTION 11.						
Ecological:	RIPARIAN AREA UNDER QUERCUS LOBATA.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	27	Map Index:	83592	EO Index:	84625	Element Last Seen:	2009-06-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32482 / -121.51990				Accuracy:	specific area	
UTM:	Zone-10 N4242892 E629376				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 34, SE (M)				Acres:	9.0	
Location:	ALONG SNODGRASS SLOUGH, FROM JUST NORTH TO ABOUT 0.5 MILE NORTH OF LAMBERT ROAD CROSSING OVER SNODGRASS SLOUGH.						
Detailed Location:	MAPPED BY CNDDB AS 5 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE EAST HALF OF THE SE 1/4 OF SECTION 34.						
Ecological:	RIPARIAN AREA WITH TYPHA AND SCIRPUS ACUTUS.						
General:	IN 2009, NORTHERNMOST POLYGON HAD PLANTS OCCURRING SPORADICALLY ALONG THE WATER'S EDGE. THE FOUR REMAINING POLYGONS FROM NORTH TO SOUTH HAD 4, 1, 3, AND 3 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	28	Map Index:	83593	EO Index:	84626	Element Last Seen:	2009-06-22
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-06-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-23	

Quad Summary: Courtland (3812135), Clarksburg (3812145)

County Summary: Sacramento

Lat/Long:	38.37175 / -121.50964	Accuracy:	specific area
UTM:	Zone-10 N4248114 E630189	Elevation (ft):	5
PLSS:	T06N, R04E, Sec. 14 (M)	Acres:	12.0

Location: FROM 0.15 TO 0.75 MILE NORTH OF HOOD FRANKLIN ROAD ALONG RAILROAD TRACKS, BETWEEN SACRAMENTO RIVER AND I-5, E OF HOOD.

Detailed Location: MAPPED BY CNDDB AS 3 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA THROUGH THE MIDDLE OF SECTION 14.

Ecological: RIPARIAN.

General: IN 2009, SOUTHERNMOST POLYGON HAD 50 PLANTS, THE CENTRAL POLYGON HAD 3 PLANTS, AND THE NORTHERN POLYGON HAD 1 PLANT.

Owner/Manager: UNKNOWN

Occurrence No.	29	Map Index:	83594	EO Index:	84628	Element Last Seen:	2009-07-31
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-07-31	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-23	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.25343 / -121.49944	Accuracy:	specific area
UTM:	Zone-10 N4234999 E631293	Elevation (ft):	5
PLSS:	T05N, R04E, Sec. 25, NW (M)	Acres:	1.0

Location: SE END OF DELTA MEADOWS RIVER PARK, ABOUT 0.6 AIR MILE ENE OF LOCKE, NE OF WALNUT GROVE.

Detailed Location: MAPPED BY CNDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SE 1/4 OF THE NW 1/4 OF SECTION 25.

Ecological: TIDAL MARSH. ISOLATED EXPOSED CLUMP ON WATER'S EDGE.

General: 1 PLANT OBSERVED IN 2009.

Owner/Manager: DPR-DELTA MEADOWS RIVER PARK

Neostapfia colusana

Element Code: PMPOA4C010

Colusa grass

Listing Status: **Federal:** Threatened

CNDDB Element Ranks: **Global:** G1

State: Endangered

State: S1

Other: Rare Plant Rank - 1B.1

Habitat: **General:** VERNAL POOLS.

Micro: USUALLY IN THE BOTTOMS OF LARGE, OR DEEP VERNAL POOLS; ADOBE SOILS. 5-125 M.



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Occurrence No.	49	Map Index:	89194	EO Index:	5744	Element Last Seen:	2017-07-19
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2017-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2020-04-21
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49106 / -121.68525			Accuracy:	specific area		
UTM:	Zone-10 N4261120 E614659			Elevation (ft):	25		
PLSS:	T08N, R03E, Sec. 31, SE (M)			Acres:	6.0		
Location:	DAVIS AIR FORCE COMMUNICATION FACILITY. 4 MILES SOUTH OF INTERSTATE 80, EAST OF ROAD 104, BETWEEN ROAD 34 AND ROAD 35.						
Detailed Location:	DAVIS COMMUNICATIONS ANNEX. POPULATION IS IN DRAINAGE IN THE SOUTHERN PORTION OF THE FACILITY. IN POOL #9. 2 POLYGONS MAPPED IN THE WEST HALF OF THE SE 1/4 OF SEC 31. WITHIN 1/4 MI OF EO #74, WHICH IS A TRANSPLANTED POPULATION.						
Ecological:	PLAYA TYPE VERNAL POOL ON LOW AREA ON PESCADERO CLAY LOAM. ASSOCIATED WITH DOWNINGIA, LASTHENIA FREMONTII, PLAGIOBOTHRYIS, PSILOCARPHUS, MYOSURUS, LEPIDIUM LATIFOLIUM, CRYPIS SCHOENOIDES, CRESSA TRUXILLENSIS, & TUCTORIA MUCRONATA.						
General:	N POLY: >1000 IN 1993, 36000 IN '96, >100 IN '01, 8435 IN '03, 43732 IN '04, 22671 IN '05, 10897 IN '06, 0 IN '07, 8486 IN '08, 11314 IN '09, 20816 IN '10, 37400+ IN '11, 200+ IN '17. S POLY SEEN IN 2004 PER LEE, 0 IN 2003-2011 PER GERLACH.						
Owner/Manager:	DOD-MCCLELLAN AFB						

Occurrence No.	58	Map Index:	25471	EO Index:	5800	Element Last Seen:	2011-10-15
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2011-10-15
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2016-02-09
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49593 / -121.67732			Accuracy:	specific area		
UTM:	Zone-10 N4261671 E615342			Elevation (ft):	25		
PLSS:	T08N, R03E, Sec. 32, NW (M)			Acres:	1.0		
Location:	IN DRAINAGE ON THE EAST SIDE OF THE DAVIS AIR FORCE COMMUNICATIONS FACILITY, 2.5 MILES NNW OF SAXON.						
Detailed Location:	FACILITY IS 4 MILES SOUTH OF DAVIS, EAST OF ROAD 104 AND BETWEEN ROAD 35 AND ROAD 36. MAPPED ALONG SECTION LINE BETWEEN THE SE 1/4 OF NE 1/4 OF SECTION 31 AND SW 1/4 OF NW 1/4 OF SECTION 32 ACCORDING TO 2013 WITHAM DIGITAL DATA. IN POOL #3.						
Ecological:	PLAYA TYPE VERNAL POOL ON PESCADERO CLAY LOAM. GROWING PRIMARILY ON DISTURBED GROUND IN AREAS OF LOW COMPETITION. THIS POPULATION OCCURS AS A VIRTUAL MONOCULTURE. WITH DOWNINGIA SPP., LASTHENIA FREMONTII, PLAGIOBOTHRYIS, PSILOCARPHUS, ETC.						
General:	SEVERAL THOUSAND PLANTS IN 1993. 1000 IN 1996. 2,208 PLANTS BETWEEN THIS EO AND EO #49 IN 2004. 842 PLANTS IN 2005, 9013 IN 2006, 0 IN 2007, 12 IN 2008, 0 IN 2009, 21 IN 2010, 100 IN 2011. POOL DAMAGED IN 2009 WHEN CONCRETE ANCHOR REMOVED.						
Owner/Manager:	DOD-MCCLELLAN AFB, YOL COUNTY						



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Occurrence No.	74	Map Index:	89258	EO Index:	90255	Element Last Seen:	2011-10-15
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2011-10-15	
Occ. Type:	Transplant Outside of Native Hab./Range	Trend:	Unknown	Record Last Updated:		2013-05-22	
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49464 / -121.68853			Accuracy:	specific area		
UTM:	Zone-10 N4261514 E614367			Elevation (ft):	25		
PLSS:	T08N, R03E, Sec. 31, SW (M)			Acres:	1.0		
Location:	YOLO GRASSLANDS REGIONAL PARK; APPROXIMATELY 0.8 AIR MILE EAST OF TREMONT CEMETERY.						
Detailed Location:	2 POOLS MAPPED AS A SINGLE POLYGON ACCORDING TO 2013 WITHAM DIGITAL DATA IN THE NE 1/4 OF THE SW 1/4 OF SEC 31. THIS IS WITHIN A 1/4 MI OF EO#49, BUT KEPT AS A SEPARATE OCCURRENCE BECAUSE THESE ARE TRANSPLANTED PLANTS IN CREATED POOLS.						
Ecological:	CREATED VERNAL POOLS, MOSTLY BARE GROUND. THE RARE TUCTORIA MUCRONATA ALSO PLANTED IN ONE OF THE POOLS.						
General:	327 PLANTS SEEN IN 2009, 167 PLANTS SEEN IN 2010, AND 282 PLANTS SEEN IN 2011.						
Owner/Manager:	YOL COUNTY						

<i>Puccinellia simplex</i>				Element Code: PMPOA53110			
California alkali grass							
Listing Status:	Federal:	None		CNDDB Element Ranks:	Global:	G3	
	State:	None			State:	S2	
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive					
Habitat:	General:	MEADOWS AND SEEPS, CHENOPOD SCRUB, VALLEY AND FOOTHILL GRASSLANDS, VERNAL POOLS.					
	Micro:	ALKALINE, VERNALLY MESIC. SINKS, FLATS, AND LAKE MARGINS. 1-915 M.					

Occurrence No.	50	Map Index:	98761	EO Index:	100236	Element Last Seen:	1955-03-24
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1955-03-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2016-01-22
Quad Summary:	Saxon (3812146), Davis (3812156)						
County Summary:	Solano						
Lat/Long:	38.49505 / -121.70965				Accuracy:	2/5 mile	
UTM:	Zone-10 N4261533 E612525				Elevation (ft):		
PLSS:	T08N, R02E, Sec. 36 (M)				Acres:	280.0	
Location:	JUST WEST OF WESTMINSTER PRESBYTERIAN CHURCH OF TREMONT, 4.5 MILES SOUTHEAST OF THE CITY OF DAVIS.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB JUST WEST OF GIVEN CHURCH (LABELED AS "TREMONT CEMETARY" ON TOPO MAP).						
Ecological:	GROWING IN BARE ALKALI PATCHES OF AN ALKALINE MEADOW.						
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1955 CRAMPTON COLLECTION. BASED ON 2015 AERIAL IMAGERY, NO SUITABLE NATURAL HABITAT REMAINS IN THIS AREA; SITE PRESUMED EXTIRPATED.						
Owner/Manager:	UNKNOWN						



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Tuctoria mucronata

Element Code: PMPOA6N020

Crampton's tuctoria or Solano grass

Listing Status: **Federal:** Endangered

CNDDB Element Ranks: **Global:** G1

State: Endangered

State: S1

Other: Rare Plant Rank - 1B.1, SB_RSABG-Rancho Santa Ana Botanic Garden

Habitat: **General:** VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND.

Micro: CLAY BOTTOMS OF DRYING VERNAL POOLS AND LAKES IN VALLEY GRASSLAND. 5-15 M.

Occurrence No.	3	Map Index:	89194	EO Index:	6337	Element Last Seen:	2011-10-15
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2011-10-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-09-14	

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.49106 / -121.68525	Accuracy:	specific area
UTM:	Zone-10 N4261120 E614659	Elevation (ft):	25
PLSS:	T08N, R03E, Sec. 31, SE (M)	Acres:	6.0

Location: DAVIS AIR FORCE COMMUNICATION FACILITY, EAST OF ROAD 104, BETWEEN ROAD 34 AND ROAD 35, 4 MILES SOUTH OF I-80.

Detailed Location: DAVIS COMMUNICATIONS ANNEX. 2 POLYGONS MAPPED ACCORDING TO 2013 WITHAM DIGITAL DATA IN THE WEST HALF OF THE SE 1/4 SECTION 31. PART OF OCCURRENCE MANAGED BY YOLO COUNTY PARKS. WITHIN 1/4 MI OF EO#4, WHICH IS A TRANSPLANTED POPULATION.

Ecological: LOW AREA ON PESCADERO CLAY LOAM. N SUBPOP RESTRICTED TO DISTURBED GROUND. S SUBPOP IN ALKALI SCALD, ALSO SHOWS SIGNS OF DISTURBANCE. ASSOCIATES INCLUDE CRYPHIS SCHOENOIDES AND LEPIDIUM LATIFOLIUM. NEOSTAFIA COLUSANA ALSO PRESENT.

General: 2 POLYGONS WITH ~10,000 PLANTS TOTAL IN 1993, 2700 IN 1996, 1993 IN 2001, 4588 IN 2003, ~24,000 IN 2004, 10,364 IN 2005, 2216 IN 2006, 0 IN 2007, 5350 IN 2008, 364 IN 2009, 6970 IN 2010, 11,400 IN 2011. WEEDS TAKING OVER BY 2001.

Owner/Manager: DOD-MCCLELLAN AFB, YOL COUNTY

Occurrence No.	4	Map Index:	89196	EO Index:	90198	Element Last Seen:	2011-10-15
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2011-10-15	
Occ. Type:	Transplant Outside of Native Hab./Range	Trend:	Unknown	Record Last Updated:		2013-05-10	

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.49464 / -121.68879	Accuracy:	specific area
UTM:	Zone-10 N4261513 E614344	Elevation (ft):	25
PLSS:	T08N, R03E, Sec. 31, SW (M)	Acres:	2.0

Location: YOLO GRASSLANDS REGIONAL PARK; APPROXIMATELY 0.8 AIR MILE EAST OF TREMONT CEMETARY.

Detailed Location: 2 POOLS MAPPED AS A SINGLE POLYGON ACCORDING TO 2013 WITHAM DIGITAL DATA IN THE NE 1/4 OF THE SW 1/4 OF SEC 31. THIS IS WITHIN A 1/4 MI OF EO#3, BUT KEPT AS A SEPARATE OCCURRENCE BECAUSE THESE ARE TRANSPLANTED PLANTS IN CREATED POOLS.

Ecological: CREATED VERNAL POOLS, MOSTLY BARE GROUND. THE RARE NEOSTAFIA COLUSANA ALSO PLANTED IN ONE OF THE POOLS.

General: 16 PLANTS OBSERVED IN 2011.

Owner/Manager: YOL COUNTY



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Saxon (3812146) OR Courtland (3812135) OR Clarksburg (3812145) OR Florin (3812144) OR Liberty Island (3812136) OR Bruceville (3812134) OR Rio Vista (3812126) OR Thornton (3812124) OR Isleton (3812125))
 AND Taxonomic Group IS (Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
<i>Brasenia schreberi</i> watershield	PDCAB01010	None	None	G5	S3	2B.3
<i>Carex comosa</i> bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
<i>Cicuta maculata</i> var. <i>bolanderi</i> Bolander's water-hemlock	PDAP10M051	None	None	G5T4T5	S2?	2B.1
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	PDAP10Z130	None	None	G2	S2	1B.2
<i>Extriplex joaquinana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	PDFAB250D2	None	None	G5T2	S2	1B.2
<i>Legenere limosa</i> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's pepper-grass	PDBRA1M0K1	None	None	G4T1	S1	1B.2
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	PDAP119030	None	Rare	G2	S2	1B.1
<i>Limosella australis</i> Delta mudwort	PDSCR10030	None	None	G4G5	S2	2B.1
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
<i>Neostapfia colusana</i> Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Plagiobothrys hystriculus</i> bearded popcornflower	PDBOR0V0H0	None	None	G2	S2	1B.1
<i>Puccinellia simplex</i> California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
<i>Sagittaria sanfordii</i> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<i>Scutellaria galericulata</i> marsh skullcap	PDLAM1U0J0	None	None	G5	S2	2B.2
<i>Scutellaria lateriflora</i> side-flowering skullcap	PDLAM1U0Q0	None	None	G5	S2	2B.2
<i>Sidalcea keckii</i> Keck's checkerbloom	PDMAL110D0	Endangered	None	G2	S2	1B.1
<i>Symphyotrichum lentum</i> Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
<i>Trifolium hydrophilum</i> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
<i>Tuctoria mucronata</i> Crampton's tuctoria or Solano grass	PMPOA6N020	Endangered	Endangered	G1	S1	1B.1

Record Count: 27



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Query Criteria: Quad IS (Saxon (3812146) OR Courtland (3812135) OR Clarksburg (3812145) OR Florin (3812144) OR Liberty Island (3812136) OR Bruceville (3812134) OR Rio Vista (3812126) OR Thornton (3812124) OR Isleton (3812125))
 AND Taxonomic Group IS (Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

<i>Cicuta maculata var. bolanderi</i>			Element Code: PDAPI0M051	
Bolander's water-hemlock				
Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global: G5T4T5
	State:	None		State: S2?
	Other:	Rare Plant Rank - 2B.1		
Habitat:	General:	MARSHES AND SWAMPS.		
	Micro:	IN FRESH OR BRACKISH WATER. 0-20 M.		
Occurrence No.	16	Map Index: 83772	EO Index: 84800	Element Last Seen: 1993-07-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1993-07-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2011-09-26
Quad Summary:	Thornton (3812124), Isleton (3812125), Bruceville (3812134), Courtland (3812135)			
County Summary:	Sacramento			
Lat/Long:	38.26295 / -121.49892		Accuracy:	1 mile
UTM:	Zone-10 N4236056 E631321		Elevation (ft):	0
PLSS:	T05N, R04E, Sec. 24 (M)		Acres:	0.0
Location:	DELTA MEADOWS RIVER PARK.			
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN GENERAL VICINITY OF DELTA MEADOWS.			
Ecological:				
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1993 BOWCUTT COLLECTION CITED IN A 1996 AREA CHECKLIST FOR DELTA MEADOWS RIVER PARK. NEEDS FIELDWORK.			
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK			



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Eryngium jepsonii

Element Code: PDAPI0Z130

Jepson's coyote-thistle

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2

State: None

State: S2

Other: Rare Plant Rank - 1B.2

Habitat: **General:** VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND.

Micro: CLAY. 3-305 M.

Occurrence No. 8 **Map Index:** A2113 **EO Index:** 103682 **Element Last Seen:** 2002-04-30

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2002-04-30

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2016-10-14

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.42468 / -121.66249 **Accuracy:** 2/5 mile

UTM: Zone-10 N4253783 E616751 **Elevation (ft):** 10

PLSS: T07N, R03E, Sec. 29 (M) **Acres:** 280.0

Location: GLIDE-TULE RANCH, 2.5 MILES SSE OF INTERSECTION OF ROAD 105 AND ROAD 38, YOLO COUNTY.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB ABOUT 2.5 MILES SSE OF GIVEN INTERSECTION BASED ON 2002 SOLOMESHCH COLLECTION.

Ecological: FLAT PLAIN GRASSLAND ON VERTISOLS. ASSOCIATES INCLUDE LOLIUM MULTIFLORUM, HEMIZONIA CONGESTA, HESPEREVAX CAULESCENS, TRIFOLIUM WILDENOVII, LOTUS WRANGELIANUS, AND LASTHENIA GLABRATA.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2002 SOLOMESHCH COLLECTION. NEEDS FIELDWORK.

Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No. 9 **Map Index:** A2114 **EO Index:** 103683 **Element Last Seen:** 2007-04-20

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2007-04-20

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2016-10-06

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.43944 / -121.67361 **Accuracy:** 1/10 mile

UTM: Zone-10 N4255407 E615758 **Elevation (ft):** 20

PLSS: T07N, R03E, Sec. 20, NW (M) **Acres:** 18.0

Location: GLIDE-TULE RANCH, 7.6 MILES SOUTH OF DAVIS.

Detailed Location: MAPPED BY CNDDDB FROM 2007 PRESTON COORDINATES IN THE SW 1/4 OF THE NW 1/4 OF SECTION 20. SOURCE AND ACCURACY OF COORDINATES IS UNKNOWN.

Ecological: ANNUAL GRASSLAND, WITH LOLIUM MULTIFLORUM, HORDEUM MARINUM, TRIFOLIUM MICRODON, LUPINUS MICROCARPUS, AND SIDALCEA SP.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2007 PRESTON COLLECTION. NEEDS FIELDWORK.

Owner/Manager: DFG-YOLO BYPASS WA

Lilaeopsis masonii

Element Code: PDAPI19030

Mason's lilaeopsis

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2

State: Rare

State: S2

Other: Rare Plant Rank - 1B.1

Habitat: **General:** MARSHES AND SWAMPS, RIPARIAN SCRUB.



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Micro: TIDAL ZONES, IN MUDDY OR SILTY SOIL FORMED THROUGH RIVER DEPOSITION OR RIVER BANK EROSION. IN BRACKISH OR FRESHWATER. 0-10 M.

Occurrence No.	23	Map Index:	66758	EO Index:	7763	Element Last Seen:	2009-09-03
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-09-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-11-23	

Quad Summary: Rio Vista (3812126)

County Summary: Sacramento

Lat/Long:	38.13233 / -121.68674	Accuracy:	specific area
UTM:	Zone-10 N4221312 E615095	Elevation (ft):	10
PLSS:	T03N, R03E, Sec. 06 (M)	Acres:	6.0

Location: ABOUT 2.0 MILES SOUTH OF RIO VISTA, EAST SIDE SACRAMENTO RIVER NEAR GAS WELLS ALONG HWY 160.

Detailed Location: 1.5 MI SOUTH OF RIO VISTA BRIDGE ON WEST SIDE OF BRANNON ISLAND. IN VICINITY & SOUTH OF PULLOUT. MAPPED BY CNDDB AS 2 POLYS; NORTH POLY MAPPED NEAR GAS WELLS AND PULLOUT TO ENCOMPASS 1980 & 1986 INFO, SOUTH POLY MAPPED ACC TO 2010 DWR DATA.

Ecological: NORTH POLYGON: SAND AND SILT WITH SIGNIFICANT ORGANIC MATTER CONTENT. ASSOCIATED WITH SCIRPUS ACUTUS, CYPERUS ERAGROSTIS, POLYGONUM, RUMEX, AND VERBENA BONARIENSIS. SOUTH POLYGON: ON LOG AND PILINGS.

General: NORTH POLYGON: PLANTS OBSERVED NEAR GAS WELLS IN 1980, 2 CLUMPS OF 1 FT X 1/2 FT OBSERVED IN 1986, 5 CLUMPS TOTALING APPROXIMATELY 75 SQ METERS OBSERVED IN 1990. SOUTH POLYGON: OBSERVED IN 2009.

Owner/Manager: PVT, DFG

Occurrence No.	25	Map Index:	22576	EO Index:	16464	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1988-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1995-12-15	

Quad Summary: Liberty Island (3812136)

County Summary: Solano

Lat/Long:	38.29490 / -121.74154	Accuracy:	specific area
UTM:	Zone-10 N4239284 E610047	Elevation (ft):	10
PLSS:	T05N, R02E, Sec. 10, N (M)	Acres:	91.3

Location: CACHE SLOUGH, FROM PUMPING STATIONS DOWNSTREAM 1 MILE TOWARDS SE TIP OF PETERS POCKET.

Detailed Location:

Ecological: IN SPLASH ZONE ALONG THE EAST BANK OF BARKER SLOUGH.

General: 15 CLUSTERS OF THE PLANT OBSERVED IN 1984; BASED ON NON-FLOWERING SPECIMEN, BUT VERIFIED BY LINCOLN CONSTANCE. 1988 SURVEYS REVEALED MUCH LARGER POPULATION.

Owner/Manager: PVT



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Occurrence No.	26	Map Index:	10908	EO Index:	19975	Element Last Seen:	2009-09-17
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-16
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.18172 / -121.65690			Accuracy:	specific area		
UTM:	Zone-10 N4226830 E617630			Elevation (ft):	0		
PLSS:	T04N, R03E, Sec. 21, NW (M)			Acres:	1.0		
Location:	NEAR CONFLUENCE OF STEAMBOAT SLOUGH WITH SACRAMENTO RIVER ON NORTH BANK OF GRAND ISLAND.						
Detailed Location:	NEAR MILE MARKER 15. MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	IN 1985 HABITAT DESCRIBED AS "TIDALLY INUNDATED FRESHWATER MARSH BORDERING SLOUGH ON SOD FORMED BY VERBENA HASTATA". IN 2009, HABITAT WAS DESCRIBED AS "EXPOSED LOG AT WATER'S EDGE WITH JUNCUS EFFUSUS".						
General:	ABOUT 100 PLANTS OBSERVED IN 1985. AREA SEARCHED IN 1990 BUT NO PLANTS FOUND. A SMALL DENSE PATCH (2 X 2 FEET) WAS REPORTED IN 2009. PLANTS REPORTED FROM STEAMBOAT SLOUGH IN 1995 ARE ALSO ATTRIBUTED TO THIS SITE (ZEBELL AND FIEDLER, 1996).						
Owner/Manager:	DOD-COE						

Occurrence No.	27	Map Index:	80802	EO Index:	9610	Element Last Seen:	2009-10-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-10-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-16
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.23270 / -121.67076			Accuracy:	specific area		
UTM:	Zone-10 N4232470 E616335			Elevation (ft):	0		
PLSS:	T05N, R03E, Sec. 32, W (M)			Acres:	22.0		
Location:	CONFLUENCE OF MINER SLOUGH AND CACHE SLOUGH, SOUTH OF LIBERTY ISLAND.						
Detailed Location:	MAPPED BY CNDDDB AS 5 POLYGONS TO ECOMPASS INFORMATION FROM A 1988 ECOS, INC REPORT, A 1991 GOLDEN & FIELDER REPORT, AND 2010 DWR DIGITAL DATA.						
Ecological:	SOUTH-FACING BANKS OF TULE ISLANDS, INUNDATED AT HIGH TIDE AND EXPOSED AT LOW TIDE. ASSOCIATED WITH LIMOSELLA SUBULATA, HYDROCOTYLE VERTICILLATA VAR. TRIRADIATA, SCIRPUS CALIFORNICUS, JUNCUS BALTICUS, VERBENA BONARIENSIS, ETC.						
General:	10,000+ PLANTS OBS IN 1985 ON SEVERAL TULE ISLANDS NEAR CONFLUENCE OF MINER SLOUGH AND CACHE SLOUGH. SEEN IN AREA IN 1988 & 1990. SMALL PATCHES OBSERVED IN 2009. PLANTS ALSO REPORTED IN VICINITY IN 1995 (ZEBELL AND FIEDLER, 1996).						
Owner/Manager:	DFG-MINER SLOUGH WA						



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Occurrence No.	39	Map Index:	10853	EO Index:	14347	Element Last Seen:	1990-08-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-08-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2006-10-17
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.13975 / -121.68650			Accuracy:	80 meters		
UTM:	Zone-10 N4222136 E615104			Elevation (ft):	10		
PLSS:	T04N, R03E, Sec. 31, S (M)			Acres:	0.0		
Location:	ALONG HWY 160 APPROXIMATELY 1 MI S OF THE RIO VISTA BRIDGE. WEST EDGE OF BRANNAN ISLAND ALONG THE SACRAMENTO RIVER.						
Detailed Location:	JUST SOUTH OF THE R.V. PARK. POPULATION ENDS WHERE RIPRAP BEINGS AT THE SOUTHERN AND NORTHERN ENDS OF THE BEACH.						
Ecological:	ON SAND AND CLAY WITH HIGH ORGANIC MATTER CONTENT. ALONG THE BEACH BETWEEN OLD PILINGS AND THE LEVEE.						
General:	SEVERAL DENSE POPULATIONS EXTENDING OVER 80 METERS OBSERVED IN 1990.						
Owner/Manager:	UNKNOWN						
Occurrence No.	40	Map Index:	10848	EO Index:	19967	Element Last Seen:	1988-05-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1988-05-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24438 / -121.69462			Accuracy:	specific area		
UTM:	Zone-10 N4233736 E614229			Elevation (ft):	5		
PLSS:	T05N, R03E, Sec. 30, SW (M)			Acres:	10.0		
Location:	LINDSEY SLOUGH; NEAR ITS CONFLUENCE WITH CACHE SLOUGH, SOUTH END OF LITTLE HASTINGS TRACT.						
Detailed Location:							
Ecological:	ON CLAY BANKS SUBJECT TO TIDALLY-MEDIATED FRESHWATER INUNDATION.						
General:	MANY PLANTS OBSERVED IN 1988.						
Owner/Manager:	UNKNOWN						
Occurrence No.	41	Map Index:	11266	EO Index:	22269	Element Last Seen:	1987-09-02
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	1987-09-02
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	1994-02-10
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16608 / -121.49209			Accuracy:	80 meters		
UTM:	Zone-10 N4225316 E632095			Elevation (ft):	10		
PLSS:	T04N, R04E, Sec. 25, E (M)			Acres:	0.0		
Location:	MOUTH OF HOG SLOUGH AT CONFLUENCE WITH SOUTH FORK MOKELUMNE RIVER.						
Detailed Location:							
Ecological:							
General:	ABOUT 50 PLANTS SEEN ON AN ISLAND IN 1987. POOR SITE QUALITY DUE TO EROSION.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	51	Map Index:	11223	EO Index:	11878	Element Last Seen:	2009-08-03
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-24
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.14591 / -121.51054				Accuracy:	specific area	
UTM:	Zone-10 N4223052 E630513				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 35, SE (M)				Acres:	7.0	
Location:	SOUTH MOKELUMNE RIVER; ISLAND IN OXBOW OF RIVER JUST NORTH OF JUNCTION OF SOUTH MOKELUMNE RIVER AND SYCAMORE SLOUGH.						
Detailed Location:	MAPPED BY CNDDDB AS 2 POLYGONS BASED ON A 1987 DAINS MAP AND 2010 DWR DIGITAL DATA.						
Ecological:	ON EXPOSED LOGS AND TIDAL MUD FLATS. PLANTS OCCUR WITH CRASSULA AQUATICA, LIMOSELLA SUBULATA, ELEOCHARIS ACICULARIS, IN SHADE OF JUNCUS EFFUSUS, SALIX LASIOLEPIS AND CEPHALANTHUS OCCIDENTALIS.						
General:	OBSERVED ON WEST END OF INSTREAM ISLAND IN 1987. SMALL, SPARSE PATCHES OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	69	Map Index:	21627	EO Index:	14257	Element Last Seen:	1995-07-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1995-07-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1997-02-14
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16117 / -121.67378				Accuracy:	nonspecific area	
UTM:	Zone-10 N4224528 E616185				Elevation (ft):	13	
PLSS:	T04N, R03E, Sec. 29, SW (M)				Acres:	8.9	
Location:	BRANNAN ISLAND, 0.5 MILE NORTH OF RIO VISTA BRIDGE ALONG STATE ROUTE 160.						
Detailed Location:							
Ecological:	GROWING AT THE INUNDATION LINE IN SUBSTRATE OF SEDIMENTS AND FINES WHICH HAVE BEEN DEPOSITED AMONG SUBSIDED RIPRAP. ASSOCIATES INCLUDE SCIRPUS CALIFORNICUS, MIMULUS SP., JUNCUS SP., VERBENA BONARIENSIS, AND SYMPHYOTRICHUM LENTUM.						
General:	MAIN SOURCE OF INFORMATION FOR THIS SITE IS 1990 OBSERVATION BY MCKEE. PLANTS ALSO REPORTED IN THIS VICINITY IN 1995 (ZEBELL ET AL. 1996). MANAGED BY THE BRANNAN-ANDRUS LEVEE DISTRICT.						
Owner/Manager:	PVT, BRANNON-ANDRUS LEVEE DIST						



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Occurrence No.	71	Map Index:	21935	EO Index:	12005	Element Last Seen:	1995-09-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1995-09-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26344 / -121.49866				Accuracy:	80 meters	
UTM:	Zone-10 N4236110 E631344				Elevation (ft):	15	
PLSS:	T05N, R04E, Sec. 24, SW (M)				Acres:	0.0	
Location:	SNODGRASS SLOUGH AT THE MEADOWS, 0.9 AIR MILE SOUTH OF TWIN CITIES ROAD EAST OF THE RAILROAD TRACKS.						
Detailed Location:	DELTA MEADOWS STATE PARK AT THE NORTH END OF THE LEVEE THAT RUNS NORTHEAST FROM THE TOWN OF LOCKE.						
Ecological:							
General:	POPULATION COVERED AN AREA OF APPROXIMATELY 25 SQ. FEET IN 1990. PLANTS ALSO REPORTED IN THIS VICINITY IN 1995 (ZEBELL AND FIEDLER, 1996).						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						
Occurrence No.	72	Map Index:	22575	EO Index:	16465	Element Last Seen:	2005-08-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-06
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31249 / -121.73734				Accuracy:	specific area	
UTM:	Zone-10 N4241241 E610387				Elevation (ft):	10	
PLSS:	T05N, R02E, Sec. 03, NE (M)				Acres:	56.5	
Location:	ALONG HASS SLOUGH, FROM DUCK SLOUGH NORTHWEST APPROXIMATELY 1 MILE.						
Detailed Location:	ALSO INTO THE SOUTH 1/2 OF PROJECTED SECTION 34.						
Ecological:	GROWING ON LEVEE BANKS AND ISLANDS. ASSOCIATED WITH SCHOENOPLECTUS ACUTUS, POLYGONUM PUNCTATUM, SCIRPUS CALIFORNICUS, RUBUS DISCOLOR, LYCOPUS AMERICANUS, QUERCUS LOBATA, ROSA CALIFORNICA, SALIX EXIGUA, SALIX LASIOLEPIS, ETC.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED IN 1988. 1 PATCH (8" X8") OBSERVED AT NORTHWESTERN EDGE OF SITE IN 2005.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	73	Map Index:	22577	EO Index:	16579	Element Last Seen:	2005-08-24
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-11-30
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.29046 / -121.72392				Accuracy:	specific area	
UTM:	Zone-10 N4238813 E611594				Elevation (ft):	10	
PLSS:	T05N, R02E, Sec. 11, SW (M)				Acres:	10.1	
Location:	AT THE SOUTHEAST TIP OF PETERS POCKET, AT CONFLUENCE OF CACHE SLOUGH AND HASS SLOUGH.						
Detailed Location:	2 CNDDB POLYGONS: (1) ON THE VERY SE CORNER OF PETERS POCKET, (2) THE ERODING BASE OF THE OUTBOARD SIDE OF A LEVEE, ON THE EASTERN EDGE OF CACHE SLOUGH/HASS SLOUGH.						
Ecological:	LEVEE EDGE, FOUND WITH SALIX LUCIDA, MENTHA ARVENSIS, AND ALNUS RHOMBIFOLIA.						
General:	1988 MAP DETAIL IS ONLY SOURCE OF INFORMATION FOR COLONY (1). 1 PATCH SEEN AT COLONY (2) IN 2005.						
Owner/Manager:	PVT						

Occurrence No.	83	Map Index:	23237	EO Index:	22585	Element Last Seen:	1992-07-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1992-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-01
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.15735 / -121.53594				Accuracy:	80 meters	
UTM:	Zone-10 N4224286 E628268				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 34, NW (M)				Acres:	0.0	
Location:	ISLAND IN NORTH MOKELUMNE RIVER, APPROX. 6 KM (3.6 MI) DUE EAST OF ISLETON.						
Detailed Location:	ALONG SOUTHWEST SHORELINE OF ERODING ISLAND.						
Ecological:	SOILS APPEAR TO BE PEAT AND CLAY. FOUND GROWING IN ASSOCIATION WITH TULES AND SEDGES AT THE WATERLINE.						
General:	APPROX. 100 PLANTS SEEN IN 1992. ACCORDING TO CLEMONS, EROSION APPEARS TO BE OCCURRING AT A RAPID RATE BASED UPON COMPARISON WITH AERIAL PHOTOGRAPHS OF THE SITE FROM 1940-1977.						
Owner/Manager:	PVT						

Occurrence No.	159	Map Index:	46370	EO Index:	46370	Element Last Seen:	2000-04-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2000-04-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2001-11-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20460 / -121.44355				Accuracy:	80 meters	
UTM:	Zone-10 N4229661 E636275				Elevation (ft):	5	
PLSS:	T04N, R05E, Sec. 09, SW (M)				Acres:	0.0	
Location:	NORTH SIDE OF BEAVER SLOUGH ALONG THE SOUTH BORDER OF NEW HOPE TRACT, 2 AIR MILES SOUTHWEST OF THORNTON.						
Detailed Location:	ON NORTH EDGE OF SLOUGH.						
Ecological:	NEAR THE BASE OF A DISTURBED LEVEE.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2000.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	219	Map Index:	80864	EO Index:	81807	Element Last Seen:	2009-09-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-29
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.22748 / -121.49638				Accuracy:	specific area	
UTM:	Zone-10 N4232124 E631607				Elevation (ft):	15	
PLSS:	T04N, R04E, Sec. 01, N (M)				Acres:	3.0	
Location:	NORTH MOKELUMNE RIVER BETWEEN DEAD HORSE ISLAND AND STATEN ISLAND.						
Detailed Location:	MAPPED BY CNDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	EXPOSED TIDAL MUD FLAT AND LOGS AT WATER'S EDGE WITH JUNCUS EFFUSUS. IN SHADE OF ALDER.						
General:	SPARSE TO DENSE PATCHES OBSERVED IN 2009.						
Owner/Manager:	TNC, UNKNOWN						

Occurrence No.	220	Map Index:	80865	EO Index:	81808	Element Last Seen:	2009-09-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-29
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17562 / -121.65640				Accuracy:	specific area	
UTM:	Zone-10 N4226153 E617684				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 21, SW (M)				Acres:	6.0	
Location:	ALONG THE SACRAMENTO RIVER BETWEEN GRAND ISLAND AND BRANNAN ISLAND.						
Detailed Location:	MAPPED BY CNDDB AS 4 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA IN THE SW 1/4 OF SECTION 21 AND THE SE 1/4 OF SECTION 20.						
Ecological:	EXPOSED TIDAL MUD FLAT WITH SCIRPUS, HYDROCOTYLE, POLYGONUM, AND JUNCUS EFFUSUS.						
General:	MANY DENSE TO SCATTERED PATCHES OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	221	Map Index:	80866	EO Index:	81809	Element Last Seen:	2009-09-17
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-29
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.20827 / -121.65608				Accuracy:	specific area	
UTM:	Zone-10 N4229777 E617659				Elevation (ft):	10	
PLSS:	T04N, R03E, Sec. 09, NW (M)				Acres:	1.0	
Location:	NEAR THE JUNCTION OF CACHE SLOUGH AND ELKHORN SLOUGH, SW SIDE OF RYER ISLAND.						
Detailed Location:	NEAR PUMPING STATION IN THE SW 1/4 OF THE NW 1/4 OF SECTION 9.						
Ecological:	BOAT WRECKAGE.						
General:	A DENSE 4 X 4 FT PATCH OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	222	Map Index:	80868	EO Index:	81810	Element Last Seen:	2009-09-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-29
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24639 / -121.67207				Accuracy:	specific area	
UTM:	Zone-10 N4233986 E616199				Elevation (ft):	10	
PLSS:	T05N, R03E, Sec. 29, SW (M)				Acres:	1.0	
Location:	BETWEEN THE SACRAMENTO RIVER DEEP WATER SHIP CHANNEL AND PROSPECT SLOUGH, ABOUT 0.8 AIR MILE NE OF LIBERTY ISLAND FERRY.						
Detailed Location:							
Ecological:	EXPOSED TIDAL MUD FLAT AND SAND BANK WITH CYPERUS ERAGROSTIS, JUNCUS EFFUSUS, J. XIPHIODES, AND PASPALUM.						
General:	DENSE PATCHES SCATTERED IN THIS AREA IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	223	Map Index:	80869	EO Index:	81811	Element Last Seen:	2009-09-17
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-11-29
Quad Summary:	Liberty Island (3812136), Clarksburg (3812145), Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.37324 / -121.63082				Accuracy:	specific area	
UTM:	Zone-10 N4248115 E619600				Elevation (ft):		
PLSS:	T06N, R03E, Sec. 10 (M)				Acres:	794.0	
Location:	ALONG THE SACRAMENTO DEEP WATER SHIP CHANNEL FROM PROSPECT ISLAND NORTH TO THE VICINITY OF GARCIA BEND.						
Detailed Location:	MAPPED AS 29 POLYGONS STRETCHING OVER 16 MILES ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	EXPOSED TIDAL MUD FLATS AND LOGS WITH HYDROCOTYLE, SCIRPUS, CALAMAGROSTIS, CYPERUS ERAGROSTIS, SYMPHYOTRICHUM LENTUM, JUNCUS XIPHIODES, AND PASPALUM. SOME AREAS ARE IN SHADE OF ALDERS AND RIPARIAN TREES.						
General:	MANY SCATTERED PATCHES OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	230	Map Index:	88417	EO Index:	81957	Element Last Seen:	2007-08-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2007-08-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-03-12
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24604 / -121.70249			Accuracy:	specific area		
UTM:	Zone-10 N4233911 E613538			Elevation (ft):	0		
PLSS:	T05N, R02E, Sec. 25, SE (M)			Acres:	1.0		
Location:	LINDSEY SLOUGH, APPROXIMATELY 0.4 MILE WEST OF WRIGHT CUT, SE END OF HASTINGS TRACT, NORTH OF RIO VISTA.						
Detailed Location:	MAPPED BY CNDDB AS 2 POLYGONS IN THE NW 1/4 OF THE SE 1/4 OF SECTION 25. ON A MID-CHANNEL ISLAND WITHIN SLOUGH, JUST WEST OF HASTINGS ISLAND ROAD BRIDGE AND ON THE SOUTH SHORE OF LINDSEY SLOUGH JUST EAST OF HASTINGS ISLAND ROAD BRIDGE.						
Ecological:	HARD CLAY BENCHES WITH A LOT OF HERBS. ASSOCIATES INCLUDE CORNUS SERICEA, RUBUS DISCOLOR, SALIX EXIGUA, SALIX LASIOLEPIS, SCHOENOPLECTUS ACUTUS, SALIX BABYLONICA, ALNUS RHOMBIFOLIA, PHRAGMITES AUSTRALIS, CAREX BARBARAE, ETC.						
General:	OBSERVED IN NORTHERN POLYGON IN 2005 DURING VEGETATION SURVEYS. OBSERVED IN SOUTHERN POLYGON IN 2007.						
Owner/Manager:	UNKNOWN						

Occurrence No.	231	Map Index:	80964	EO Index:	81970	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-06
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.25973 / -121.73982			Accuracy:	80 meters		
UTM:	Zone-10 N4235385 E610250			Elevation (ft):	2		
PLSS:	T05N, R02E, Sec. 22, SE (M)			Acres:	0.0		
Location:	LINDSEY SLOUGH; APPROXIMATELY 1.94 MILES EAST OF HASTINGS CUT, SOUTH END OF HASTINGS TRACT.						
Detailed Location:	IN-CHANNEL ISLAND.						
Ecological:	TREE-DOMINATED ISLAND IN LINDSEY SLOUGH. NATURAL REMNANT VEGETATION WITH EVIDENT BLACK-CROWNED NIGHT HERON PERCHES. ASSOCIATES INCLUDE SALIX LASIOLEPIS, CORNUS SERICEA, ALNUS RHOMBIFOLIA, ROSA CALIFORNICA, VITIS CALIFORNICA, ETC.						
General:	OBSERVED IN 2005 DURING VEGETATION SURVEYS.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	232	Map Index:	81157	EO Index:	82154	Element Last Seen:	2005-08-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-22
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.30049 / -121.72915				Accuracy:	80 meters	
UTM:	Zone-10 N4239920 E611122				Elevation (ft):	5	
PLSS:	T05N, R02E, Sec. 02, SE (M)				Acres:	0.0	
Location:	HASS SLOUGH; JUST NORTH OF SYCAMORE SLOUGH BETWEEN MOORE TRACT AND PETERS POCKET.						
Detailed Location:							
Ecological:	ASSOCIATED WITH ALNUS RHOMBIFOLIA, QUERCUS LOBATA, RUBUS DISCOLOR, ROSA CALIFORNICA, SALIX LASIOLEPIS, CORNUS SERICEA, CAREX BARBARAE, SALIX EXIGUA, CEPHALANTHUS OCCIDENTALIS, FRAXINUS LATIFOLIA, LATHYRUS JEPSONII SSP. JEPSONII, ETC.						
General:	OBSERVED IN 2005 DURING VEGETATION SURVEYS.						
Owner/Manager:	UNKNOWN						

Centromadia parryi ssp. parryi

Element Code: PDAST4R0P2

pappose tarplant

Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G3T2
	State:	None		State:	S2
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive			
Habitat:	General:	CHAPARRAL, COASTAL PRAIRIE, MEADOWS AND SEEPS, COASTAL SALT MARSH, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	VERNALLY MESIC, OFTEN ALKALINE SITES. 1-500 M.			

Occurrence No.	36	Map Index:	A9123	EO Index:	110957	Element Last Seen:	1972-08-08
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1972-08-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-04-25
Quad Summary:	Courtland (3812135), Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.37158 / -121.53372				Accuracy:	nonspecific area	
UTM:	Zone-10 N4248061 E628087				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 15, N (M)				Acres:	78.0	
Location:	SOUTH EDGE OF COUNTY ROAD 142, MERRITT ISLAND.						
Detailed Location:	MAPPED AS BEST GUESS AROUND THE SOUTH SIDE OF COUNTY ROAD 142.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1972 QUICK COLLECTION.						
Owner/Manager:	UNKNOWN						

Symphotrichum lentum

Element Code: PDASTE8470

Suisun Marsh aster

Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G2
	State:	None		State:	S2
	Other:	Rare Plant Rank - 1B.2, SB_RSABG-Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture			
Habitat:	General:	MARSHES AND SWAMPS (BRACKISH AND FRESHWATER).			
	Micro:	MOST OFTEN SEEN ALONG SLOUGHS WITH PHRAGMITES, SCIRPUS, BLACKBERRY, TYPHA, ETC. 0-15 M.			



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Occurrence No.	29	Map Index:	82578	EO Index:	14101	Element Last Seen:	2009-09-18
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-18
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16345 / -121.67196				Accuracy:	specific area	
UTM:	Zone-10 N4224784 E616340				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 29, NW (M)				Acres:	1.0	
Location:	BRANNAN ISLAND, 0.6 MILE NORTH OF RIO VISTA BRIDGE ALONG STATE ROUTE 160.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	GROWING ON SEDIMENTS AND FINES DEPOSITED ON SUBSIDED RIPRAP. ASSOCIATES INCLUDE SCIRPUS CALIFORNICUS, VERBENA BONARIENSIS, LILAEOPSIS MASONII, JUNCUS, MIMULUS, AND POLYGONUM.						
General:	30 PLANTS SEEN IN 1990 1/2 MI NORTH OF RIO VISTA BRIDGE ON SR 160. 3 PLANTS OBSERVED IN 2009.						
Owner/Manager:	PVT, BRANNON-ANDRUS LEVEE DIST						

Occurrence No.	50	Map Index:	10855	EO Index:	7762	Element Last Seen:	1990-07-26
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1990-07-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1993-06-02
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.13517 / -121.68693				Accuracy:	80 meters	
UTM:	Zone-10 N4221627 E615074				Elevation (ft):	0	
PLSS:	T03N, R03E, Sec. 06, NW (M)				Acres:	0.0	
Location:	EAST BANK OF SACRAMENTO RIVER, 1.5 MILES SOUTH OF THE RIO VISTA BRIDGE.						
Detailed Location:	SANDY BEACH 1.5 MILES SOUTH OF JUNCTION OF HWY 160 AND HWY 12 ON THE WEST SHORE OF BRANNAN ISLAND.						
Ecological:	GROWING AMONG LITTORAL VEGETATION IN ASSOCIATION WITH LILAEOPSIS MASONII, LIMOSELLA SUBULATA, MIMULUS, SCIRPUS, JUNCUS, CYPERUS, POLYGONUM, PLANTAGO, CYNODON, HELENIUM, AND PASPALUM. NEAR SHORE ASSOCIATES INCLUDE ARUNDO, SALIX, AND RUBUS.						
General:	OBSERVED IN 1990. AREA BETWEEN THIS SITE AND BRIDGE UNSURVEYED, ADDITIONAL PLANTS MAY OCCUR.						
Owner/Manager:	PVT						



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Occurrence No.	66	Map Index:	37577	EO Index:	32579	Element Last Seen:	2002-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2002-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-04-01
Quad Summary:	Bouldin Island (3812115), Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.12717 / -121.57783				Accuracy:	specific area	
UTM:	Zone-10 N4220880 E624649				Elevation (ft):	5	
PLSS:	T03N, R04E, Sec. 07, NE (M)				Acres:	44.8	
Location:	VICINITY OF CONFLUENCE OF MOKELUMNE RIVER AND GEORGIANA SLOUGH.						
Detailed Location:	MAPPED AS FOUR POLYGONS: NORTHERN POLYGON FROM HOL99F0005 (1999), TWO CENTRAL POLYGONS FROM HUD02F0022 (2002), AND SOUTHERN POLYGON FROM PER94U0002 (1994). PLANTS ON SOUTHERN TYLER ISLAND AND NORTHWESTERN BOULDIN ISLAND.						
Ecological:	OUTER LEVEE SLOPE AND INTERTIDAL ZONE.						
General:	OBSERVED IN 1999 AND 2002. EO #127 LUMPED HERE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	125	Map Index:	46574	EO Index:	46574	Element Last Seen:	2000-09-14
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2000-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2001-11-19
Quad Summary:	Isleton (3812125)						
County Summary:	San Joaquin						
Lat/Long:	38.15259 / -121.50307				Accuracy:	80 meters	
UTM:	Zone-10 N4223804 E631157				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 36, NW (M)				Acres:	0.0	
Location:	WEST SIDE OF BRACK TRACT, EAST SIDE OF THE MOKELUMNE RIVER AT WOODBRIDGE ROAD.						
Detailed Location:	NEAR PUMPING STATION AT MILE 12.						
Ecological:	ELEVATED ABOVE WATER ON WOOD PILINGS.						
General:	MORE THAN 9 PLANTS OBSERVED IN 2000.						
Owner/Manager:	UNKNOWN						

Occurrence No.	126	Map Index:	46575	EO Index:	46575	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-18
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.24559 / -121.50848				Accuracy:	specific area	
UTM:	Zone-10 N4234116 E630516				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 26, SE (M)				Acres:	2.0	
Location:	DELTA CROSS CHANNEL, BETWEEN LOCKE AND WALNUT GROVE.						
Detailed Location:	BOTH SIDES OF THE CHANNEL. MAPPED BY CNDDB AS 2 POLYGONS BASED ON A 2000 HOLLEY & PHILIPP MAP AND 2010 DWR DIGITAL DATA. IN THE SW 1/4 OF THE SW 1/4 OF SECTION 25 AND THE SE 1/4 OF THE SE 1/4 OF SECTION 26.						
Ecological:	RIPARIAN AREA AND AT BASE OF LEVEE.						
General:	MORE THAN 30 PLANTS OBSERVED IN THE WESTERN POLYGON IN 2000. 1 PLANT OBSERVED IN THE EASTERN POLYGON IN 2009.						
Owner/Manager:	STATE						



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Occurrence No.	132	Map Index:	60732	EO Index:	60768	Element Last Seen:	2009-09-14
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.22360 / -121.50643				Accuracy:	specific area	
UTM:	Zone-10 N4231679 E630735				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 02, NE (M)				Acres:	1.0	
Location:	NEAR NORTH TIP OF STATEN ISLAND ALONG NORTH MOKELUMNE RIVER, ON NE SIDE OF BRIDGE BETWEEN STATEN AND TYLER ISLANDS.						
Detailed Location:	PLANTS WERE GROWING ON PILINGS IN NORTH MOKELUMNE RIVER NEAR BRIDGE. MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA IN THE SE 1/4 OF THE NE 1/4 OF SECTION 2.						
Ecological:	GROWING ON EXPOSED PILINGS WITH A LITTLE PEAT ACCUMULATED ON EACH. ASSOCIATED WITH RUMEX, PASPALUM, AND VERBENA.						
General:	6 PLANTS SEEN IN 2003. 3 PLANTS OBSERVED IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	172	Map Index:	82599	EO Index:	83588	Element Last Seen:	2009-08-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20420 / -121.42426				Accuracy:	specific area	
UTM:	Zone-10 N4229646 E637965				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 10, SW (M)				Acres:	1.0	
Location:	ALONG THE NORTH BANK OF BEAVER SLOUGH, APPROXIMATELY HALF A MILE WEST OF INTERSTATE-5, SOUTH OF THORNTON.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SW 1/4 OF THE SW 1/4 OF SECTION 10.						
Ecological:	TIDAL RIPARIAN WITH RUBUS, SALIX EXIGUA, AND PASPALUM.						
General:	APPROXIMATELY 5 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	173	Map Index:	82600	EO Index:	83589	Element Last Seen:	2009-09-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14651 / -121.42314				Accuracy:	specific area	
UTM:	Zone-10 N4223246 E638171				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 34, SW (M)				Acres:	2.0	
Location:	HALF MILE EAST OF CONFLUENCE OF SYCAMORE SLOUGH AND UPLAND CANAL, ~1.2 MILES WEST OF JUNCTION OF I-5 AND W TURNER RD.						
Detailed Location:	MAPPED BY CNDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SOUTH HALF OF THE SW 1/4 OF SECTION 34.						
Ecological:	STEEP BANK.						
General:	POPULATIONS OBSERVED IN 2009 FROM WESTERN TO EASTERN POLYGONS WERE 4, 1, AND 2 PLANTS.						
Owner/Manager:	UNKNOWN						
Occurrence No.	174	Map Index:	82601	EO Index:	83590	Element Last Seen:	2008-01-21
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2008-01-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-12-28
Quad Summary:	Isleton (3812125), Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.16614 / -121.62339				Accuracy:	nonspecific area	
UTM:	Zone-10 N4225145 E620592				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 26, W (M)				Acres:	41.0	
Location:	LONG ISLAND AND ALONG HIGHWAY 160 JUST WEST OF ISLETON.						
Detailed Location:	2 POLYGONS MAPPED BY CNDDB. SE POLYGON IS SPECIFIC, BASED ON 2008 BRONNY COORDINATES. NW POLYGON IS NON-SPECIFIC, BASED ON A 1972 NEILSON COLLECTION FROM "LONG ISLAND, SACRAMENTO RIVER, JUST WNW OF ISLETON."						
Ecological:	ON MOUNDS WHICH HAVE BEEN ERODED AND SCoured BY CONTINUOUS WAVE ATTENUATION. ASSOCIATED WITH JUNCUS EFFUSUS.						
General:	SEEN ON LONG ISLAND IN 1972. APPROXIMATELY 3 ROBUST CLUMPS OBSERVED IN SE POLYGON IN 2008.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	175	Map Index:	82602	EO Index:	83591	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24753 / -121.70457				Accuracy:	80 meters	
UTM:	Zone-10 N4234073 E613353				Elevation (ft):	0	
PLSS:	T05N, R02E, Sec. 25 (M)				Acres:	0.0	
Location:	LINDSEY SLOUGH, APPROXIMATELY 0.5 MILE WEST OF WRIGHT CUT, NORTH OF RIO VISTA.						
Detailed Location:	NW END OF IN-CHANNEL ISLAND. NEAR THE CENTER OF SECTION 25.						
Ecological:	ASSOCIATED WITH CORNUS SERICEA, SCIRPUS CALIFORNICUS, RUBUS DISCOLOR, URTICA, PHRAGMITES AUSTRALIS, HYDROCOTYLE VERTICILLATA, JUNCUS EFFUSUS, PASPALUM DILATATUM, AND POLYGONUM PUNCTATUM.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	176	Map Index:	82603	EO Index:	83592	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24435 / -121.69525				Accuracy:	80 meters	
UTM:	Zone-10 N4233731 E614173				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 30, SW (M)				Acres:	0.0	
Location:	LINDSEY SLOUGH BETWEEN WRIGHT CUT AND CACHE SLOUGH, SOUTH OF LITTLE HASTINGS TRACT, NORTH OF RIO VISTA.						
Detailed Location:	IN THE SW 1/4 OF THE SW 1/4 OF SECTION 30.						
Ecological:	IN-CHANNEL ISLAND WITH SALIX LASIOLEPIS, CORNUS SERICEA, CEPHALANTHUS OCCIDENTALIS, ALNUS RHOMBIFOLIA, CONVULVULUS, CYPERUS ERAGROSTIS, EICHHORNIA CRASSIPES, HELENIUM PUBERULUM, HYDROCOTYLE VERTICILLATA, JUNCUS EFFUSUS, LATHYRUS, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	177	Map Index:	82604	EO Index:	83593	Element Last Seen:	2009-09-04
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24819 / -121.65775				Accuracy:	specific area	
UTM:	Zone-10 N4234204 E617449				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 28, SW (M)				Acres:	1.0	
Location:	MINER SLOUGH, APPROXIMATELY 1.5 MILES FROM ITS CONFLUENCE WITH CACHE SLOUGH, SE SIDE OF PROSPECT ISLAND.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE NW 1/4 OF THE SW 1/4 OF SECTION 28.						
Ecological:	LOG.						
General:	2 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	178	Map Index:	82605	EO Index:	83599	Element Last Seen:	2009-10-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-10-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.22371 / -121.67259				Accuracy:	specific area	
UTM:	Zone-10 N4231470 E616189				Elevation (ft):	10	
PLSS:	T04N, R03E, Sec. 05 (M)				Acres:	66.0	
Location:	ALONG CACHE SLOUGH, MINER SLOUGH, AND THE SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, NORTH OF RIO VISTA.						
Detailed Location:	MAPPED BY CNDDDB AS 11 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SW 1/4 OF SECTION 29 SOUTH THROUGH SECTIONS 32 (WEST 1/2), 5 (WEST 1/2), 8 (NE 1/4) AND ENDING IN THE NW 1/4 OF SECTION 9.						
Ecological:	RIPARIAN MARSHES, TIDAL MARSHES, AND LEVEE RIPRAP. ASSOCIATED WITH SCIRPUS, TYPHA, SALIX LASIOLEPIS, RUBUS DISCOLOR, JUNCUS EFFUSUS, J. XIPHIODES, BIDENS, CYPERUS ERAGROSTIS, LYCOPUS, AND VERBENA.						
General:	TOTAL OF 1091 PLANTS OBSERVED IN 2009.						
Owner/Manager:	DFG, UNKNOWN						



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Occurrence No.	179	Map Index:	82606	EO Index:	83600	Element Last Seen:	2009-10-02
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-10-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.19340 / -121.65908				Accuracy:	specific area	
UTM:	Zone-10 N4228123 E617421				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 16 (M)				Acres:	34.0	
Location:	CACHE SLOUGH BETWEEN ELKHORN SLOUGH AND STEAMBOAT SLOUGH, NNE OF RIO VISTA.						
Detailed Location:	MAPPED BY CNDDDB AS 5 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	LEVEE RIPRAP AND EXPOSED PILINGS WITH PASPALUM, VERBENA, BIDENS, JUNCUS XIPHIODES, AND CYPERUS ERAGROSTIS.						
General:	TOTAL OF 424 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	180	Map Index:	82611	EO Index:	83601	Element Last Seen:	2009-09-17
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.18622 / -121.64732				Accuracy:	specific area	
UTM:	Zone-10 N4227341 E618463				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 16, S (M)				Acres:	28.0	
Location:	STEAMBOAT SLOUGH, JUST EAST OF ITS JUNCTION WITH CACHE SLOUGH, NE OF RIO VISTA.						
Detailed Location:	NORTH AND SOUTH SHORE OF STEAMBOAT SLOUGH. MAPPED BY CNDDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SOUTH HALF OF SECTION 16 EXTENDING EAST INTO THE SW 1/4 OF SECTION 15 AND EXTENDING SOUTH INTO THE NORTH HALF OF SECTION 21.						
Ecological:	RIPRAP WITH RIPARIAN.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	181	Map Index:	82620	EO Index:	83602	Element Last Seen:	2008-01-21
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2008-01-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.19475 / -121.63204			Accuracy:	specific area		
UTM:	Zone-10 N4228307 E619787			Elevation (ft):	10		
PLSS:	T04N, R03E, Sec. 15, NE (M)			Acres:	3.0		
Location:	STEAMBOAT SLOUGH, ALONG RYER ROAD EAST APPROXIMATELY 1.8 ROAD MILES EAST OF RYER ISLAND FERRY, NE OF RIO VISTA.						
Detailed Location:	IN THE SW 1/4 OF THE NE 1/4 OF SECTION 15.						
Ecological:	ALONG TOE OF LEVEE.						
General:	APPROXIMATELY 50 PLANTS OBSERVED IN 2008. THESE WERE DISCONTINUOUS COLONIES OF PLANTS ALONG A 400 FOOT STRETCH OF LEVEE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	182	Map Index:	82621	EO Index:	83603	Element Last Seen:	2009-09-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17455 / -121.65133			Accuracy:	specific area		
UTM:	Zone-10 N4226042 E618130			Elevation (ft):	10		
PLSS:	T04N, R03E, Sec. 21, S (M)			Acres:	24.0		
Location:	SACRAMENTO RIVER WEST OF IDA ISLAND, BETWEEN GRAND ISLAND AND BRANNAN ISLAND, BETWEEN RIO VISTA AND ISLETON.						
Detailed Location:	BOTH SIDES OF THE SACRAMENTO RIVER. MAPPED BY CNDDDB AS 9 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	LEVEE RIPRAP, PILINGS, TIDAL MUD BANKS, RIPARIAN MARSHES, AND LOGS.						
General:	TOTAL OF 439 PLANTS/CLUMPS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	183	Map Index:	82622	EO Index:	83604	Element Last Seen:	2009-09-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.16513 / -121.68151				Accuracy:	specific area	
UTM:	Zone-10 N4224958 E615501				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 30, NE (M)				Acres:	6.0	
Location:	NW BANK OF THE SACRAMENTO RIVER APPROXIMATELY 0.3 TO 0.7 MILE NW OF THE RIO VISTA BRIDGE.						
Detailed Location:	MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	LEVEE RIPRAP ABOVE HIGH WATER MARK WITH POLYGONUM, ARUNDO, PASPALUM, BIDENS, JUNCUS XIPHIODES, AND CYPERUS ERAGROSTIS.						
General:	IN 2009, NORTHERN POLYGON HAD 3 PLANTS AND SOUTHERN POLYGON HAD 100 WIDELY SCATTERED PLANTS.						
Owner/Manager:	UNKNOWN						

Occurrence No.	184	Map Index:	82623	EO Index:	83605	Element Last Seen:	2009-09-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.15159 / -121.69079				Accuracy:	specific area	
UTM:	Zone-10 N4223445 E614710				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 31, W (M)				Acres:	33.0	
Location:	NW BANK OF THE SACRAMENTO RIVER, FROM JUST SW TO APPROXIMATELY 1.25 MILES SW OF THE RIO VISTA BRIDGE, NEAR RIO VISTA.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE SW 1/4 OF SECTION 30 AND THE WEST HALF OF SECTION 31.						
Ecological:	RIPRAP AND PILINGS.						
General:	50 PLANTS OBSERVED SCATTERED ALONG BANK IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	185	Map Index:	82624	EO Index:	83606	Element Last Seen:	2009-09-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.15161 / -121.68226				Accuracy:	specific area	
UTM:	Zone-10 N4223457 E615457				Elevation (ft):	5	
PLSS:	T04N, R03E, Sec. 31, NE (M)				Acres:	1.0	
Location:	SE BANK OF THE SACRAMENTO RIVER APPROXIMATELY 0.4 MILE SW OF THE RIO VISTA BRIDGE, NEAR RIO VISTA.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE NW 1/4 OF THE NE 1/4 OF SECTION 31.						
Ecological:	RIPRAP AND SHORELINE.						
General:	5 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	186	Map Index:	82625	EO Index:	83607	Element Last Seen:	2005-09-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-09-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33824 / -121.64566				Accuracy:	80 meters	
UTM:	Zone-10 N4244212 E618361				Elevation (ft):	0	
PLSS:	T06N, R03E, Sec. 28, NE (M)				Acres:	0.0	
Location:	SACRAMENTO RIVER DEEP WATER SHIP CHANNEL BETWEEN COURTLAND RD AND ROAD 159, ~1.7 MILES N OF THE YOLO/SOLANO COUNTY LINE.						
Detailed Location:	EAST BANK. IN THE SW 1/4 OF THE NE 1/4 OF SECTION 28.						
Ecological:	ASSOCIATED WITH POPULUS FREMONTII, RUBUS DISCOLOR, SALIX LASIOLEPIS, S. EXIGUA, S. GOODDINGII, ALNUS RHOMBIFOLIA, CORTADERIA SELLOANA, AND FOENICULUM VULGARE.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	187	Map Index:	82626	EO Index:	83608	Element Last Seen:	2009-09-17
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.32762 / -121.64795				Accuracy:	specific area	
UTM:	Zone-10 N4243031 E618178				Elevation (ft):	0	
PLSS:	T06N, R03E, Sec. 33, NE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, ~0.6 MILE SOUTH OF ROAD 159, ~1 MILE NORTH OF THE YOLO / SOLANO COUNTY LINE.						
Detailed Location:	EAST BANK. MAPPED BY CNDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE NW 1/4 OF THE NE 1/4 OF SECTION 33.						
Ecological:	TIDAL RIPARIAN IN SHADE OF ALDERS.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	188	Map Index:	82627	EO Index:	83609	Element Last Seen:	2005-09-19
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-09-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.31778 / -121.65417				Accuracy:	80 meters	
UTM:	Zone-10 N4241931 E617650				Elevation (ft):	10	
PLSS:	T06N, R03E, Sec. 33, SW (M)				Acres:	0.0	
Location:	IN TOE DRAINAGE W OF SACRAMENTO DEEP WATER SHIP CHANNEL, ~0.25 MI N OF YOLO / SOLANO COUNTY LINE, S END OF YOLO BYPASS.						
Detailed Location:	EAST BANK OF TOE DRAINAGE. IN THE SW 1/4 OF THE SW 1/4 OF SECTION 33.						
Ecological:	ASSOCIATED WITH RUBUS DISCOLOR, SALIX LASIOLEPIS, S. GOODDINGII, ALNUS RHOMBIFOLIA, CAREX BARBARAE, ROSA CALIFORNICA, BROMUS DIANDRUS, ACER NEGUNDO, FRAXINUS LATIFOLIA, JUGLANS CALIFORNICA, LEPIDIUM, LYCOPUS AMERICANUS, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						
Occurrence No.	189	Map Index:	82628	EO Index:	83611	Element Last Seen:	2009-09-17
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.28064 / -121.65913				Accuracy:	specific area	
UTM:	Zone-10 N4237803 E617276				Elevation (ft):	10	
PLSS:	T05N, R03E, Sec. 16 (M)				Acres:	98.0	
Location:	SACRAMENTO DEEP WATER SHIP CHANNEL, APPROX 2.2 TO 4.5 MILES NNE OF JUNCTION WITH CACHE SLOUGH, SOUTH END YOLO BYPASS.						
Detailed Location:	BOTH SIDES OF CHANNEL. MAPPED BY CNDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. IN THE WEST 1/2 OF SECTION 9 SOUTH THROUGH THE SE 1/4 OF SECTION 8, NW 1/4 OF SECTION 16, EAST 1/2 OF SECTION 17, AND THE NE 1/4 OF SECTION 20.						
Ecological:	RIPARIAN AND TIDAL MARSHES. ASSOCIATED WITH RUBUS DISCOLOR, SALIX GOODDINGII, S. EXIGUA, S. LASIOLEPIS, ALNUS RHOMBIFOLIA, CAREX BARBARAE, JUGLANS CALIFORNICA, LEPIDIUM LATIFOLIUM, ROSA CALIFORNICA, ACER NEGUNDO, ALNUS RHOMBIFOLIA, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY. 300 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	190	Map Index:	82629	EO Index:	83612	Element Last Seen:	2009-09-17
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2009-09-17
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.26166 / -121.66414				Accuracy:	specific area	
UTM:	Zone-10 N4235691 E616869				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 20, SE (M)				Acres:	1.0	
Location:	SACRAMENTO DEEP WATER SHIP CHANNEL, APPROXIMATELY 1.9 MILES NNE OF JUNCTION WITH CACHE SLOUGH, SOUTH END OF YOLO BYPASS.						
Detailed Location:	WESTERN SHORE OF PROSPECT ISLAND, EASTERN SHORE OF CHANNEL. MAPPED BY CNDDDB ACCORDING TO 2010 DWR DIGITAL DATA. IN THE NORTH HALF OF THE SE 1/4 OF SECTION 20.						
Ecological:	RIPRAP.						
General:	FEW SCATTERED PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	191	Map Index:	82630	EO Index:	83614	Element Last Seen:	2005-08-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31897 / -121.74497				Accuracy:	80 meters	
UTM:	Zone-10 N4241951 E609710				Elevation (ft):	0	
PLSS:	T06N, R02E, Sec. 34, SW (M)				Acres:	0.0	
Location:	HASS SLOUGH, APPROXIMATELY 1.1 MILES NW OF DUCK SLOUGH, NE OF DOZIER AND EAST OF VACAVILLE.						
Detailed Location:	IN THE NW 1/4 OF THE SW 1/4 OF SECTION 34.						
Ecological:	ASSOCIATED WITH SCHOENOPLECTUS ACUTUS, POLYGONUM PUNCTATUM, SCIRPUS CALIFORNICUS, RUBUS DISCOLOR, LYCOPUS AMERICANUS, QUERCUS LOBATA, ROSA CALIFORNICA, SALIX EXIGUA, S. LASIOLEPIS, ALNUS RHOMBIFOLIA, CEPHALANTHUS OCCIDENTALIS, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	192	Map Index:	82631	EO Index:	83615	Element Last Seen:	2005-08-24
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31500 / -121.74016			Accuracy:	80 meters		
UTM:	Zone-10 N4241516 E610137			Elevation (ft):	4		
PLSS:	T06N, R02E, Sec. 34, SW (M)			Acres:	0.0		
Location:	HASS SLOUGH, APPROXIMATELY 0.7 MILE NORTH OF DUCK SLOUGH, NE OF DOZIER AND EAST OF VACAVILLE.						
Detailed Location:	IN THE SE 1/4 OF THE SW 1/4 OF SECTION 34.						
Ecological:	ASSOCIATED WITH CORNUS SERICEA, ROSA CALIFORNICA, QUERCUS LOBATA, TOXICODENDRON DIVERSILOBUM, LYCOPUS AMERICANUS, ALNUS RHOMBIFOLIA, EUTHAMIA OCCIDENTALIS, RUBUS DISCOLOR, MENTHA ARVENSIS, APOCYNUM CANNABINUM, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	193	Map Index:	82632	EO Index:	83616	Element Last Seen:	2008-01-21
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2008-01-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.26992 / -121.70520			Accuracy:	specific area		
UTM:	Zone-10 N4236557 E613264			Elevation (ft):	0		
PLSS:	T05N, R02E, Sec. 13, SW (M)			Acres:	1.0		
Location:	EAST SHORE OF HASTINGS TRACT AND WEST SHORE OF CACHE SLOUGH, APPROXIMATELY 0.6 AIR MILE NW OF FRENCH ISLAND.						
Detailed Location:	IN THE SE 1/4 OF THE SW 1/4 OF SECTION 13.						
Ecological:	ON MOUNDS WHICH HAVE BEEN ERODED AND SCoured BY CONTINUOUS WAVE ATTENUATION. ASSOCIATED WITH JUNCUS EFFUSUS.						
General:	3 ROBUST CLUMPS OBSERVED IN 2008.						
Owner/Manager:	PVT						



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Occurrence No.	194	Map Index:	80964	EO Index:	83617	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.25973 / -121.73982				Accuracy:	80 meters	
UTM:	Zone-10 N4235385 E610250				Elevation (ft):	2	
PLSS:	T05N, R02E, Sec. 22, SE (M)				Acres:	0.0	
Location:	LINDSEY SLOUGH; APPROXIMATELY 2 MILES EAST OF HASTINGS CUT, SOUTH END OF HASTINGS TRACT, EAST OF FAIRFIELD.						
Detailed Location:	IN THE NW 1/4 OF THE SE 1/4 OF SECTION 22.						
Ecological:	IN-CHANNEL ISLAND. ASSOCIATED WITH SALIX LASIOLEPIS, CORNUS SERICEA, ALNUS RHOMBIFOLIA, ROSA CALIFORNICA, VITIS CALIFORNICA, ACER NEGUNDO, FICUS, HOITA MACROSTACHYA, SAMBUCUS MEXICANA, CEPHALANTHUS OCCIDENTALIS, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED DURING A 2005 VEGETATION SURVEY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	198	Map Index:	82636	EO Index:	83642	Element Last Seen:	2009-09-04
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-23
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.17753 / -121.67048				Accuracy:	specific area	
UTM:	Zone-10 N4226348 E616448				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 20 (M)				Acres:	13.0	
Location:	NW BANK OF THE SACRAMENTO RIVER ACROSS FROM STEAMBOAT SLOUGH AND GRAND ISLAND, NE OF RIO VISTA.						
Detailed Location:	NEAR THE CONFLUENCE OF STEAMBOAT SLOUGH AND CACHE SLOUGH WITH THE SACRAMENTO RIVER. MAPPED BY CNDDB AS 3 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	LEVEE RIPRAP ABOVE HIGH WATER MARK WITH BIDENS, JUNCUS XIPHIODES, AND CYPERUS ERAGROSTIS.						
General:	310 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Plagiobothrys hystriculus

Element Code: PDBOR0V0H0

bearded popcornflower

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2

State: None

State: S2

Other: Rare Plant Rank - 1B.1

Habitat: **General:** VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND.

Micro: WET SITES. 1-275 M.

Occurrence No. 24 **Map Index:** 83524 **EO Index:** 84548 **Element Last Seen:** 2009-04-14

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2009-04-14

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2020-05-08

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.43312 / -121.67004 **Accuracy:** 80 meters

UTM: Zone-10 N4254710 E616078 **Elevation (ft):** 16

PLSS: T07N, R03E, Sec. 20, SW (M) **Acres:** 0.0

Location: SOUTH END OF DFG TULE RANCH, APPROXIMATELY 2.4 AIR MILES SSW OF SAXON, YOLO BYPASS WILDLIFE AREA, SW OF SACRAMENTO.

Detailed Location: MAPPED ACCORDING TO 2009 WITHAM COORDINATES, IN THE SE 1/4 OF THE SW 1/4 OF SECTION 20.

Ecological: VERNAL POOL GRASSLAND MOSAIC PRIMARILY ON CAPAY-CLEAR LAKE SOIL ASSOCIATION WITH SOME INCLUSION OF PESCADERO CLAY. MESIC SWALES ASSOCIATED WITH TRIFOLIUM BARBIGERUM AND LASTHENIA GLABRATA.

General: SITE IS BASED ON A 2003 & 2009 WITHAM COLLECTIONS; DESCRIBED AS "COMMON" IN 2009.

Owner/Manager: DFG-YOLO BYPASS WA

Lepidium latipes var. heckardii

Element Code: PDBRA1M0K1

Heckard's pepper-grass

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G4T1

State: None

State: S1

Other: Rare Plant Rank - 1B.2

Habitat: **General:** VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

Micro: GRASSLAND, AND SOMETIMES VERNAL POOL EDGES. ALKALINE SOILS. 1-30 M.

Occurrence No. 7 **Map Index:** 28792 **EO Index:** 30160 **Element Last Seen:** 1891-07-05

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1891-07-05

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2010-12-01

Quad Summary: Liberty Island (3812136), Dozier (3812137)

County Summary: Solano

Lat/Long: 38.31118 / -121.73559 **Accuracy:** nonspecific area

UTM: Zone-10 N4241098 E610543 **Elevation (ft):** 10

PLSS: T05N, R02E, Sec. 03 (M) **Acres:** 286.6

Location: HAAS SLOUGH.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS ALONG THE FULL EXTENT OF HAAS SLOUGH.

Ecological: IN LOW PLACES RANK WITH MARSH GRASSES.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1891 JEPSON COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



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Occurrence No.	10	Map Index:	54738	EO Index:	54738	Element Last Seen:	2003-04-XX
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-12-16
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45912 / -121.67397				Accuracy:	specific area	
UTM:	Zone-10 N4257590 E615693				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	1.0	
Location:	TULE RANCH; JUST SE OF THE JUNCTION OF COUNTY ROAD 38 AND COUNTY ROAD 105.						
Detailed Location:	MAPPED AS TWO COLONIES IN THE FAR NW CORNER OF THE NW 1/4 OF SECTION 17.						
Ecological:	MESIC GRASSLAND DOMINATED BY LASTHENIA GLABRATA AND LOLIUM MULTIFLORUM. ASSOCIATES INCLUDE LAYIA CHRYSANTHEMOIDES, BLENNOSPERMA NANUM AND VARIOUS OTHERS. OCCASIONALLY OCCURRING WITH VAR. LATIPES.						
General:	>1000 OBSERVED BETWEEN THIS SITE AND OCCURRENCE #11 IN 2003.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	11	Map Index:	54739	EO Index:	54739	Element Last Seen:	2009-04-18
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-04-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-07-29
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43728 / -121.67065				Accuracy:	specific area	
UTM:	Zone-10 N4255171 E616018				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20, W (M)				Acres:	7.0	
Location:	TULE RANCH; APPROXIMATELY 1.5 AIR MILES SSE OF THE JUNCTION OF COUNTY ROAD 38 AND COUNTY ROAD 105, 8 MILES SE OF DAVIS.						
Detailed Location:	VICINITY OF TWO LARGE PLAYA POOLS. SEVEN COLONIES LOCATED PRIMARILY IN THE CENTER OF THE WESTERN HALF OF SECTION 20.						
Ecological:	GRASSLAND, VERNAL POOL COMPLEX. CAPAY-CLEAR LAKE SOIL ASSOCIATION. ASSOCIATED WITH LASTHENIA FREMONTII, L. GLABERRIMA, L. GLABRATA, FRANKENIA SALINA, PHALARIS LEMMONII, LUPINUS BICOLOR, MEDICAGO POLYMORPHA, AND LOLIUM MULTIFLORUM.						
General:	>1000 OBSERVED BETWEEN THIS SITE AND OCCURRENCE #10 IN 2003. >500 PLANTS OBSERVED IN A PORTION OF THE SITE IN 2007. A 2009 COLLECTION BY SOLOMESHCH IS ALSO ATTRIBUTED TO THIS OCCURRENCE. LEPIDIUM LATIPES VAR. LATIPES IS ALSO PRESENT.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	12	Map Index:	80988	EO Index:	81938	Element Last Seen:	2010-03-29
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2010-03-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-07-29	
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.38236 / -121.50745			Accuracy:	specific area		
UTM:	Zone-10 N4249295 E630361			Elevation (ft):	5		
PLSS:	T06N, R04E, Sec. 11, SE (M)			Acres:	1.0		
Location:	JUST SW OF STONE LAKE; APPROXIMATELY 1.75 AIR MILES WNW OF JUNCTION OF I-5 AND HOOD FRANKLIN ROAD, SOUTH OF SACRAMENTO.						
Detailed Location:	MAPPED ACCORDING TO 2010/2011 DWR DIGITAL DATA.						
Ecological:	SLOPE ALONGSIDE A DITCH, EDGE OF POOL. ASSOCIATED WITH MEDICAGO, GRINDELIA, PLAGIOBOTHRYS, HEMIZONIA, AND CERASTIUM.						
General:	150 PLANTS OBSERVED IN 2009. 400 PLANTS OBSERVED IN 2010.						
Owner/Manager:	UNKNOWN						
Occurrence No.	15	Map Index:	89790	EO Index:	90798	Element Last Seen:	2010-03-29
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2010-03-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-07-29	
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.38002 / -121.50016			Accuracy:	specific area		
UTM:	Zone-10 N4249045 E631002			Elevation (ft):	6		
PLSS:	T06N, R04E, Sec. 12, SW (M)			Acres:	2.0		
Location:	JUST SOUTH OF STONE LAKE; ABOUT 1.2 AIR MILES WNW OF JUNCTION OF I-5 AND HOOD FRANKLIN RD, SOUTH OF SACRAMENTO.						
Detailed Location:	2 SITES MAPPED BY CNDDDB AS A SINGLE POLYGON ACCORDING TO 2011 DWR DIGITAL DATA. MAPPED IN THE SW 1/4 OF THE SW 1/4 OF SECTION 12.						
Ecological:	NEAR POOL AND PONDED AREA. ASSOCIATED WITH PLAGIOBOTHRYS, CERASTIUM, ERODIUM CICUTARIUM, MEDICAGO, GRINDELIA, MYOSURUS, POA ANNUA, HEMIZONIA, LOLIUM, RUMEX, CAMOMILLA, ELEOCHARIS, AND LEPIDIUM LATIPES VAR. LATIPES.						
General:	575 PLANTS OBSERVED IN 2010.						
Owner/Manager:	UNKNOWN						



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Brasenia schreberi

Element Code: PDCAB01010

watershield

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G5

State: None

State: S3

Other: Rare Plant Rank - 2B.3

Habitat: **General:** FRESHWATER MARSHES AND SWAMPS.

Micro: AQUATIC KNOWN FROM WATER BODIES BOTH NATURAL AND ARTIFICIAL IN CALIFORNIA. 1-2180 M.

Occurrence No. 11 **Map Index:** 82077 **EO Index:** 83069 **Element Last Seen:** 1976-07-26

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1976-07-26

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2013-11-19

Quad Summary: Bruceville (3812134), Courtland (3812135)

County Summary: Sacramento

Lat/Long: 38.34242 / -121.49128 **Accuracy:** nonspecific area

UTM: Zone-10 N4244885 E631846 **Elevation (ft):** 5

PLSS: T06N, R04E, Sec. 25 (M) **Acres:** 677.0

Location: STONE LAKE DUCK CLUB, 1 MILE N OF LAMBERT ROAD, NEAR COURTLAND.

Detailed Location: IN SECTION 25.

Ecological: LEAVES FLOATING ON WARM STILL WATER 2-3 FT DEEP.

General: UNKNOWN NUMBER OF PLANTS SEEN. ONLY SOURCE OF INFORMATION IS A 1976 FERLATTE COLLECTION.

Owner/Manager: USFWS-STONE LAKES NWR, UNK



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Downingia pusilla

Element Code: PDCAM060C0

dwarf downingia

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: GU
	State: None		State: S2
	Other: Rare Plant Rank - 2B.2		
Habitat:	General: VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.		
	Micro: VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-490 M.		

Occurrence No.	56	Map Index: 26055	EO Index: 5239	Element Last Seen:	2010-05-13
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2010-05-13
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-09-13

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.40858 / -121.48900	Accuracy:	specific area
UTM:	Zone-10 N4252231 E631925	Elevation (ft):	10
PLSS:	T06N, R04E, Sec. 01, NE (M)	Acres:	9.0

Location: WEST OF I-5 AT THE ELK GROVE BLVD INTERCHANGE, ELK GROVE.

Detailed Location: SEVERAL COLONIES MAPPED BY CNDDB AS 7 POLYGONS ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES. IN THE SW 1/4 OF THE SE 1/4 OF SECTION 36 AND THE NORTH HALF OF THE NE 1/4 OF SECTION 1.

Ecological: VERNAL POOLS SURROUNDED BY ANNUAL GRASSLAND. ASSOCIATED WITH ALLOCARYA UNDULATA, A. STIPITATA MICRANTHA, PSILOCARPHUS BREVISSIMUS, ALOPECURUS SACCATUS, ERYNGIUM ARISTULATUM, AND LOLIUM MULTIFLORUM. SOILS ARE SAN JOAQUIN SILTY LOAM.

General: HUNDREDS TO THOUSANDS OF PLANTS OBSERVED IN 1990. 500 PLANTS OBSERVED IN 2009. 1161 PLANTS REPORTED IN 2010.

Owner/Manager: SAC COUNTY-PARKS & REC

Legenere limosa

Element Code: PDCAM0C010

legenere

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_UCBBG-UC Berkeley Botanical Garden		
Habitat:	General: VERNAL POOLS.		
	Micro: IN BEDS OF VERNAL POOLS. 1-1005 M.		



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Occurrence No.	31	Map Index:	26234	EO Index:	14087	Element Last Seen:	1993-05-06
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1993-05-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-04-28
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.44134 / -121.38825			Accuracy:	80 meters		
UTM:	Zone-10 N4256015 E640659			Elevation (ft):	35		
PLSS:	T07N, R05E, Sec. 24, SW (M)			Acres:	0.0		
Location:	NORTH OF SHELDON ROAD AND 0.7 MILE EAST OF HIGHWAY 99, ELK GROVE.						
Detailed Location:	MAPPED ABOUT 1/4 MILE NORTH OF SHELDON ROAD WITHIN THE SW 1/4 OF THE SW 1/4 OF SECTION 24.						
Ecological:	DEEP NORTHERN CLAYPAN VERNAL POOLS ON GALT CLAY SOILS. POOLS DOMINATED BY ERYNGIUM CASTRENSE, DOWNINGIA BICORNUTA, AND LASTHENIA GLABERRIMA. OTHER ASSOCIATES INCLUDE ELEOCHARIS MACROSTACHYIS AND PLAGIOBOTHRYS STIPITATUS MICRANTHUS.						
General:	1993: MORE THAN 2500 PLANTS OBSERVED, POOLS IN FAIRLY GOOD SHAPE ALTHOUGH ADJACENT LAND HAD BEEN FARMED. 2009 AERIAL PHOTO SHOWS HOUSING DEVELOPMENT THROUGHOUT ENTIRE AREA.						
Owner/Manager:	PVT						
Occurrence No.	40	Map Index:	29100	EO Index:	30941	Element Last Seen:	1995-05-15
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	1995-05-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-04-29
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39459 / -121.46990			Accuracy:	1/5 mile		
UTM:	Zone-10 N4250706 E633619			Elevation (ft):	13		
PLSS:	T06N, R05E, Sec. 06, SE (M)			Acres:	0.0		
Location:	ABOUT 1.5 MILES EAST OF STONE LAKE, 1.4 MILES SW OF JUNCTION OF FRANKLIN BLVD & ELK GROVE BLVD.						
Detailed Location:	MAPPED IN THE SE 1/4 OF SECTION 6 AND THE NE 1/4 OF SECTION 7. ORIGINAL MAP IS VAGUE; EXACT LOCATION UNKNOWN. NORTHWEST HALF OF THE OCCURRENCE IS NOW ELLIOTT RANCH ELEMENTARY SCHOOL; REMAINING HALF IS STILL UNDEVELOPED.						
Ecological:	VERNAL POOLS WITH DOWNINGIA ORNATISSIMA, NAVARRETIA LEUCOCEPHALA, CASTILLEJA EXSERTA, AND LEPIDIUM LATIPES.						
General:	50+ PLANTS OBSERVED IN 1995. ABOUT HALF OF THE OCCURRENCE HAS BEEN DEVELOPED ACCORDING TO 2009 AERIAL IMAGERY; NEEDS FIELDWORK TO DETERMINE IF HABITAT/SPECIES IS STILL PRESENT.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	41	Map Index:	29099	EO Index:	30940	Element Last Seen:	1995-05-20
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1995-05-20
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1997-03-27
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43901 / -121.45128				Accuracy:	nonspecific area	
UTM:	Zone-10 N4255662 E635162				Elevation (ft):	18	
PLSS:	T07N, R05E, Sec. 20, SE (M)				Acres:	11.7	
Location:	ALONG NORTH SIDE OF SIMS ROAD, 0.15-0.4 MILE EAST OF JUNCTION WITH FRANKLIN BLVD.						
Detailed Location:	300 FT N OF SIMS ROAD.						
Ecological:	VERNAL POOL COMPLEX WITH LASTHENIA GLABERRIMA, RANUNCULUS BONARIENSIS, PLAGIOBOTHRYUS STIPITATUS, DOWNINGIA ORNATISSIMA, D. BICORNUTA AND LEPIDIUM LATIPES.						
General:	300 PLANTS IN 1995. SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT LAND.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	78	Map Index:	83406	EO Index:	84420	Element Last Seen:	2010-05-13
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-02
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40879 / -121.49166				Accuracy:	specific area	
UTM:	Zone-10 N4252250 E631692				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 01, N (M)				Acres:	8.0	
Location:	JUST WEST OF ELK GROVE BLVD JUNCTION WITH I-5, FROM ABOUT 1.5 TO 2.25 AIR MILES ESE OF CLARKSBURG.						
Detailed Location:	8 COLONIES MAPPED BY CNDDDB AS 6 POLYGONS ACCORDING TO 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	ALONG DITCH NEAR FENCE AND SCATTERED IN POOLS & WET DEPRESSIONS. ASSOCIATED WITH CALLITRICHE, PLAGIOBOTHRYUS STIPITATUS, LASTHENIA GLABERRIMA, GRASSES, RUMEX, ERYNGIUM, RANUNCULUS BONARIENSIS, ELEOCHARIS MACROSTACHYA, HORDEUM MARINUM, ETC.						
General:	2010 POPULATION NUMBERS FOR POLYGONS FROM EAST TO WEST: 300, 200, 100, 120, 5150, AND 1000.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	79	Map Index:	83407	EO Index:	84421	Element Last Seen:	2010-05-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-05-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-15
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37680 / -121.49290				Accuracy:	specific area	
UTM:	Zone-10 N4248698 E631642				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 13, N (M)				Acres:	27.0	
Location:	NORTH SIDE OF HOOD FRANKLIN ROAD, FROM 0.3 TO 1.3 MILES EAST OF I-5, SOUTH OF STONE LAKE.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDDB AS 6 POLYGONS ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	POOLS, ROADSIDE DITCHES, AND SWALES. ASSOC W/ PLAGIOBOTHRYIS SP., ELEOCHARIS MACROSTACHYA, E. ACICULARIS, GRATIOLA EBRACTEATA, RANUNCULUS AQUATILIS, LASTHENIA GLABERRIMA, GLYCERIA DECLINATA, LILAEA SCILLOIDES, PHYLLODENDRON, ETC.						
General:	2009: 70 PLANTS OBSERVED ALONG THE ROAD AT THE SOUTH END OF THE WESTERN POLYGON. 2010 POPULATION NUMBERS FOR POLYGONS FROM WEST TO EAST: 4117, 100, 500, 1, 10, AND 51.						
Owner/Manager:	UNKNOWN						

<i>Extriplex joaquinana</i>			Element Code: PDCHE041F3		
San Joaquin spearscale					
Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G2
	State:	None		State:	S2
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden			
Habitat:	General:	CHENOPOD SCRUB, ALKALI MEADOW, PLAYAS, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	IN SEASONAL ALKALI WETLANDS OR ALKALI SINK SCRUB WITH DISTICHLIS SPICATA, FRANKENIA, ETC. 0-800 M.			

Occurrence No.	22	Map Index:	20319	EO Index:	16736	Element Last Seen:	1891-09-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1891-09-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2014-04-07
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.15872 / -121.69617				Accuracy:	3/5 mile	
UTM:	Zone-10 N4224228 E614228				Elevation (ft):		
PLSS:	T04N, R02E, Sec. 25 (M)				Acres:	0.0	
Location:	RIO VISTA.						
Detailed Location:							
Ecological:							
General:	SITE BASED ON AN 1891 JEPSON COLLECTION. ONLY NOTES ON HERBARIUM LABEL ARE: "EXHIBITING A TENDENCY TOWARD DIOECISM." SITE POSSIBLY EXTIRPATED BY DEVELOPMENT.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	26	Map Index:	20320	EO Index:	16735	Element Last Seen:	1891-07-05
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1891-07-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1993-03-12
Quad Summary:	Liberty Island (3812136), Dozier (3812137)						
County Summary:	Solano						
Lat/Long:	38.30674 / -121.75728				Accuracy:	1 mile	
UTM:	Zone-10 N4240580 E608653				Elevation (ft):	5	
PLSS:	T05N, R02E, Sec. 04 (M)				Acres:	0.0	
Location:	MAIN PRAIRIE.						
Detailed Location:							
Ecological:	DAMP, BARREN SPOTS.						
General:	1891 JEPSON COLLECTIONS ARE THE ONLY SOURCES OF INFORMATION FOR THIS SITE. NEEDS FIELDWORK.						
Owner/Manager:	UNKNOWN						

Occurrence No.	71	Map Index:	60327	EO Index:	60363	Element Last Seen:	2001-06-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2001-06-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-03-04
Quad Summary:	Saxon (3812146), Davis (3812156)						
County Summary:	Yolo						
Lat/Long:	38.49860 / -121.68619				Accuracy:	1/10 mile	
UTM:	Zone-10 N4261955 E614565				Elevation (ft):	40	
PLSS:	T08N, R03E, Sec. 31, N (M)				Acres:	0.0	
Location:	EAST OF DAVIS, 3.5 MILES SOUTH OF I-80 ON MACE BLVD, THEN 0.5 MILE EAST ALONG ENTRANCE ROAD, THEN SOUTH 400 YARDS.						
Detailed Location:	10 YARDS WEST OF DEPARTMENT OF DEFENSE FENCE. MAPPED ACCORDING TO COORDINATES PROVIDED IN SOURCE.						
Ecological:	ASSOCIATED WITH HORDEUM, LOLIUM, BROMUS HORDEACEUS, AND PLAGIOBOTHRYIS.						
General:	TWO PLANTS OBSERVED IN 2001.						
Owner/Manager:	DOD						



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Occurrence No.	105	Map Index:	81165	EO Index:	82143	Element Last Seen:	2016-04-05
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2016-04-05
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-12-07
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.42998 / -121.65726				Accuracy:	80 meters	
UTM:	Zone-10 N4254378 E617200				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 29, NE (M)				Acres:	5.0	
Location:	GLIDE TULE RANCH; ABOUT 2 AIR MILES EAST OF THE JUNCTION OF COUNTY RD 104 AND THOMSEN RD, YOLO BYPASS WILDLIFE AREA.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2016 LAZAR COORDINATES, IN THE FAR NE 1/4 OF THE NE 1/4 OF SECTION 29.						
Ecological:	IN ALKALI GRASSLAND. ASSOCIATED WITH ANTHEMIS COTULA, LASTHENIA GLABRATA, MEDICAGO POLYMORPHA, LOLIUM MULTIFLORUM, HEMIZONIA CONGESTA, HESPEREVAX CAULESCENS, TRIFOLIUM WILLDENOVII, LOTUS WRANGELIANUS, ETC.						
General:	ABOUT 50 PLANTS OBSERVED IN 2016; POSSIBLY MORE SMALL PLANTS. 2002 SOLOMESHCH COLLECTION FROM "GLIDE RANCH, 2.5 MI SSE FROM INTERSECTION OF RD 105 & RD 38" AND 2002 SHAFFER COLLECTION ARE ALSO ATTRIBUTED TO THIS SITE.						
Owner/Manager:	DFG-YOLO BYPASS WA						

Occurrence No.	133	Map Index:	B2621	EO Index:	114552	Element Last Seen:	2017-06-10
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2017-06-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2019-03-18
Quad Summary:	Saxon (3812146)						
County Summary:	Solano						
Lat/Long:	38.48039 / -121.69549				Accuracy:	80 meters	
UTM:	Zone-10 N4259924 E613784				Elevation (ft):	28	
PLSS:	T07N, R02E, Sec. 1, SE (M)				Acres:	5.0	
Location:	WEST OF HYDE ROAD AT THE SOLONO/YOLO COUNTY LINE, SOUTH OF COUNTY ROAD 36 AT TERMINUS OF MACE BLVD.						
Detailed Location:	MAPPED ACCORDING TO 2017 DEAN COORDINATES, IN THE NE 1/4 OF THE SE 1/4 OF SECTION 1.						
Ecological:	UPLANDS TO THE EAST OF LARGE PLAYA POOL. ALKALINE PRAIRIE DOMINATED BY TALL LOLIUM THAT HAS NOW LODGED AND IS COVERING GROUND WITH THICK THATCH THROUGH WHICH FRANKENIA IS POKING. N-S TRENDING SHALLOW DITCH/SWALE.						
General:	1000 OR MORE PLANTS IN UPLANDS IN 2017.						
Owner/Manager:	PVT						



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Cuscuta obtusiflora var. glandulosa

Element Code: PDCUS01111

Peruvian dodder

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G5T4?

State: None

State: SH

Other: Rare Plant Rank - 2B.2

Habitat: **General:** MARSHES AND SWAMPS (FRESHWATER).

Micro: FRESHWATER MARSH. 15-280 M.

Occurrence No. 6 **Map Index:** 83838 **EO Index:** 84869 **Element Last Seen:** 1995-06-02

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1995-06-02

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2011-10-05

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long: 38.41454 / -121.43301 **Accuracy:** specific area

UTM: Zone-10 N4252973 E636803 **Elevation (ft):**

PLSS: T07N, R05E, Sec. 33, SE (M) **Acres:** 1.0

Location: 6104 DOUBLOON COURT, LAGUNA LAKE, NORTH OF ELK GROVE BLVD, WEST OF FOULKS RANCH ROAD, ELK GROVE.

Detailed Location: MAPPED AS BEST GUESS BY CNDDDB TO ENCOMPASS THE BACKYARD LAGUNA LAKE SHORELINE OF THE GIVEN ADDRESS.

Ecological: SUBMERGED ON MYRIOPHYLLUM SIBRICUM IN FRESHWATER POND.

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1995 BARBE COLLECTION ANNOTATED ONLY TO THE SPECIES. ID OF THIS SPECIMEN IS QUESTIONABLE, NEEDS FIELDWORK.

Owner/Manager: PVT

Astragalus tener var. tener

Element Code: PDFAB0F8R1

alkali milk-vetch

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2T1

State: None

State: S1

Other: Rare Plant Rank - 1B.2

Habitat: **General:** ALKALI PLAYA, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

Micro: LOW GROUND, ALKALI FLATS, AND FLOODED LANDS; IN ANNUAL GRASSLAND OR IN PLAYAS OR VERNAL POOLS. 0-170 M.



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Occurrence No.	31	Map Index:	24741	EO Index:	7754	Element Last Seen:	1978-05-08
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2002-05-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-02
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45952 / -121.65795				Accuracy:	1/5 mile	
UTM:	Zone-10 N4257654 E617091				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NE (M)				Acres:	0.0	
Location:	1/4 MILE SOUTH OF SAXON STATION.						
Detailed Location:	MAPPED IN THE NE 1/4 OF THE NE 1/4 OF SECTION 17.						
Ecological:	GROWING IN A LARGE VERNAL MEADOW, ON CAPAY SOIL, WITH LASTHENIA GLABRATA, DOWNINGIA INSIGNIS, ALLOCARYA STIPITATA, BOISDUVALIA CLEISTOGAMA, PSILOCARPUS BREVISSIMUS, P. OREGANUS, MYOSURUS MINIMIS.						
General:	SITE BASED ON A COLLECTION BY CRAMPTON IN 1978 (#9578). WITHAM VISITED SITE IN MAR & APR 2002, DID NOT SEE PLANTS BUT BELIEVES SITE IS EXTANT. BITTMAN VISITED SITE 5/16/02, BUT NO PLANTS FOUND. WITHAM WILL RESURVEY IN 2003.						
Owner/Manager:	UNKNOWN						

Occurrence No.	32	Map Index:	24742	EO Index:	7753	Element Last Seen:	2003-04-XX
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45668 / -121.67393				Accuracy:	specific area	
UTM:	Zone-10 N4257320 E615701				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	4.2	
Location:	1 MILE SOUTHWEST OF SAXON STATION, 0.5 MILE WEST OF RR TRACKS, YOLO BYPASS AREA.						
Detailed Location:	SEVERAL COLONIES MAPPED WITHIN THE NW 1/4 OF SECTION 17. 1960 COLLECTION BY CRAMPTON FROM 1.25 MILE SOUTHWEST OF SAXON STATION ALSO ATTRIBUTED TO THIS SITE.						
Ecological:	GROWING IN VALLEY GRASSLAND ON ADOBE SOIL, ALKALI VERNAL POOLS AND SWALES. DOMINATED BY LOLIUM MULTIFLORUM, LASTHENIA GLABRATA. ASSOC: LAYIA CHRYSANTHEMOIDES, BLENNOSPERMA NANUM, DOWNINGIA, ALOPECURUS HOWELLII, ET AL.						
General:	ORIGINAL SOURCE OF INFORMATION IS 1966 COLLECTION BY B. CRAMPTON IN DITCH ALONG ROAD. PLANTS FOUND IN APRIL 2002 BUT NOT ON 5/16/02. >100 PLANTS OBSERVED IN 2003 BETWEEN THIS & OCCURRENCES #64 & #70.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	33	Map Index:	24740	EO Index:	7746	Element Last Seen:	1979-04-09
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	2002-03-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-02
Quad Summary:	Saxon (3812146)						
County Summary:	Solano, Yolo						
Lat/Long:	38.49520 / -121.72071				Accuracy:	nonspecific area	
UTM:	Zone-10 N4261536 E611560				Elevation (ft):	40	
PLSS:	T08N, R02E, Sec. 35 (M)				Acres:	459.7	
Location:	SSE OF DAVIS ALONG TREMONT ROAD.						
Detailed Location:	MAPPED ALONG TREMONT ROAD IN SECTIONS 34, 35, AND 36.						
Ecological:	GROWING ON A LEVELED ALKALINE FLAT.						
General:	SITE BASED ON A 1979 COLLECTION BY B. CRAMPTON. WITHAM SEARCHED THE AREA IN 1990 BUT DID NOT FIND ANY PLANTS. IN 2002, WITHAM FOUND NO PLANTS AND NO NATURAL HABITAT ALONG TREMONT ROAD.						
Owner/Manager:	UNKNOWN						

Occurrence No.	34	Map Index:	24738	EO Index:	19248	Element Last Seen:	1959-04-13
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2002-03-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-14
Quad Summary:	Saxon (3812146), Dixon (3812147)						
County Summary:	Solano						
Lat/Long:	38.45978 / -121.75096				Accuracy:	1 mile	
UTM:	Zone-10 N4257569 E608976				Elevation (ft):	50	
PLSS:	T07N, R02E, Sec. 16 (M)				Acres:	0.0	
Location:	6 MILES SOUTH OF DAVIS.						
Detailed Location:							
Ecological:							
General:	SITE BASED ON A 1959 COLLECTION BY B. CRAMPTON. WITHAM SEARCHED THE AREA IN 1990 AND 2002 BUT DID NOT OBSERVE ANY PLANTS. NO NATURAL HABITAT FOUND ALONG SIKES, HACKMAN, & TREMONT RDS; ALL AG LAND.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	44	Map Index:	24806	EO Index:	25844	Element Last Seen:	2004-04-06
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2004-04-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-03
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.48980 / -121.68505				Accuracy:	specific area	
UTM:	Zone-10 N4260981 E614678				Elevation (ft):	25	
PLSS:	T08N, R03E, Sec. 31, SE (M)				Acres:	11.7	
Location:	AIR FORCE COMMUNICATIONS FACILITY, SOUTH OF DAVIS.						
Detailed Location:	DAVIS COMMUNICATIONS ANNEX. EAST OF ROAD 104 AND BETWEEN ROADS 35 AND 36. MANY SMALL COLONIES MAPPED BY CNDDB AS 5 POLYGONS.						
Ecological:	ON PESCADERO SOIL ADJACENT TO PONDED AREAS, IN AREAS OF LOWER PLANT COVER. ASSOCIATES INCLUDE SEVERAL ALKALINE WETLAND SPECIES SUCH AS FRANKENIA, PLAGIOBOTHRYS STIPITATA STIPITATA, AND POGOGYNE ZIZYPHOROIDES. OTHER RARE PLANTS ALSO HERE.						
General:	65 PLANTS OBSERVED OVER 2.5 ACRES IN 1993 IN THE SOUTHERNMOST POLYGON. NONE FOUND IN 1995, 1996, OR 2002. 912 OBSERVED IN 2004 IN THE 4 NORTHERN POLYGONS.						
Owner/Manager:	DOD-MCCLELLAN AFB						

Occurrence No.	64	Map Index:	51708	EO Index:	51708	Element Last Seen:	2003-04-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2003-04-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43951 / -121.67286				Accuracy:	specific area	
UTM:	Zone-10 N4255415 E615822				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20, NW (M)				Acres:	15.0	
Location:	DFG GLIDE-TULE RANCH ECOLOGICAL RESERVE, APPROXIMATELY 2 MILES SOUTHWEST OF SAXON.						
Detailed Location:	MAPPED AS 3 POLYGONS IN THE WESTERN PORTION OF SECTION 20. INCLUDES GLIDE SITE #2.						
Ecological:	ALKALI VERNAL POOLS AND SWALES ON DEEPLY CHURNING SOILS OF THE PESCADERO CLAY AND CLEAR LAKE CLAY SERIES. ASSOCIATES INCLUDE LASTHENIA FREMONTII, LOLIUM MULTIFLORUM, TRIPHYSARIA ERIANTHA SSP. ERIANTHA, AND LUPINUS BICOLOR.						
General:	5 PLANTS OBSERVED OVER SEVERAL VISITS AS PART OF THE KINDER-MORGAN PIPELINE SURVEY (2002). >100 PLANTS OBSERVED IN 2003 BETWEEN THIS & OCC #32 & 70. RECENTLY ACQUIRED BY DFG AS PART OF THE YOLO BASIN ECOLOGICAL AREA. INCLUDES FORMER EO #69.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Occurrence No.	70	Map Index:	54633	EO Index:	54633	Element Last Seen:	2003-04-XX
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2003-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-02-17
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.45262 / -121.67215				Accuracy:	specific area	
UTM:	Zone-10 N4256871 E615863				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 17, NW (M)				Acres:	0.8	
Location:	DFG GLIDE-TULE RANCH ER, ABOUT 0.25 MILE WEST OF RAILROAD TRACKS ALONG SLOUGH, 1.9 AIR MILES SOUTHWEST OF GLIDE RANCH.						
Detailed Location:	ONE SMALL COLONY MAPPED IN THE SW 1/4 OF THE NW 1/4 OF SECTION 17.						
Ecological:	MESIC GRASSLAND DOMINATED BY LASTHENIA GLABRATA AND LOLIUM MULTIFLORUM. ASSOCIATES INCLUDE LAYIA CHRYSANTHEMOIDES, BLENNOSPERMA NANUM ET AL.						
General:	FEWER THAN 100 PLANTS OBSERVED IN 2003 BETWEEN THIS OCCURRENCE & OCCURRENCES #32 & #64.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Astragalus tener var. ferrisiae

Element Code: PDFAB0F8R3

Ferris' milk-vetch

Listing Status: Federal: None

CNDDB Element Ranks: Global: G2T1

State: None

State: S1

Other: Rare Plant Rank - 1B.1

Habitat: General: MEADOWS AND SEEPS, VALLEY AND FOOTHILL GRASSLAND.

Micro: SUBALKALINE FLATS ON OVERFLOW LAND IN THE CENTRAL VALLEY; USUALLY SEEN IN DRY, ADOBE SOIL. 4-80 M.

Occurrence No.	6	Map Index:	22755	EO Index:	19963	Element Last Seen:	1978-05-08
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			2002-05-16
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2013-08-01

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.45543 / -121.66126	Accuracy:	nonspecific area
UTM:	Zone-10 N4257197 E616808	Elevation (ft):	15
PLSS:	T07N, R03E, Sec. 17, NE (M)	Acres:	168.0

Location: 1/4 MILE SOUTH OF SAXON.

Detailed Location: AREA IMMEDIATELY SOUTH OF SAXON STATION PART OF THE DFG GLIDE TULE RANCH. MAPPED BY CNDDB ACCORDING TO TRS INFORMATION ON 1978 CRAMPTON COLLECTION LABEL IN THE NE 1/4 OF SECTION 17.

Ecological: LARGE VERNAL MEADOW. AREA CATTLE GRAZED (2002).

General: SITE BASED ON A 1978 CRAMPTON COLLECTION. 1959 CRAMPTON COLLECTION ALSO ATTRIB HERE. SITE VISITED 3/21/02, 4/8/02, & 5/16/02, NO PLANTS FOUND. ACC TO WITHAM, HABITAT PRESENT AND RELATIVELY NATURAL LANDSCAPE; WILL BE SURVEYED AGAIN IN 2003.

Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No.	14	Map Index:	53728	EO Index:	53728	Element Last Seen:	2009-04-18
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:			2009-04-18
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2013-07-26

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.43650 / -121.66991	Accuracy:	specific area
UTM:	Zone-10 N4255085 E616084	Elevation (ft):	15
PLSS:	T07N, R03E, Sec. 20, SW (M)	Acres:	11.0

Location: GLIDE TULE ER; PLAYA POOL ABOUT 1.4 AIR MILES NNE OF VAUGHN RANCH, EAST OF THE SACRAMENTO NORTHERN CANAL, YOLO BYPASS.

Detailed Location: MAPPED WITHIN THE SW 1/4 OF SECTION 20 ACCORDING TO 2007 DEAN DIGITAL DATA.

Ecological: VERNAL POOL/GRASSLAND MOSAIC ON CAPAY-CLEAR LAKE SOIL. SOME PESCADERO CLAY. MESIC GRASSLAND ON MARGIN OF PLAYA POOL. ASSOCIATES INCLUDE LASTHENIA GLABRATA, LOLIUM MULTIFLORUM, HESPEREVAX CAULESCENS, AND POGOGYNE ZIZYPHOIDEIS.

General: 12 VERY SCATTERED PLANTS OBSERVED IN 2003. >2000 PLANTS OBSERVED IN 2007. 2002 AND 2009 COLLECTIONS BY SOLOMESHCH ARE ALSO ATTRIBUTED TO THIS OCCURRENCE.

Owner/Manager: DFG-YOLO BYPASS WA

Lathyrus jepsonii var. jepsonii

Element Code: PDFAB250D2

Delta tule pea

Listing Status: Federal: None

CNDDB Element Ranks: Global: G5T2

State: None

State: S2

Other: Rare Plant Rank - 1B.2, SB_BerrySB-Berry Seed Bank, SB_RSABG-Rancho Santa Ana Botanic Garden



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Habitat:	General: MARSHES AND SWAMPS.						
	Micro: IN FRESHWATER AND BRACKISH MARSHES. OFTEN FOUND WITH TYPHA, ASTER LENTUS, ROSA CALIFORNICA, JUNCUS SPP., SCIRPUS, ETC. USUALLY ON MARSH AND SLOUGH EDGES. 0-5 M.						
Occurrence No.	3	Map Index:	11226	EO Index:	19249	Element Last Seen:	1980-10-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1980-10-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2000-03-08
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento, Solano						
Lat/Long:	38.18394 / -121.65511				Accuracy:	nonspecific area	
UTM:	Zone-10 N4227078 E617784				Elevation (ft):	2	
PLSS:	T04N, R03E, Sec. 21 (M)				Acres:	69.6	
Location:	STEAMBOAT SLOUGH NEAR JUNCTION WITH SACRAMENTO RIVER.						
Detailed Location:	UNKNOWN WHICH SIDE OF RIVER THE PLANTS WERE SEEN. SITE MAPPED TO ENCOMPASS ALL LIKELY HABITAT ALONG BOTH SIDES OF THE SLOUGH UP TO 0.5 MILE UPSTREAM FROM CONFLUENCE WITH THE SACRAMENTO RIVER. ACTUAL POP SIZE SMALLER THAN DEPICTED AT CNDDB.						
Ecological:	EDGE OF SLOUGH JUST ABOVE HIGH WATER LINE. ASSOCIATED WITH EQUISETUM, VITUS CALIFORNICA, AND ROSA, QUERCUS LOBATA, PLATANUS RACEMOSA, ALNUS RHOMBIFOLIA, FRAXINUS, AND RUBUS.						
General:	5 PLANTS.						
Owner/Manager:	PVT						
Occurrence No.	22	Map Index:	11250	EO Index:	20063	Element Last Seen:	2009-07-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-15
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25376 / -121.49979				Accuracy:	specific area	
UTM:	Zone-10 N4235035 E631262				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 25, NW (M)				Acres:	7.0	
Location:	SNODGRASS SLOUGH, 0.6 TO 0.8 MILE NORTH OF DELTA CROSS CHANNEL, SE PORTION OF DELTA MEADOWS PARK, NE OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDB AS 4 POLYGONS. 3 SMALL EASTERN POLYGONS BASED ON SPECIFIC GIS DATA FROM DWR. 1 WESTERN POLYGON REPRESENTS THE CENTER OF A <5 ACRE VEGETATION SAMPLING PLOT; THIS POINT LOCATION IS SLIGHTLY LESS SPECIFIC THAN THE OTHERS.						
Ecological:	COASTAL/VALLEY FRESHWATER MARSH WITH SALIX LUCIDA, CORNUS SERICEA, QUERCUS LOBATA, RUBUS DISCOLOR, ALNUS RHOMBIFOLIA, CEPHALANTHUS OCCIDENTALIS, SCIRPUS ACUTUS, HIBISCUS LASIOCARPUS, CAREX BARBARAE, CONVULVULUS ARVENSIS, PASPALUM DILATATUM.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 1987. L. J. JEPSONII REPRESENTED LESS THAN 1% OF THE VEGETATION AT WESTERN SITE IN 2005. IN 2009 THE 3 EASTERN POLYGONS HAD 1, 1, AND 20 PLANTS IN THEM RESPECTIVELY, GOING FROM THE NORTH TO SOUTH SITES.						
Owner/Manager:	DPR-DELTA MEADOWS, UNKNOWN						



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Occurrence No.	23	Map Index:	11269	EO Index:	20064	Element Last Seen:	1987-08-30
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1987-08-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-02-10
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25956 / -121.49499				Accuracy:	80 meters	
UTM:	Zone-10 N4235685 E631672				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24 (M)				Acres:	0.0	
Location:	WEST SIDE OF SNODGRASS SLOUGH; ABOUT 1.2 AIR MILES SOUTH OF TWIN CITIES ROAD.						
Detailed Location:							
Ecological:	PLANTS IN COASTAL/VALLEY FRESHWATER MARSH ASSOCIATED WITH CEPHALANTHUS OCCIDENTALIS, ALNUS RHOMBIFOLIA, SCIRPUS ACUTUS, AND HIBISCUS LASIOCARPUS. IN SUNNY AREAS, ESPECIALLY SOUTH-FACING, NEAR THE WATERS EDGE.						
General:	PLANTS WERE TOO TANGLED TO ESTIMATE POPULATION SIZE.						
Owner/Manager:	UNKNOWN						

Occurrence No.	24	Map Index:	11277	EO Index:	15640	Element Last Seen:	2009-08-10
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-10
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-15
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26881 / -121.49321				Accuracy:	specific area	
UTM:	Zone-10 N4236714 E631811				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, N (M)				Acres:	25.0	
Location:	ALONG SNODGRASS SLOUGH AND SIDE CHANNELS, FROM TWIN CITIES ROAD TO 3/4 MILE SOUTH OF ROAD, NORTH OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDDB AS 9 POLYGONS.						
Ecological:	COASTAL/VALLEY FRESHWATER MARSH ASSOCIATED WITH CEPHALANTHUS OCCIDENTALIS, ALNUS RHOMBIFOLIA, SCIRPUS ACUTUS, HIBISCUS LASIOCARPUS, RUBUS DISCOLOR, CORNUS, ROSA CALIFORNICA, VITUS CALIFORNICA, SALIX EXIGUA, TYPHA.						
General:	36 PLANTS OBSERVED IN 2009. INCLUDES FORMER OCCURRENCE #25.						
Owner/Manager:	DPR, TNC, UNKNOWN						



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Occurrence No.	48	Map Index:	24968	EO Index:	29611	Element Last Seen:	1994-01-12
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1994-01-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18882 / -121.48503				Accuracy:	80 meters	
UTM:	Zone-10 N4227850 E632672				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18 (M)				Acres:	0.0	
Location:	SOUTH MOKELUMNE RIVER, ON ISLAND 0.5 MILE SOUTHWEST OF BEAVER SLOUGH.						
Detailed Location:	SMALL ISLAND JUST NORTH OF RIVER MILE 15.						
Ecological:	ASSOCIATED WITH LIMOSELLA SUBULATA, SCIRPUS AMERICANUS, SCIRPUS ACUTUS OCCIDENTALIS, VERBENA, SALIX, CEPHALANTHUS, AND ALNUS.						
General:	1-5 PLANTS OBSERVED IN 1987. LATHYRUS JEPSONII VAR. CALIFORNICA OCCURS NEARBY ON RIPRAP BANK.						
Owner/Manager:	UNKNOWN						

Occurrence No.	49	Map Index:	24967	EO Index:	15642	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-02-10
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24109 / -121.66332				Accuracy:	specific area	
UTM:	Zone-10 N4233409 E616974				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 32 (M)				Acres:	15.6	
Location:	RYER ISLAND ALONG MINER SLOUGH, APPROXIMATELY 0.5 MILE FROM THE SOUTHWEST TIP OF PROSPECT ISLAND.						
Detailed Location:	ALONG WATER SIDE OF LEVEE NEAR MOUTH OF MINER SLOUGH.						
Ecological:							
General:	MAP DETAIL IS ONLY SOURCE OF INFORMATION FOR THIS SITE. SITE QUALITY, POPULATION TRENDS, AND ECOLOGICAL INFORMATION NEEDED.						
Owner/Manager:	UNKNOWN						

Occurrence No.	50	Map Index:	24966	EO Index:	6303	Element Last Seen:	1988-10-31
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1988-10-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1993-12-27
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29658 / -121.50904				Accuracy:	nonspecific area	
UTM:	Zone-10 N4239773 E630376				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 11 (M)				Acres:	10.1	
Location:	SNODGRASS SLOUGH, SOUTHERN TIP OF ISLAND LOCATED 1.2 MILE NORTH OF TWIN CITIES ROAD.						
Detailed Location:	SITE IS 3/4 MILE NORTH OF THE "DURBIN" TRIANGULATION POINT.						
Ecological:	FRESHWATER MARSH. SEVERAL POPULATIONS OF HIBISCUS LASIOCARPUS AREA LOCATED NEARBY.						
General:	ONE 10' X 10' COLONY OBSERVED IN 1988. SITE QUALITY AND ADDITIONAL ECOLOGICAL INFORMATION NEEDED FOR THIS SITE.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	53	Map Index:	24962	EO Index:	6306	Element Last Seen:	2005-08-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-16
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.30028 / -121.73065				Accuracy:	specific area	
UTM:	Zone-10 N4239895 E610991				Elevation (ft):	5	
PLSS:	T05N, R02E, Sec. 02 (M)				Acres:	64.0	
Location:	HASS SLOUGH AND CACHE SLOUGH, ADJACENT TO THE SOUTHEAST END OF PETERS POCKET.						
Detailed Location:	MAPPED BY CNDDB AS 13 POLYGONS. THE POLYGON 0.3 MILE NORTH OF SYCAMORE SLOUGH WAS MAPPED BASED ON 2005 VEGETATION MAPPING DATA. THE OTHER 12 POLYGONS CAME FROM 1988 MAPPING DATA.						
Ecological:	ASSOCIATED WITH ALNUS RHOMBIFOLIA, QUERCUS LOBATA, RUBUS DISCOLOR, SALIX LASIOLEPIS, CORNUS SERICEA, CAREX BARBARAE, SALIX EXIGUA, CEPHALANTHUS OCCIDENTALIS, FRAXINUS LATIFOLIA, LEERSIA ORYZOIDES, POPULUS FREMONTII, SALIX GOODDINGII, ETC.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 1988. L. J. VAR. JEPSONII ACCOUNTED FOR LESS THAN 1% OF THE ISLAND VEGETATION AT THE SITE SURVEYED IN 2005.						
Owner/Manager:	PVT, UNKNOWN						

Occurrence No.	54	Map Index:	24961	EO Index:	6305	Element Last Seen:	1988-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-12-15
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.29670 / -121.74571				Accuracy:	specific area	
UTM:	Zone-10 N4239479 E609680				Elevation (ft):	5	
PLSS:	T05N, R02E, Sec. 10 (M)				Acres:	10.1	
Location:	CACHE SLOUGH, NORTH BANK OF SLOUGH 1.2 MILES WEST OF THE SOUTHEAST TIP OF PETERS POCKET.						
Detailed Location:							
Ecological:							
General:	MAP DETAIL IS ONLY SOURCE OF INFORMATION FOR THIS SITE. ECOLOGICAL AND SITE QUALITY INFORMATION NEEDED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	123	Map Index:	46487	EO Index:	46487	Element Last Seen:	2000-06-22
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2000-06-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2001-11-13

Quad Summary: Thornton (3812124)

County Summary: San Joaquin

Lat/Long:	38.19321 / -121.47996	Accuracy:	80 meters
UTM:	Zone-10 N4228344 E633108	Elevation (ft):	2
PLSS:	T04N, R05E, Sec. 18 (M)	Acres:	0.0

Location: EAST SIDE OF STATEN ISLAND, JUST SOUTH OF CONFLUENCE OF BEAVER SLOUGH AND MOKELUMNE RIVER.

Detailed Location: IN BACKWATER MARSH OR SLOUGH.

Ecological: IN WATER (?) ADJACENT TO ISLAND. SURROUNDED BY LARGE RIPARIAN FOREST.

General: 1 PLANT OBSERVED IN 2000.

Owner/Manager: UNKNOWN

Occurrence No.	134	Map Index:	56159	EO Index:	56175	Element Last Seen:	2004-07-09
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2004-07-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-07-20

Quad Summary: Isleton (3812125)

County Summary: Sacramento

Lat/Long:	38.15179 / -121.59560	Accuracy:	80 meters
UTM:	Zone-10 N4223588 E623050	Elevation (ft):	0
PLSS:	T04N, R03E, Sec. 36, NE (M)	Acres:	0.0

Location: WATER SIDE OF THE NORTHERN LEVEE ALONG GEORGIANA SLOUGH, JUST UPSTREAM OF THE OXBOW, SOUTH OF ISLETON.

Detailed Location: FOUND ON OUTSIDE OF RIPARIAN CORRIDOR NEAR LEVEE TOE.

Ecological: RIPARIAN SCRUB HABITAT. DOMINANTS INCLUDE SALIX EXIGUA, S. GOODINGII, AND S. LASIOLEPIS. ASSOCIATES INCLUDE LEYMUS TRITICOIDES AND JUNCUS.

General: 1 PLANT SEEN IN 2004.

Owner/Manager: UNKNOWN



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Occurrence No.	156	Map Index:	80963	EO Index:	84297	Element Last Seen:	2005-08-16
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-30
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24718 / -121.70333				Accuracy:	80 meters	
UTM:	Zone-10 N4234035 E613462				Elevation (ft):	2	
PLSS:	T05N, R02E, Sec. 25, SE (M)				Acres:	0.0	
Location:	LINDSEY SLOUGH, APPROXIMATELY 0.4 MILE WEST OF WRIGHT CUT, SE END OF HASTINGS TRACT.						
Detailed Location:	ON A MID-CHANNEL ISLAND WITHIN SLOUGH, JUST WEST OF HASTINGS ISLAND ROAD BRIDGE.						
Ecological:	HARD CLAY BENCHES WITH A LOT OF HERBS. ASSOCIATES INCLUDE CORNUS SERICEA, RUBUS DISCOLOR, SALIX EXIGUA, SALIX LASIOLEPIS, SCHOENOPLECTUS ACUTUS, SALIX BABYLONICA, ALNUS RHOMBIFOLIA, PHRAGMITES AUSTRALIS, ETC.						
General:	L. J. VAR. JEPSONII ACCOUNTED FOR LESS THAN 1% OF THE PLANT COVER FOUND DURING A VEGETATION SURVEY AT THIS SITE IN 2005.						
Owner/Manager:	UNKNOWN						

Occurrence No.	157	Map Index:	83262	EO Index:	84298	Element Last Seen:	2009-06-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-06-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-30
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26398 / -121.45814				Accuracy:	80 meters	
UTM:	Zone-10 N4236229 E634887				Elevation (ft):	4	
PLSS:	T05N, R05E, Sec. 20, SW (M)				Acres:	0.0	
Location:	0.4 AIR MILE WEST OF I-5 BRIDGE OVER COSUMNES RIVER.						
Detailed Location:	NEAR A DIRT ROAD AT THE BOUNDARY BETWEEN AN AGRICULTURAL FIELD AND RIPARIAN FOREST, BETWEEN CHANNELS OF COSUMNES RIVER AND MOKELUMNE RIVER.						
Ecological:	RIPARIAN FOREST.						
General:	3 PLANTS OBSERVED IN 2009.						
Owner/Manager:	STATE						



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Occurrence No.	158	Map Index:	83265	EO Index:	84299	Element Last Seen:	2009-08-12
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-18
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento, Yolo						
Lat/Long:	38.33034 / -121.57940				Accuracy:	specific area	
UTM:	Zone-10 N4243423 E624165				Elevation (ft):	1	
PLSS:	T06N, R04E, Sec. 31, N (M)				Acres:	6.0	
Location:	CHANNEL BETWEEN SUTTER SLOUGH / ELK SLOUGH AND THE SACRAMENTO RIVER, WEST OF COURTLAND, AT SW END OF MERRITT ISLAND.						
Detailed Location:	ON THE NORTH SIDE OF THE CHANNEL.						
Ecological:	RIPRAP ABOVE HIGH WATER.						
General:	APPROXIMATELY 20 PLANTS OBSERVED IN 2009, IN SCATTERED CLUMPS.						
Owner/Manager:	UNKNOWN						

Occurrence No.	159	Map Index:	83277	EO Index:	84301	Element Last Seen:	2005-08-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-30
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.30301 / -121.57868				Accuracy:	80 meters	
UTM:	Zone-10 N4240391 E624275				Elevation (ft):	1	
PLSS:	T05N, R04E, Sec. 07, NE (M)				Acres:	0.0	
Location:	NW SHORE OF STEAMBOAT SLOUGH, 0.3 MILE SW OF ITS CONFLUENCE WITH THE SACRAMENTO RIVER, ON WEST SIDE OF SUTTER ISLAND.						
Detailed Location:							
Ecological:	WELL-DEVELOPED REMNANT STAND OF QUERCUS LOBATA, Q. AGRIFOLIA, AND ALNUS RHOMBIFOLIA, WITH FRAXINUS LATIFOLIA, ARTEMISIA DOUGLASIANA, ROSA CALIFORNICA, RUBUS URSINUS, VITIS CALIFORNICA, ACER NEGUNDO, SALIX EXIGUA, APOCYNUM CANNABINUM, ETC.						
General:	L. J. VAR. JEPSONII ACCOUNTED FOR LESS THAN 1% OF THE PLANT COVER FOUND DURING A VEGETATION SURVEY AT THIS SITE IN 2005.						
Owner/Manager:	UNKNOWN						

<i>Trifolium hydrophilum</i>					Element Code: PDFAB400R5		
saline clover							
Listing Status:	Federal:	None		CNDDDB Element Ranks:	Global:	G2	
	State:	None			State:	S2	
	Other:	Rare Plant Rank - 1B.2					
Habitat:	General:	MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.					
	Micro:	MESIC, ALKALINE SITES. 1-335 M.					



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Occurrence No.	36	Map Index:	83562	EO Index:	84595	Element Last Seen:	1974-04-24
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1974-04-24	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-19	

Quad Summary: Liberty Island (3812136), Dozier (3812137)

County Summary: Solano

Lat/Long:	38.35810 / -121.74937	Accuracy:	1/5 mile
UTM:	Zone-10 N4246289 E609267	Elevation (ft):	15
PLSS:	T06N, R02E, Sec. 22, NW (M)	Acres:	0.0

Location: 1 MILE NE OF BUNKER STATION; SWAN X SIKES ROADS, SACRAMENTO VALLEY.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AT SWAN ROAD AND SIKES ROAD INTERSECTION, ABOUT 0.7 MILE NORTHEAST OF BUNKER.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1974 COLLECTION BY CRAMPTON. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	37	Map Index:	83564	EO Index:	84596	Element Last Seen:	2009-04-27
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-04-27	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-19	

Quad Summary: Florin (3812144)

County Summary: Sacramento

Lat/Long:	38.41575 / -121.48629	Accuracy:	specific area
UTM:	Zone-10 N4253030 E632149	Elevation (ft):	10
PLSS:	T07N, R04E, Sec. 36, E (M)	Acres:	1.0

Location: WEST SIDE OF I-5, ABOUT 0.5 AIR MILE NNW OF INTERSECTION WITH ELK GROVE BLVD.

Detailed Location: MAPPED IN THE APPROXIMATE CENTER OF THE EAST HALF OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.

Ecological: DRIED DEPRESSION DOMINATED BY LOLIUM MULTIFLORUM.

General: 100 PLANTS OBSERVED IN 2009.

Owner/Manager: UNKNOWN



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Occurrence No.	38	Map Index:	83566	EO Index:	84598	Element Last Seen:	2010-05-13
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-05-13
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.40805 / -121.49098				Accuracy:	specific area	
UTM:	Zone-10 N4252169 E631753				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 01, N (M)				Acres:	34.0	
Location:	EAST SIDE OF ELK GROVE BLVD INTERSECTION WITH I-5, NORTH OF STONE LAKE.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDDB AS 11 POLYGONS ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES. WITHIN THE NORTH HALF OF SECTION 1 AND THE SOUTH HALF OF SECTION 36.						
Ecological:	SEASONALLY WET GRASSLANDS, SWALES, AND DEPRESSIONS. ASSOCIATED WITH HORDEUM MARINUM, LASTHENIA CALIFORNICA, L. GLABERRIMA, LOLIUM MULTIFLORUM, DOWNINGIA BICORNUTA VAR. BICORNUTA, CRESSA TRUXILLENIS, ERYNGIUM SP., CONVULVULUS ARVENSIS, ETC.						
General:	26,134 PLANTS OBSERVED IN 2009. 4,622 PLANTS OBSERVED IN 2010.						
Owner/Manager:	DPR, UNKNOWN						
Occurrence No.	39	Map Index:	83567	EO Index:	84599	Element Last Seen:	2009-04-28
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.39652 / -121.48464				Accuracy:	specific area	
UTM:	Zone-10 N4250899 E632328				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 01, S (M)				Acres:	14.0	
Location:	BETWEEN STONE LAKE AND I-5, FROM ABOUT 1.8 TO 2.5 AIR MILES NORTHWEST OF FRANKLIN.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDDB AS 9 POLYGONS ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES. WITHIN THE SOUTH HALF OF SECTION 1 AND THE NORTH HALF OF THE NE 1/4 OF SECTION 12.						
Ecological:	SEASONALLY WET GRASSLANDS, VERNAL POOLS, AND DEPRESSIONS. ASSOC W/ PLAGIOBOTHRYIS, JUNCUS BUFONIS, HORDEUM MARINUM, DOWNINGIA BICORNUTA, MATRICARIA, ERYNGIUM CASTRENSE, VULPIA BROMOIDES, LEPIDIUM LATIPES LATIPES, LASTHENIA GLABERRIMA, ETC.						
General:	2580 PLANTS OBSERVED IN 2009.						
Owner/Manager:	DPR						



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Occurrence No.	40	Map Index:	83568	EO Index:	84600	Element Last Seen:	2010-05-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-05-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-22
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37894 / -121.49197				Accuracy:	specific area	
UTM:	Zone-10 N4248937 E631719				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 13, N (M)				Acres:	12.0	
Location:	NORTH SIDE OF HOOD FRANKLIN ROAD, FROM ABOUT 1.2 TO 1.9 AIR MILES ENE OF HOOD.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDDB AS 7 POLYGONS ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES. WITHIN THE NORTH HALF OF SECTION 13 AND THE SE 1/4 OF SW 1/4 OF SECTION 12.						
Ecological:	GRASSLAND FIELDS, SWALES, VERNAL POOLS, AND DITCHES. ASSOCIATED WITH HORDEUM MARINUM, LOLIUM MULTIFLORUM, LASTHENIA CALIFORNICA, L. CHRYSANTHA, AND PLAGIOBOTHRYIS.						
General:	710 PLANTS OBSERVED IN 2009. 200 PLANTS OBSERVED IN NORTHERNMOST POLYGON IN 2010.						
Owner/Manager:	UNKNOWN						
Occurrence No.	41	Map Index:	83569	EO Index:	84601	Element Last Seen:	2009-04-30
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-04-30
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-22
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.40331 / -121.50255				Accuracy:	specific area	
UTM:	Zone-10 N4251626 E630752				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 02, NE (M)				Acres:	1.0	
Location:	NORTHWEST OF STONE LAKE, ABOUT 1.3 AIR MILES SOUTHEAST OF CLARKSBURG AND ABOUT 1 AIR MILE NORTHEAST OF ROSEBUD LANDING.						
Detailed Location:	TWO COLONIES MAPPED IN THE SE 1/4 OF THE NE 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	GRASSLAND SWALES.						
General:	30 PLANTS OBSERVED IN NORTHERN COLONY AND 10,000 PLANTS OBSERVED IN SOUTHERN COLONY IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	42	Map Index:	83570	EO Index:	84602	Element Last Seen:	2003-04-11
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2003-04-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-09-12
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.43659 / -121.66740				Accuracy:	nonspecific area	
UTM:	Zone-10 N4255099 E616303				Elevation (ft):	15	
PLSS:	T07N, R03E, Sec. 20 (M)				Acres:	2128.0	
Location:	DFG TULE RANCH VERNAL POOLS, SOUTHEAST OF JUNCTION OF COUNTY ROADS 38 & 105, ABOUT 8 MILES SOUTHEAST OF DAVIS.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB AS A NON-SPECIFIC POLYGON AROUND THE SOUTHWEST PORTION OF DFG'S TULE RANCH TO ENCOMPASS VERNAL POOL HABITAT IN VICINITY.						
Ecological:	VERNAL POOL GRASSLAND MOSAIC PRIMARILY ON CAPAY-CLEAR LAKE SOIL ASSOCIATION WITH SOME INCLUSION OF PESCADERO CLAY. PLANTS OCCURRING PRIMARILY IN VERNAL POOLS.						
General:	OCCURRENCE BASED ON A 1966 CRAMPTON COLLECTION FROM "1 MILE SW OF SAXON STATION" AND A 2003 WITHAM COLLECTION FROM "DFG TULE RANCH VERNAL POOLS, ~8 MI SE OF DAVIS, SE OF JCT OF CR 38 & 105." NEEDS MAP DETAIL.						
Owner/Manager:	DFG-YOLO BYPASS WA						



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Scutellaria galericulata

Element Code: PDLAM1U0J0

marsh skullcap

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G5

State: None

State: S2

Other: Rare Plant Rank - 2B.2

Habitat: **General:** MARSHES AND SWAMPS, LOWER MONTANE CONIFEROUS FOREST, MEADOWS AND SEEPS.

Micro: SWAMPS AND WET PLACES. 0-1950 M.

Occurrence No.	29	Map Index:	83680	EO Index:	84708	Element Last Seen:	2009-08-10
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-08-10	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-09-14	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.26835 / -121.48239	Accuracy:	specific area
UTM:	Zone-10 N4236679 E632758	Elevation (ft):	5
PLSS:	T05N, R05E, Sec. 19, NW (M)	Acres:	1.0

Location: JUST EAST OF DELTA MEADOWS; ~0.9 AIR MILE SE OF JUNCTION OF SNODGRASS SLOUGH AND TWIN CITIES ROAD, NNE OF WALNUT GROVE.

Detailed Location: MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA.

Ecological: TIDAL MARSH, ON EXPOSED LOG TOPS. ASSOCIATED WITH ALNUS, HELENIUM, EPILOBIUM, JUNCUS EFFUSUS, LYCOPUS, PASPALUM, AND VERBENA.

General: IN 2009, 1 PLANT WAS OBSERVED IN THE WESTERN POLYGON AND 20 PLANTS WERE OBSERVED IN THE EASTERN POLYGON.

Owner/Manager: TNC

Occurrence No.	30	Map Index:	83681	EO Index:	84709	Element Last Seen:	2009-07-31
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-07-31	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-09-14	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.25734 / -121.49740	Accuracy:	specific area
UTM:	Zone-10 N4235435 E631465	Elevation (ft):	0
PLSS:	T05N, R04E, Sec. 25, N (M)	Acres:	1.0

Location: EAST SIDE OF DELTA MEADOWS AND WEST SIDE OF SNODGRASS SLOUGH, ABOUT 0.8 AIR MILE NE OF LOCKE, NE OF WALNUT GROVE.

Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA.

Ecological: EXPOSED LOG TOPS WITH CEPHALANTHUS, JUNCUS EFFUSUS, CAREX DENSA, AND RUMEX CRISPUS.

General: PLANTS WERE CONSIDERED UNCOMMON AT THIS SITE IN 2009.

Owner/Manager: DPR-DELTA MEADOWS RIVER PARK

Scutellaria lateriflora

Element Code: PDLAM1U0Q0

side-flowering skullcap

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G5

State: None

State: S2

Other: Rare Plant Rank - 2B.2

Habitat: **General:** MEADOWS AND SEEPS, MARSHES AND SWAMPS.



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Micro: WET MEADOWS AND MARSHES. IN THE DELTA, OFTEN FOUND ON LOGS. 0-500 M.				
Occurrence No.	2	Map Index: 37124	EO Index: 32121	Element Last Seen: 1892-09-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1892-09-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2014-04-22
Quad Summary:	Terminous (3812114), Bouldin Island (3812115), Isleton (3812125)			
County Summary:	San Joaquin			
Lat/Long:	38.10350 / -121.53293		Accuracy:	nonspecific area
UTM:	Zone-10 N4218315 E628626		Elevation (ft):	
PLSS:	T03N, R04E, Sec. 15 (M)		Acres:	6035.0
Location:	BOULDIN ISLAND.			
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS AROUND BOULDIN ISLAND.			
Ecological:				
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS AN 1892 COLLECTION BY BRANDEGEE. NEEDS FIELDWORK.			
Owner/Manager:	UNKNOWN			
Occurrence No.	3	Map Index: 66826	EO Index: 66985	Element Last Seen: 2009-08-10
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 2009-08-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2013-09-09
Quad Summary:	Bruceville (3812134), Courtland (3812135)			
County Summary:	Sacramento			
Lat/Long:	38.25875 / -121.50156		Accuracy:	specific area
UTM:	Zone-10 N4235586 E631098		Elevation (ft):	5
PLSS:	T05N, R04E, Sec. 24, SW (M)		Acres:	8.0
Location:	DELTA MEADOWS, JUST NE OF LOCKE.			
Detailed Location:	MAPPED BY CNDDDB AS 8 SMALL POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA. MOSTLY LOCATED ALONG A DEAD END SLOUGH THAT BRANCHES OFF OF SNODGRASS SLOUGH TO THE WEST AND THEN THE NORTH.			
Ecological:	ON LOGS OR PARTIALLY SUBMERGED LOGS WITH VERBENA, JUNCUS EFFUSUS, SOLANUM, MENTHA, BUTTONWILLOW, PASPALUM, LYCOPUS, AND CENTAURIUM.			
General:	24 PLANTS IN TOTAL OBSERVED IN 2009 (INDIVIDUAL POPULATIONS RANGED IN SIZE FROM 1 TO 4 PLANTS). 1992 HRUSA AND 1993 BOWCUTT COLLECTIONS FROM "IMMEDIATELY EAST OF LOCKE, DELTA MEADOWS RIVER PARK" ARE ALSO ATTRIBUTED TO THIS SITE.			
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK			



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Occurrence No.	4	Map Index:	79775	EO Index:	80763	Element Last Seen:	2009-09-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14652 / -121.43250				Accuracy:	specific area	
UTM:	Zone-10 N4223232 E637351				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 33, SE (M)				Acres:	1.0	
Location:	ALONG SYCAMORE SLOUGH BETWEEN BRACK TRACT AND TERMINOUS TRACT, ABOUT 4.2 AIR MILES NE OF TERMINUS.						
Detailed Location:	ON LOG IN MIDDLE OF SLOUGH.						
Ecological:	ON LOG INTERMIXED WITH GALIUM.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	5	Map Index:	79776	EO Index:	80764	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20834 / -121.48669				Accuracy:	specific area	
UTM:	Zone-10 N4230014 E632491				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 07, SW (M)				Acres:	1.0	
Location:	ALONG SOUTH MOKELUMNE RIVER BETWEEN STATEN ISLAND AND NEW HOPE TRACT, ABOUT 1.4 AIR MILES SOUTH OF NEW HOPE LANDING.						
Detailed Location:	NORTH SIDE OF RIVER.						
Ecological:	EXPOSED LOG WITH MANY OTHER MARSH SPECIES INCLUDING SPERGULARIA MARINUM, LYCOPUS, JUNCUS EFFUSUS, ETC.						
General:	6 PLANTS WERE OBSERVED ON A FEW EXPOSED LOGS IN THIS AREA IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	6	Map Index:	79777	EO Index:	80765	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21229 / -121.49369				Accuracy:	specific area	
UTM:	Zone-10 N4230442 E631870				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 12, NE (M)				Acres:	1.0	
Location:	ALONG SOUTH MOKELUMNE RIVER BETWEEN STATEN ISLAND AND NEW HOPE TRACT, ABOUT 1 AIR MI SOUTH OF NEW HOPE LANDING.						
Detailed Location:	EAST SIDE OF RIVER.						
Ecological:	EXPOSED LOG WITH MANY OTHER MARSH SPECIES INCLUDING SPERGULARIA MARINUM, LYCOPUS, JUNCUS EFFUSUS, ETC.						
General:	5 PLANTS WERE OBSERVED GROWING ON THREE EXPOSED LOGS IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	7	Map Index:	79778	EO Index:	80766	Element Last Seen:	2009-09-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.22763 / -121.49784				Accuracy:	specific area	
UTM:	Zone-10 N4232138 E631479				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 01, NW (M)				Acres:	1.0	
Location:	ALONG NORTH MOKELUMNE RIVER BETWEEN DEAD HORSE ISLAND AND STATEN ISLAND, JUST WEST OF NEW HOPE LANDING.						
Detailed Location:	SOUTH SIDE OF RIVER.						
Ecological:	EXPOSED LOG AT WATER'S EDGE WITH VERBENA, JUNCUS EFFUSUS, AND LYCOPUS.						
General:	12 PLANTS OBSERVED IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE?						

Occurrence No.	8	Map Index:	79779	EO Index:	80768	Element Last Seen:	2009-09-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23906 / -121.48757				Accuracy:	specific area	
UTM:	Zone-10 N4233421 E632358				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 36, NW (M)				Acres:	1.0	
Location:	ALONG MOKELUMNE RIVER AT THE NW END OF NEW HOPE TRACT, ABOUT 0.78 AIR MILE NORTH OF NEW HOPE LANDING.						
Detailed Location:	WEST SIDE OF RIVER.						
Ecological:	ON LOG EDGE OF RIPARIAN.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	TNC?						

Occurrence No.	9	Map Index:	79780	EO Index:	80769	Element Last Seen:	2009-09-14
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.22729 / -121.50951				Accuracy:	specific area	
UTM:	Zone-10 N4232084 E630459				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 02, NE (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH BETWEEN DEAD HORSE ISLAND AND TYLER ISLAND, ABOUT 1 AIR MILE WEST OF NEW HOPE LANDING.						
Detailed Location:	EAST SIDE OF SLOUGH.						
Ecological:	EXPOSED LOG TOP AT WATER'S EDGE.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	10	Map Index:	79781	EO Index:	80770	Element Last Seen:	2009-07-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26092 / -121.49386				Accuracy:	specific area	
UTM:	Zone-10 N4235838 E631767				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, SE (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH ON THE EAST SIDE OF THE MEADOWS, ABOUT 1.1 AIR MILES NE OF LOCKE.						
Detailed Location:	WEST SIDE OF THE SLOUGH.						
Ecological:	GROWING ON EXPOSED LOG TOPS WITH JUNCUS EFFUSUS.						
General:	10 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	11	Map Index:	79783	EO Index:	80772	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27046 / -121.49625				Accuracy:	specific area	
UTM:	Zone-10 N4236893 E631542				Elevation (ft):	10	
PLSS:	T05N, R04E, Sec. 24, N (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH AT THE NORTH END OF THE MEADOWS, ABOUT 1.5 AIR MILES NNE OF LOCKE.						
Detailed Location:							
Ecological:	UP ON LOG WITH LOTS OF CEPHALANTHUS.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	12	Map Index:	79784	EO Index:	80773	Element Last Seen:	2009-09-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-08-31
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27018 / -121.47621				Accuracy:	specific area	
UTM:	Zone-10 N4236891 E633295				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 19, N (M)				Acres:	13.0	
Location:	ALONG THE PORTION OF SNODGRASS SLOUGH BETWEEN TWIN CITIES RD AND THE MOKELUMNE RIVER, EAST OF THE MEADOWS, NE OF LOCKE.						
Detailed Location:	MAPPED BY CNDDB AS 17 POLYGONS ACCORDING TO 2010 DWR DIGITAL DATA.						
Ecological:	MOSTLY ON PARTIALLY SUBMERGED OR FALLEN LOGS. ASSOCIATES INCLUDE SOLANUM AMERICANUM, LYCOPUS, HELENIUM, JUNCUS EFFUSUS, AGROSTIS EXARATA, ETC.						
General:	68 PLANTS IN TOTAL OBSERVED IN 2009 (INDIVIDUAL POPULATIONS RANGED IN SIZE FROM 1 PLANT TO 20 PLANTS).						
Owner/Manager:	UNKNOWN						



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Occurrence No.	13	Map Index:	79785	EO Index:	80774	Element Last Seen:	2009-08-11
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-08-11	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-08-31	
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28049 / -121.49776				Accuracy:	specific area	
UTM:	Zone-10 N4238004 E631391				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 13, SW (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH ~0.25 AIR MI N OF TWIN CITIES ROAD ON THE WEST SIDE OF SOUTHERN PACIFIC RR TRACKS, N OF LOCKE.						
Detailed Location:							
Ecological:	TIDAL MARSH. GROWING ON STUMPS STICKING OUT OF THE WATER AT WATER'S EDGE WITH ALDER, VERBENA, EPILOBIUM, AND JUNCUS EFFUSUS.						
General:	40 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

<i>Hibiscus lasiocarpus var. occidentalis</i>				Element Code: PDMAL0H0R3			
woolly rose-mallow							
Listing Status:	Federal:	None		CNDDDB Element Ranks:	Global:	G5T3	
	State:	None			State:	S3	
	Other:	Rare Plant Rank - 1B.2, SB_RSABG-Rancho Santa Ana Botanic Garden, SB_UCBBG-UC Berkeley Botanical Garden					
Habitat:	General:	MARSHES AND SWAMPS (FRESHWATER).					
	Micro:	MOIST, FRESHWATER-SOAKED RIVER BANKS & LOW PEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAP AND LEVEES. IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-155 M.					

Occurrence No.	36	Map Index:	10841	EO Index:	20816	Element Last Seen:	1891-09-16
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1974-07-15		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2013-03-14		
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.14963 / -121.69328				Accuracy:	1/5 mile	
UTM:	Zone-10 N4223223 E614495				Elevation (ft):		
PLSS:	T04N, R03E, Sec. 31 (M)				Acres:	0.0	
Location:	SACRAMENTO RIVER NEAR RIO VISTA.						
Detailed Location:							
Ecological:							
General:	SPECIES SEEN IN 1887 AND 1891. ALSO SEEN AT THIS LOCATION BY HOOD (DATE UNKNOWN). NO PLANTS OBSERVED DURING A 1974 SITE VISIT.						
Owner/Manager:	PVT						



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Occurrence No.	61	Map Index:	11304	EO Index:	19497	Element Last Seen:	1973-08-XX
Occ. Rank:	None			Presence:	Extirpated	Site Last Seen:	1987-09-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-01-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.16779 / -121.47193			Accuracy:	nonspecific area		
UTM:	Zone-10 N4225535 E633857			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 30 (M)			Acres:	38.5		
Location:	HOG SLOUGH BETWEEN CANAL RANCH & BRACK TRACT. ABOUT 4.75 AIR MILES SW OF THORNTON.						
Detailed Location:							
Ecological:							
General:	ONE PLANT WAS SEEN IN 1973, BUT IN 1987 SEARCH IT WAS REPORTED THAT THE ISLANDS THAT ONCE OCCURRED HERE ARE NOW UNDER WATER. OCCURRENCE IS NOW CONSIDERED EXTIRPATED.						
Owner/Manager:	PVT						

Occurrence No.	88	Map Index:	11362	EO Index:	19496	Element Last Seen:	1987-08-19
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	1987-08-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-10-25
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.15525 / -121.44049			Accuracy:	80 meters		
UTM:	Zone-10 N4224189 E636635			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 33 (M)			Acres:	0.0		
Location:	WOODBIDGE ECOLOGICAL RESERVE SOUTH OF WOODBRIDGE ROAD.						
Detailed Location:							
Ecological:	ON BERM IN ANNUALLY FLOODED POND GROWING WITH COCKLEBURRS AND GRASSES.						
General:	FEWER THAN 10 PLANTS FOUND IN 1987.						
Owner/Manager:	DFG-WOODBRIDGE ER						

Occurrence No.	89	Map Index:	11258	EO Index:	22272	Element Last Seen:	1992-07-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1992-07-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-01-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.17900 / -121.49518			Accuracy:	80 meters		
UTM:	Zone-10 N4226746 E631801			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 24 (M)			Acres:	0.0		
Location:	SOUTH MOKELUMNE RIVER, 1 MILE NORTH OF JUNCTION WITH HOG SLOUGH, WEST OF CANAL RANCH.						
Detailed Location:	SMALL BERM ISLAND IN RIVER BETWEEN STATEN ISLAND AND CANAL RANCH; MAPPED NEAR RIVER MILE 14.						
Ecological:	ON UPSTREAM END OF ISLAND GROWING WITH SALIX, CEPHALANTHUS, AND CORNUS STOLONIFERA. SOIL APPEARS TO BE PEAT OR PEAT/CLAY.						
General:	2 PLANTS FOUND IN 1987 BY DAINS. 3-4 PLANTS OBSERVED BY CLEMONS IN 1992.						
Owner/Manager:	PVT						



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Occurrence No.	90	Map Index:	11254	EO Index:	20782	Element Last Seen:	2009-07-31
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-07-31	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-05-25	
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25585 / -121.49904			Accuracy:	specific area		
UTM:	Zone-10 N4235268 E631324			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 25, NW (M)			Acres:	22.0		
Location:	SNODGRASS SLOUGH, FROM ABOUT 0.4 TO 1.1 AIR MILES NORTHEAST OF LOCKE.						
Detailed Location:	7 COLONIES MAPPED IN THE NW 1/4 OF SECTION 25 AND THE SW 1/4 OF THE SE 1/4 OF SECTION 24 ACCORDING TO MAPS FROM 1984, 1987, AND 1990, 2005 VEGCAMP COORDINATES, AND 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	TIDAL MARSH AT WATER'S EDGE. ASSOCIATED WITH CEPHALANTHUS OCCIDENTALIS, SALIX LASIOLEPIS, S. LUCIDA, S. EXIGUA, SCIRPUS ACUTUS, CONVOLVULUS SEPIUM, POLYGONUM, CORNUS SERICEA, RUBUS DISCOLOR, ALNUS RHOMBIFOLIA, FRAXINUS LATIFOLIA, ETC.						
General:	<10 PLANTS OBSERVED IN THE SW COLONY IN 1984. 9-15 PLANTS OBSERVED IN 1987. 6 PLANTS IN THE WESTERNMOST AND 8 IN THE SW COLONY IN 1990. 0.2% COVER OF HIBISCUS IN 1-5 ACRES IN CENTER OF EO IN 2005. 6 PLANTS IN 2009. INCLUDES FORMER EO #109.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						

Occurrence No.	91	Map Index:	11281	EO Index:	21533	Element Last Seen:	2017-07-24
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2017-07-24	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2018-01-23	
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27069 / -121.49655			Accuracy:	specific area		
UTM:	Zone-10 N4236919 E631515			Elevation (ft):	1		
PLSS:	T05N, R04E, Sec. 24 (M)			Acres:	32.0		
Location:	SNODGRASS SLOUGH AND LOST SLOUGH, ABOUT 1.1-2 AIR MILES NORTHEAST OF LOCKE.						
Detailed Location:	SEVERAL COLONIES MAPPED ALONG SLOUGH BANKS AND ISLANDS IN VICINITY OF THE CONFLUENCE OF SLOUGHS. MAPPED AS MANY POLYGONS BY CNDDDB PRIMARILY ACCORDING TO DWR DIGITAL DATA. INCLUDES FORMER OCCURRENCES #92 AND #180.						
Ecological:	TIDAL MARSH. OCCURRING ON BORDER OF TULES AND UPLAND VEGETATION. ASSOCIATED WITH CEPHALANTHUS OCCIDENTALIS, SALIX LASIOLEPIS, S. HINDSIANA, SCIRPUS ACUTUS, CORNUS SERICEA, CONVOLVULUS SEPIUM, TYPHA, RUBUS DISCOLOR, JUNCUS, ETC.						
General:	~50 PLANTS OBSERVED AT TWIN CITIES RD BRIDGE IN 1985. FOUR COLONIES OBSERVED IN 1987 WITH 3-5 PLANTS PER COLONY. UNKNOWN NUMBER SEEN IN 2005. 134 PLANTS SEEN THROUGHOUT SITE IN 2009. HUNDREDS OF PLANTS IN 2014. 1 IN N-MOST POLY IN 2017.						
Owner/Manager:	DPR-DELTA MEADOWS, TNC, UNK						



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Occurrence No.	107	Map Index:	24963	EO Index:	6304	Element Last Seen:	2009-09-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-01
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.29492 / -121.50875				Accuracy:	specific area	
UTM:	Zone-10 N4239589 E630404				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 11, E (M)				Acres:	28.0	
Location:	SNODGRASS SLOUGH, 0.6 TO 2 AIR MILES NNW OF TWIN CITIES ROAD BRIDGE.						
Detailed Location:	MAPPED BY CNDDB AS 7 POLYGONS ON BOTH SIDES OF THE SLOUGH. BASED ON A 1988 MAP BY DAINS, 2005 VEGCAMP COORDINATES, AND 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	ON THE EDGE OF SLOUGH AMONG TULE; NO LEVEE & NO OVERSTORY AT SITE. ASSOCIATES INCLUDE SCHOENOPLECTUS ACUTUS, SCIRPUS CALIFORNICUS, TYPHA LATIFOLIA, SALIX EXIGUA, S. LASIOLEPIS, ALNUS RHOMBIFOLIA, CEPHALANTHUS OCCIDENTALIS, & RUBUS.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 1988 AND 2005. 19 PLANTS OBSERVED IN 2009. 2001 HRUSA COLLECTION FROM "MIDDLE SNODGRASS SLOUGH, BETWEEN LAMBERT RD CROSSING AND TWIN CITIES RD CROSSING" ATTRIBUTED HERE. INCLUDES FORMER EO #108.						
Owner/Manager:	UNKNOWN						

Occurrence No.	136	Map Index:	50158	EO Index:	50158	Element Last Seen:	2016-07-26
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2016-07-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-22
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14141 / -121.48873				Accuracy:	specific area	
UTM:	Zone-10 N4222584 E632434				Elevation (ft):	0	
PLSS:	T03N, R04E, Sec. 1, NE (M)				Acres:	16.0	
Location:	SYCAMORE SLOUGH, BETWEEN 0.5-1.2 MILES EAST OF CONFLUENCE WITH SOUTH MOKELUMNE RIVER.						
Detailed Location:	SEVERAL COLONIES ALONG LEVEES AND CHANNEL ISLANDS. MAPPED BY CNDDB AS 10 POLYGONS ACCORDING TO A 1998 MAP BY HOLLEY, 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES, AND 2016 KWONG COORDINATES.						
Ecological:	TIDAL MARSH AND LEVEE RIPRAP ABOVE HIGH WATER MARK. ASSOCIATED WITH SCIRPUS, CYPERUS ERAGROSTIS, AND SORGHUM.						
General:	UNKNOWN NUMBER OF PLANTS SEEN IN SOUTHWESTERN POLYGON IN 1998. 2010 POPULATION NUMBERS FOR THE REMAINING POLYGONS FROM WEST TO EAST: 2, 5, 1, 12, 4, 5, 6, 3, AND 1. 2 PLANTS OBSERVED ON WESTERNMOST ISLAND IN 2016.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	137	Map Index:	50159	EO Index:	50159	Element Last Seen:	1998-10-29
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1998-10-29
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-02-11
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14508 / -121.43669			Accuracy:	80 meters		
UTM:	Zone-10 N4223066 E636987			Elevation (ft):	0		
PLSS:	T03N, R05E, Sec. 04, NW (M)			Acres:	0.0		
Location:	SYCAMORE SLOUGH, ABOUT 3.7 AIR MILES EAST OF THE SOUTH MOKELUMNE RIVER, NORTH EDGE OF TERMINOUS TRACT.						
Detailed Location:	NEAR THE BASE OF A LEVEE IN DISTURBED AREA SUBJECT TO PERPETUAL TIDAL AND RECREATIONAL WAVE FORCES.						
Ecological:							
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 1998.						
Owner/Manager:	UNKNOWN						
Occurrence No.	140	Map Index:	63298	EO Index:	63390	Element Last Seen:	2014-08-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2014-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-22
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25691 / -121.42673			Accuracy:	specific area		
UTM:	Zone-10 N4235491 E637650			Elevation (ft):	0		
PLSS:	T05N, R05E, Sec. 27, NW (M)			Acres:	6.0		
Location:	COSUMNES RIVER, 0.4 MILE EAST OF CROSSING OF WESTERN PACIFIC RR, JUST NORTHEAST OF MOKELUMNE CITY.						
Detailed Location:	ON EXPOSED MUD FLAT IN THE NW 1/4 OF NW 1/4 OF SECTION 27.						
Ecological:	MUD FLAT. FOUND WITH SCIRPUS ACUTUS, CEPHALANTHUS OCCIDENTALIS, AND LUDWIGIA PEPLOIDES.						
General:	WEST POLYGON: 4 INDIVIDUALS OBSERVED IN 2005 AND 2011, 5 IN 2014. EAST POLYGON: 1 PLANT SEEN IN 2014.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	141	Map Index:	63299	EO Index:	63391	Element Last Seen:	2014-08-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2014-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-19
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25756 / -121.43721			Accuracy:	specific area		
UTM:	Zone-10 N4235547 E636731			Elevation (ft):	0		
PLSS:	T05N, R05E, Sec. 28, N (M)			Acres:	1.0		
Location:	COSUMNES RIVER, 0.25 MILE WEST OF CROSSING OF WESTERN PACIFIC RR, NORTH OF MOKELUMNE CITY.						
Detailed Location:	MAPPED NEAR THE NORTH EDGE OF THE N 1/2 OF SECTION 28 ACCORDING TO 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	BARE SOIL OF EXPOSED MUD FLAT. LOWER STEMS IN WATER OF THE COSUMNES RIVER. ASSOCIATED WITH SALIX EXIGUA, ACER, QUERCUS LOBATA, AND GRAPES.						
General:	1 INDIVIDUAL OBSERVED IN 2005 AND 2010. 2 PLANTS OBSERVED IN 2014.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	142	Map Index:	63324	EO Index:	63416	Element Last Seen:	2005-08-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2005-08-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-19
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.31859 / -121.74364				Accuracy:	specific area	
UTM:	Zone-10 N4241910 E609827				Elevation (ft):	0	
PLSS:	T06N, R02E, Sec. 34, SW (M)				Acres:	30.7	
Location:	ALONG SOUTHERN EDGE OF HASS SLOUGH, ON NORTH SIDE OF PETERS POCKET; 1.0-1.4 MI NORTHWEST OF DUCK SLOUGH.						
Detailed Location:	MAPPED IN THE NW 1/4 OF THE SE 1/4 OF SECTION 33 ACCORDING TO COORDINATES AND SITE DESCRIPTION PROVIDED BY HICKSON.						
Ecological:	SCATTERED INDIVIDUALS ALONG SLOUGH BANK RIGHT AT WATER LINE. FOUND WITH POLYGONUM PUNCTATUM, SCIRPUS ACUTUS, JUNCUS XIPHIODES, MENTHA ARVENSIS, PLUCHEA ODORATA, AND ROSA CALIFORNICA.						
General:	ABOUT 10 SCATTERED INDIVIDUALS OBSERVED IN 2005.						
Owner/Manager:	PVT						
Occurrence No.	149	Map Index:	70656	EO Index:	71566	Element Last Seen:	2007-08-23
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2007-08-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-07
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.22132 / -121.60111				Accuracy:	80 meters	
UTM:	Zone-10 N4231296 E622451				Elevation (ft):	0	
PLSS:	T04N, R03E, Sec. 01, E (M)				Acres:	0.0	
Location:	E BANK OF STEAMBOAT SLOUGH NEAR RIVER MILE 19.5, APPROXIMATELY 0.5 MILE UPSTREAM OF HOGBACK ISLAND RECREATION FACILITY.						
Detailed Location:	GROWING IN RIPRAP ALONG THE LEVEE NEAR THE WATERLINE. MAPPED ACCORDING TO COORDINATE INFORMATION PROVIDED BY STRINGER 2007.						
Ecological:	THE LEVEE SLOPE IS VEGETATED PRIMARILY WITH EQUISETUM AND THE BOTTOM OF THE LEVEE HAS SCATTERED BUTTON BUSH, OREGON ASH, AND BOX ELDER SAPLINGS.						
General:	1 PLANT SEEN IN 2007. IT WAS THRIVING IN 2007 WITH SEVERAL FLOWERS.						
Owner/Manager:	PVT						



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Occurrence No.	150	Map Index:	70657	EO Index:	71567	Element Last Seen:	2007-09-12
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2007-09-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-01-14
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.27635 / -121.54129			Accuracy:	80 meters		
UTM:	Zone-10 N4237484 E627591			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 15, SW (M)			Acres:	0.0		
Location:	LEFT BANK OF SACRAMENTO RIVER AT RIVER MILE 29.8.						
Detailed Location:	GROWING IN RIPRAP ALONG THE LEVEE NEAR THE WATERLINE. MAPPED ACCORDING TO COORDINATE INFORMATION PROVIDED BY STRINGER 2007.						
Ecological:	ASSOCIATES INCLUDE WILLOW AND BUTTON BUSH.						
General:	1 PLANT IN 2007. LEVEE SEGMENT IS SCHEDULED TO BE REHABILITATED, WHICH WILL DESTROY THE ROSE MALLOW.						
Owner/Manager:	UNKNOWN						
Occurrence No.	176	Map Index:	82656	EO Index:	83659	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento						
Lat/Long:	38.24133 / -121.49759			Accuracy:	specific area		
UTM:	Zone-10 N4233659 E631477			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 36, NW (M)			Acres:	1.0		
Location:	SNODGRASS SLOUGH JUST SOUTH OF DELTA CROSS CHANNEL CONFLUENCE, EAST OF WALNUT GROVE.						
Detailed Location:	MAPPED ON THE WEST SIDE OF THE SLOUGH IN THE NE 1/4 OF THE NW 1/4 OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPARIAN ON RIPRAP.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	177	Map Index:	82657	EO Index:	83660	Element Last Seen:	2009-08-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-14
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.22316 / -121.49261			Accuracy:	specific area		
UTM:	Zone-10 N4231649 E631946			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 01, NE (M)			Acres:	1.0		
Location:	SOUTH MOKELUMNE RIVER, ABOUT 0.35 AIR MILE SSW OF NEW HOPE LANDING.						
Detailed Location:	MAPPED IN THE SW 1/4 OF THE NE 1/4 OF SECTION 1 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EXPOSED LOG JUST OFF SHORE. TIDAL MARSH WITH JUNCUS EFFUSUS AND EPILOBIUM.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	178	Map Index:	82658	EO Index:	83661	Element Last Seen:	2009-08-03
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14403 / -121.47584				Accuracy:	specific area	
UTM:	Zone-10 N4222893 E633558				Elevation (ft):	0	
PLSS:	T03N, R05E, Sec. 06, NW (M)				Acres:	3.0	
Location:	SYCAMORE SLOUGH, ABOUT 1.5 AIR MILES EAST OF CONFLUENCE WITH SOUTH MOKELUMNE RIVER.						
Detailed Location:	ALONG NORTH SIDE OF SLOUGH AND ON THE NORTH SIDE OF AN ISLAND WITHIN THE SLOUGH. THREE COLONIES MAPPED BY CNDDDB AS TWO POLYGONS IN THE NE 1/4 OF THE NW 1/4 OF SECTION 6 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	NORTHERN POLYGON: LEVEE RIPRAP ABOVE HIGH WATER MARK. SOUTHERN POLYGON: TIDAL MARSH WITH SCIRPUS, GROWING IN MIDDLE OF A TULE DOMINATED ISLAND.						
General:	3 PLANTS OBSERVED IN NORTHERN POLYGON AND 4 PLANTS OBSERVED IN SOUTHERN POLYGON IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	179	Map Index:	82659	EO Index:	83662	Element Last Seen:	2009-09-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26995 / -121.47710				Accuracy:	specific area	
UTM:	Zone-10 N4236864 E633218				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 19, NW (M)				Acres:	1.0	
Location:	UNNAMED WATERWAY ABOUT 1 AIR MILE EAST OF CONFLUENCE OF SNODGRASS SLOUGH, ABOUT 2.6 AIR MILES NORTHEAST OF WALNUT GROVE.						
Detailed Location:	TWO COLONIES MAPPED IN THE APPROXIMATE SE 1/4 OF THE NW 1/4 OF SECTION 19 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EASTERN COLONY: FALLEN LOG. WESTERN COLONY: TIDAL MARSH WITH TYPHA, SALIX EXIGUA, AND PASPALUM.						
General:	1 PLANT OBSERVED IN EASTERN COLONY AND 3 PLANTS OBSERVED IN WESTERN COLONY IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	181	Map Index:	82661	EO Index:	83664	Element Last Seen:	2009-08-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.37332 / -121.52226				Accuracy:	specific area	
UTM:	Zone-10 N4248270 E629083				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 15, NE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.4 MILE NORTH OF HOOD.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE APPROXIMATE SE 1/4 OF THE NE 1/4 OF SECTION 15 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	ABOVE RIPRAP BANK. ASSOCIATED WITH SALIX GOODDINGII AND CEPHALANTHUS.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	182	Map Index:	82662	EO Index:	83665	Element Last Seen:	2009-08-07
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-07
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Yolo						
Lat/Long:	38.34024 / -121.56315				Accuracy:	specific area	
UTM:	Zone-10 N4244544 E625569				Elevation (ft):	0	
PLSS:	T06N, R04E, Sec. 29, SE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.7 AIR MILE NNE OF COURTLAND.						
Detailed Location:	MAPPED ON THE NORTHWEST BANK OF THE RIVER IN THE NW 1/4 OF THE SE 1/4 OF SECTION 29 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP BANK WITH CEPHALANTHUS AND PASPALUM.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	183	Map Index:	82663	EO Index:	83667	Element Last Seen:	2009-08-12
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2009-08-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32668 / -121.57457				Accuracy:	specific area	
UTM:	Zone-10 N4243023 E624594				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 32, NW (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER JUST SOUTH OF COURTLAND, EAST OF MORGANS LANDING.						
Detailed Location:	TWO COLONIES MAPPED ON THE EAST BANK OF THE RIVER IN THE SW 1/4 OF THE NW 1/4 OF SECTION 32 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAPPED LEVEE.						
General:	1 PLANT OBSERVED IN EACH COLONY IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	184	Map Index:	82665	EO Index:	83669	Element Last Seen:	2009-08-12
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2009-08-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31991 / -121.57689				Accuracy:	specific area	
UTM:	Zone-10 N4242269 E624402				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 31, SE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER JUST WEST OF PAINTERSVILLE, ABOUT 0.7 AIR MILE SSW OF COURTLAND.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE APPROXIMATE SE 1/4 OF THE SE 1/4 OF SECTION 31 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAPED LEVEE.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	185	Map Index:	82669	EO Index:	83673	Element Last Seen:	2017-07-18
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2017-07-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2018-01-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31776 / -121.50180				Accuracy:	specific area	
UTM:	Zone-10 N4242133 E630970				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 02, NE (M)				Acres:	1.0	
Location:	ABOUT 2.25 AIR MILES WSW OF POINT PLEASANT AND 2 AIR MILES NORTHWEST OF KUHN RANCH, SOUTH OF STONE LAKE.						
Detailed Location:	THREE COLONIES MAPPED BY CNDDDB AS ONE POLYGON IN THE NE 1/4 OF THE NE 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPARIAN. ASSOCIATES INCLUDE SCHOENOPLECTUS, TYPHA, SALIX, QUERCUS LOBATA, LUDWIGIA PEPLOIDES, WATER HYACINTH, ETC.						
General:	5 PLANTS OBSERVED IN 2009, 5-10 OBSERVED IN 2017.						
Owner/Manager:	USFWS-STONE LAKES NWR?						



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Occurrence No.	186	Map Index:	82670	EO Index:	83674	Element Last Seen:	2009-08-11
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25628 / -121.51468				Accuracy:	specific area	
UTM:	Zone-10 N4235293 E629955				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 26, NE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.4-0.5 AIR MILE NNW OF LOCKE.						
Detailed Location:	TWO COLONIES MAPPED ON THE EAST BANK OF THE RIVER IN THE NW 1/4 OF THE NE 1/4 OF SECTION 26 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP ABOVE HIGH WATER MARK. ASSOCIATED WITH CEPHALANTHUS, ROSA, AND PLATANUS.						
General:	1 PLANT OBSERVED IN NORTHWEST COLONY AND 2 PLANTS OBSERVED IN SOUTHEAST COLONY IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	187	Map Index:	82671	EO Index:	83675	Element Last Seen:	2009-09-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Liberty Island (3812136)						
County Summary:	Yolo						
Lat/Long:	38.33088 / -121.64884				Accuracy:	specific area	
UTM:	Zone-10 N4243392 E618095				Elevation (ft):	0	
PLSS:	T06N, R03E, Sec. 28, S (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, ABOUT 2 AIR MILES WEST OF VALDEZ.						
Detailed Location:	MAPPED ON THE WEST SIDE OF THE CHANNEL AT THE BOTTOM OF THE S 1/2 OF SECTION 28 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	CHANNEL BANK, FAIRLY HIGH ABOVE WATER LINE.						
General:	2 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	189	Map Index:	82674	EO Index:	83678	Element Last Seen:	2009-08-25
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42509 / -121.49989				Accuracy:	specific area	
UTM:	Zone-10 N4254046 E630944				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 25, SW (M)				Acres:	4.0	
Location:	STONE LAKES NATIONAL WILDLIFE REFUGE, ABOUT 1.5 AIR MILES ENE OF CLARKSBURG.						
Detailed Location:	5 COLONIES MAPPED BY CNDDDB AS 4 POLYGONS IN THE WEST 1/2 OF THE SW 1/4 OF SECTION 25 AND THE NW 1/4 OF THE NW 1/4 OF SECTION 36.						
Ecological:	FRESHWATER MARSH AND RIPARIAN HABITATS. ASSOCIATED WITH SALIX EXIGUA, SCIRPUS, CEPHALANTHUS, AND VITIS.						
General:	2009 POPULATION NUMBERS FOR POLYGONS FROM NORTH TO SOUTH: 19, 5, 2, AND 3.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	190	Map Index:	82676	EO Index:	83679	Element Last Seen:	2009-06-08
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.42331 / -121.48754				Accuracy:	specific area	
UTM:	Zone-10 N4253867 E632026				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 36, NE (M)				Acres:	1.0	
Location:	STONE LAKES NATIONAL WILDLIFE REFUGE, WEST SIDE OF I-5, ABOUT 2.2 AIR MILES EAST OF CLARKSBURG.						
Detailed Location:	MAPPED IN THE NW 1/4 OF THE NE 1/4 OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	TYPHA MARSH NEAR FREEWAY.						
General:	7 PLANTS OBSERVED IN 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	191	Map Index:	82677	EO Index:	83681	Element Last Seen:	2009-08-25
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-24
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41816 / -121.50007				Accuracy:	specific area	
UTM:	Zone-10 N4253278 E630941				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 36, NW (M)				Acres:	1.0	
Location:	STONE LAKES NATIONAL WILDLIFE REFUGE, ABOUT 1.4 AIR MILES EAST OF CLARKSBURG.						
Detailed Location:	MAPPED IN THE SW 1/4 OF THE NW 1/4 OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	FRESHWATER MARSH WITH SALIX GOODDINGII, VITIS, AND SCIRPUS ACUTUS.						
General:	12 LARGE CLUMPS OF PLANTS OBSERVED IN 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						

Occurrence No.	192	Map Index:	82679	EO Index:	83682	Element Last Seen:	2009-09-01
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-14
Quad Summary:	Clarksburg (3812145)						
County Summary:	Yolo						
Lat/Long:	38.43114 / -121.60406				Accuracy:	specific area	
UTM:	Zone-10 N4254576 E621840				Elevation (ft):	5	
PLSS:	T07N, R03E, Sec. 25, NW (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, ABOUT 3.35 AIR MILES SSW OF ARCADE.						
Detailed Location:	MAPPED ON THE WEST BANK OF THE CHANNEL IN THE NW 1/4 OF THE NW 1/4 OF SECTION 25 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	CHANNEL BANK.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	193	Map Index:	82680	EO Index:	83683	Element Last Seen:	2009-08-25
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-25
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.41318 / -121.51926				Accuracy:	specific area	
UTM:	Zone-10 N4252698 E629275				Elevation (ft):	10	
PLSS:	T07N, R04E, Sec. 34, SE (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER JUST SOUTHEAST OF CLARKSBURG, ABOUT 0.5 AIR MILE SOUTHEAST OF CLARKSBURG MARINA.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE NE 1/4 OF THE SE 1/4 OF SECTION 34 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP.						
General:	2 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	194	Map Index:	82681	EO Index:	83684	Element Last Seen:	2009-08-25
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-25
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.40761 / -121.51564				Accuracy:	specific area	
UTM:	Zone-10 N4252085 E629600				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 02, NW (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.9 AIR MILE SSE OF CLARKSBURG MARINA.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE NW 1/4 OF THE NW 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP.						
General:	2 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	195	Map Index:	82682	EO Index:	83685	Element Last Seen:	2009-08-25
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-08-25
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-25
Quad Summary:	Clarksburg (3812145)						
County Summary:	Sacramento						
Lat/Long:	38.39963 / -121.51248				Accuracy:	specific area	
UTM:	Zone-10 N4251204 E629890				Elevation (ft):	10	
PLSS:	T06N, R04E, Sec. 02, SW (M)				Acres:	1.0	
Location:	SACRAMENTO RIVER, ABOUT 0.65 AIR MILE NORTH OF ROSEBUD LANDING.						
Detailed Location:	MAPPED ON THE EAST BANK OF THE RIVER IN THE NE 1/4 OF THE SW 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	PILING.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	200	Map Index:	A8139	EO Index:	109923	Element Last Seen:	2013-08-24
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:	2013-08-24	Record Last Updated:	2018-01-19
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.14195 / -121.46784			Accuracy:	specific area		
UTM:	Zone-10 N4222674 E634264			Elevation (ft):	0		
PLSS:	T03N, R05E, Sec. 6, NE (M)			Acres:	1.0		
Location:	NORTH SIDE OF SYCAMORE SLOUGH, ABOUT 1.9 AIR MILES EAST OF THE MOKELUMNE RIVER AND 0.9 AIR MILE SOUTH OF WOODBRIDGE RD.						
Detailed Location:	MAPPED BY CNDDDB FROM 2013 SLAKEY COORDINATES, IN THE NE 1/4 OF THE NE 1/4 OF PROJECTED SECTION 6.						
Ecological:	TIDAL MARSH. GROWING AT WATER LEVEL ON A RIP-RAP LEVEE. ASSOCIATED WITH SCHOENOPLECTUS ACUTUS VAR. OCCIDENTALIS AND CYPERUS.						
General:	8 PLANTS OBSERVED IN 2013.						
Owner/Manager:	PVT						



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Sidalcea keckii

Element Code: PDMAL110D0

Keck's checkerbloom

Listing Status: **Federal:** Endangered

CNDDB Element Ranks: **Global:** G2

State: None

State: S2

Other: Rare Plant Rank - 1B.1, SB_RSABG-Rancho Santa Ana Botanic Garden

Habitat: **General:** CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.

Micro: GRASSY SLOPES IN BLUE OAK WOODLAND. ON SERPENTINE-DERIVED, CLAY SOILS, AT LEAST SOMETIMES. 85-505 M.

Occurrence No.	21	Map Index: B3674	EO Index: 116587	Element Last Seen:	2002-04-30
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2002-04-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-08-12

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.4221 / -121.66581	Accuracy:	3/5 mile
UTM:	Zone-10 N4253492 E616466	Elevation (ft):	12
PLSS:	T07N, R03E, Sec. 29 (M)	Acres:	776.0

Location: GLIDE RANCH; 2.5 MILES SSE FROM INTERSECTION OF ROAD 105 AND ROAD 38.

Detailed Location: MAPPED AS BEST GUESS ABOUT 2.5 AIR MILES SSE OF INTERSECTION OF ROAD105/ROAD 38 WITHIN THE GLIDE TULE RANCH UNIT OF THE YOLO BYPASS WILDLIFE AREA.

Ecological: FLAT PLAIN, VERTISOLS, GRASSLANDS. LOLIUM MULTIFLORUM, HEMIZONIA CONGESTA, HESPEREVAX CAULESCENS, TRIFOLIUM WILDENOVII, LOTUS WRANGELIANUS, AND LASTHENIA GLABRATA.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2002 SOLOMESHCH COLLECTION. IDENTIFIED AS SIDALCEA KECKII BY STEVEN HILL IN 2015.

Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No.	22	Map Index: B3675	EO Index: 116589	Element Last Seen:	2007-04-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2007-04-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-08-12

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.43602 / -121.67027	Accuracy:	80 meters
UTM:	Zone-10 N4255031 E616055	Elevation (ft):	18
PLSS:	T07N, R03E, Sec. 20, SW (M)	Acres:	5.0

Location: TULE RANCH PROPERTY; APPROXIMATELY 2.2 AIR MILES SW OF THE INTERSECTION OF ROAD 106 AND ROAD 38.

Detailed Location: MAPPED ACCORDING TO 2007 DEAN COORDINATES.

Ecological: IN GRASSLANDS CONNECTING VERNAL POOLS. GROWING WITH BROMUS HORDEACEUS, HORDEUM MARINUM, LOLIUM MULTIFLORUM.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2007 DEAN ET AL. COLLECTION; PLANTS NOTED AS "MEDIUM-ABUNDANT." IDENTIFIED AS SIDALCEA KECKII BY STEVEN HILL IN 2015.

Owner/Manager: DFG-YOLO BYPASS WA



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Navarretia leucocephala ssp. bakeri

Element Code: PDPLM0C0E1

Baker's navarretia

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G4T2
State: None **State:** S2
Other: Rare Plant Rank - 1B.1
Habitat: **General:** CISMONTANE WOODLAND, MEADOWS AND SEEPS, VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND, LOWER MONTANE CONIFEROUS FOREST.
Micro: VERNAL POOLS AND SWALES; ADOBE OR ALKALINE SOILS. 3-1680 M.

Occurrence No. 27 **Map Index:** 53720 **EO Index:** 53720 **Element Last Seen:** 2009-04-19
Occ. Rank: Excellent **Presence:** Presumed Extant **Site Last Seen:** 2009-04-19
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2013-09-05

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.43679 / -121.67070 **Accuracy:** specific area
UTM: Zone-10 N4255116 E616015 **Elevation (ft):** 15
PLSS: T07N, R03E, Sec. 20, W (M) **Acres:** 105.0

Location: GLIDE TULE ECOLOGICAL RESERVE, EAST OF THE SACRAMENTO NORTHERN CANAL, WEST EDGE OF THE YOLO BYPASS.
Detailed Location: NUMEROUS PLANTS SCATTERED THROUGHOUT THE SE 1/4 OF SECTION 19 AND THE W 1/2 OF SECTION 20.
Ecological: OCCURRING IN VERNAL POOLS AND IN MESIC GRASSLAND. ASSOCIATES INCLUDE POGOGYNE DOUGLASII, LASTHENIA FREMONTII, L. GLABRATA, AND LOLIUM MULTIFLORUM.
General: MORE THAN 1000 PLANTS OBSERVED IN 2003. UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.
Owner/Manager: DFG-YOLO BYPASS WA

Occurrence No. 47 **Map Index:** 83671 **EO Index:** 84700 **Element Last Seen:** 2005-06-13
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 2005-06-13
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2011-09-12

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long: 38.45755 / -121.67412 **Accuracy:** 80 meters
UTM: Zone-10 N4257415 E615683 **Elevation (ft):** 20
PLSS: T07N, R03E, Sec. 17, NW (M) **Acres:** 0.0

Location: YOLO BYPASS WILDLIFE AREA; JUST SOUTH OF JUNCTION OF ROAD 38 (COUNTY ROAD 106) AND COUNTY ROAD 105, ~1 MILE SW OF SAXON.
Detailed Location: MAPPED BY CNDDB IN THE NW 1/4 OF THE NW 1/4 OF SECTION 17 ACCORDING TO 2005 COORDINATES.
Ecological: VERNAL POOL WITH RELATIVELY DENSE CENTER. ASSOCIATED WITH ERYNGIUM, DOWNINGIA BICORNUTA, ELEOCHARIS, EPILOBIUM, MALVA, PLAGIOBOTHRYIS STIPITATUS, AND PSILOCARPUS BREVISSIMUS.
General: OBSERVED IN 2005 DURING A VEGETATION SURVEY; 7% COVER OF NAVARRETIA LEUCOCEPHALA SSP. BAKERI IN PLOT.
Owner/Manager: DFG-YOLO BYPASS WA

Limosella australis

Element Code: PDSCR10030

Delta mudwort

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G4G5
State: None **State:** S2
Other: Rare Plant Rank - 2B.1
Habitat: **General:** RIPARIAN SCRUB, MARSHES AND SWAMPS.



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Micro: USUALLY ON MUD BANKS OF THE DELTA IN MARSHY OR SCRUBBY RIPARIAN ASSOCIATIONS; OFTEN WITH LILAEOPSIS MASONII. 0-5 M.

Occurrence No.	7	Map Index:	10883	EO Index:	9611	Element Last Seen:	1990-08-20
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1990-08-20		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1995-11-13		

Quad Summary: Rio Vista (3812126)

County Summary: Solano

Lat/Long:	38.23361 / -121.66967	Accuracy:	specific area
UTM:	Zone-10 N4232571 E616430	Elevation (ft):	5
PLSS:	T05N, R03E, Sec. 32 (M)	Acres:	95.4

Location: MINER SLOUGH WILDLIFE AREA, CONFLUENCE OF MINER SLOUGH AND CACHE SLOUGH, SOUTH OF LIBERTY ISLAND.

Detailed Location:

Ecological: ON SOUTH-FACING BANKS OF TULE ISLANDS, INUNDATED AT HIGH TIDE AND EXPOSED AT LOW TIDE. ASSOCIATED WITH LILAEOPSIS MASONII, HYDROCOTYLE VERTICILLATA, SAMOLUS FLORIBUNDUS, SCIRPUS, PASPALUM, JUNCUS CYPERUS, ELEOCHARIS, AND HYPERICUM.

General: OBSERVED 1985 AND 1990 DURING LILAEOPSIS MASONII SURVEYS.

Owner/Manager: DFG-MINER SLOUGH WA

Occurrence No.	21	Map Index:	10855	EO Index:	7761	Element Last Seen:	1990-07-26
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1990-07-26		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1993-12-29		

Quad Summary: Rio Vista (3812126)

County Summary: Sacramento

Lat/Long:	38.13517 / -121.68693	Accuracy:	80 meters
UTM:	Zone-10 N4221627 E615074	Elevation (ft):	0
PLSS:	T03N, R03E, Sec. 06, NW (M)	Acres:	0.0

Location: EAST BANK OF SACRAMENTO RIVER, 2.5 KM (1.5 MI) SOUTH OF THE RIO VISTA BRIDGE.

Detailed Location: SANDY BEACH 1.5 MILES SOUTH OF JUNCTION OF HWY 160 AND HWY 12 ON THE WEST SHORE OF BRANNON ISLAND.

Ecological: GROWING IN ASSOCIATION WITH SYMPHYOTRICHUM LENTUM, LILAEOPSIS MASONII, MIMULUS GUTTATUS, SCIRPUS, PHRAGMITES, POLYGONUM, JUNCUS, CYPERUS, PLANTAGO, CYNODON, HELENIIUM, PASPALUM, ARUNDO, SALIX, DISTICHLIS, VERBENA, AND EQUISETUM.

General: OBSERVED DURING LILAEOPSIS MASONII SURVEY IN 1990. AREA BETWEEN SITE AND BRIDGE IS UNSURVEYED, ADDITIONAL PLANTS MAY OCCUR.

Owner/Manager: PVT



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Occurrence No.	27	Map Index:	24968	EO Index:	29610	Element Last Seen:	1994-01-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-01-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-28
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18882 / -121.48503				Accuracy:	80 meters	
UTM:	Zone-10 N4227850 E632672				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, SW (M)				Acres:	0.0	
Location:	SOUTH MOKELUMNE RIVER, ON ISLAND 0.7 KM SW OF BEAVER SLOUGH.						
Detailed Location:	SMALL ISLAND JUST NORTH OF RIVER MILE 15.						
Ecological:	ASSOCIATED WITH LATHYRUS JEPSONII JEPSONII AND SAGITTARIA SP.						
General:	2' BY 3' PATCH GROWING WITH SAGITTARIA SP IN 1994.						
Owner/Manager:	UNKNOWN						

Occurrence No.	28	Map Index:	28358	EO Index:	29532	Element Last Seen:	1994-01-12
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-01-12
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19318 / -121.48079				Accuracy:	80 meters	
UTM:	Zone-10 N4228340 E633035				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, SW (M)				Acres:	0.0	
Location:	SOUTH MOKELUMNE RIVER, ABOUT 0.1 MI S OF BEAVER SLOUGH, 0.45 MI N OF RIVER MILE 15.						
Detailed Location:	PLANTS FOUND UNDER A LARGE SALIX SP.						
Ecological:							
General:	UNKNOWN HOW MANY PLANTS SEEN IN 1994.						
Owner/Manager:	UNKNOWN						

Occurrence No.	29	Map Index:	23237	EO Index:	22584	Element Last Seen:	1994-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1994-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1996-10-01
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.15735 / -121.53594				Accuracy:	80 meters	
UTM:	Zone-10 N4224286 E628268				Elevation (ft):	5	
PLSS:	T04N, R04E, Sec. 34, NW (M)				Acres:	0.0	
Location:	ISLAND IN NORTH MOKELUMNE RIVER, APPROX 6 KM (3.6 MI) DUE EAST OF ISLETON.						
Detailed Location:	ALONG SW SHORELINE OF ISLAND.						
Ecological:	ASSOCIATED WITH SAGITTARIA SANFORDII AND LILAEOPSIS MASONII.						
General:	UNKNOWN HOW MANY PLANTS SEEN IN 1994.						
Owner/Manager:	PVT						



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Occurrence No.	42	Map Index:	50172	EO Index:	50172	Element Last Seen:	2001-04-14
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2001-04-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2003-02-12
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento						
Lat/Long:	38.23061 / -121.49440			Accuracy:	80 meters		
UTM:	Zone-10 N4232473 E631776			Elevation (ft):	0		
PLSS:	T05N, R04E, Sec. 36, SE (M)			Acres:	0.0		
Location:	LOCATED ON SOUTHWEST SIDE OF MCCORMACK-WILLIAMSON ALONG DEAD HORSE CUT, 0.5 MILE SOUTH OF SNODGRASS SLOUGH.						
Detailed Location:	AT BASE OF LEVEE.						
Ecological:	AT BASE OF LEVEE ABOVE THE LOW TIDE MARK, WHERE IT MAY BE INUNDATED DURING TIDAL CYCLES.						
General:	1 PLANT SEEN IN 2000.						
Owner/Manager:	TNC, UNKNOWN						
Occurrence No.	59	Map Index:	82558	EO Index:	83572	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-16
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20808 / -121.48565			Accuracy:	specific area		
UTM:	Zone-10 N4229987 E632582			Elevation (ft):	0		
PLSS:	T04N, R05E, Sec. 07, SW (M)			Acres:	1.0		
Location:	MOKELUMNE RIVER, ABOUT 1.3 RIVER MI NW OF CONFLUENCE WITH BEAVER SLOUGH, IN BETWEEN STATEN ISLAND AND NEW HOPE TRACT.						
Detailed Location:	MAPPED AS TWO POLYGONS BASED ON 2010 DIGITAL DATA FROM CA DEPT OF WATER RESOURCES.						
Ecological:	ON EXPOSED LOG STUMPS AT WATERS EDGE WITH JUNCUS EFFUSUS, CYPERUS ERAGROSTIS AND PASPALUM.						
General:	THREE DENSE PATCHES OF APPROXIMATELY 1 SQ M EACH SEEN IN BOTH POLYGONS IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						
Occurrence No.	60	Map Index:	82559	EO Index:	83577	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-05-16
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.21493 / -121.49628			Accuracy:	specific area		
UTM:	Zone-10 N4230731 E631639			Elevation (ft):	0		
PLSS:	T04N, R04E, Sec. 12, NW (M)			Acres:	1.0		
Location:	MOKELUMNE RIVER, ABOUT 0.95 AIR MI SSW OF NEW HOPE LANDING, IN BETWEEN STATEN ISLAND AND NEW HOPE TRACT.						
Detailed Location:	MAPPED BASED ON 2010 DIGITAL DATA FROM CA DEPT OF WATER RESOURCES.						
Ecological:	EXPOSED LOGS.						
General:	SMALL DENSE PATCHES ON LOGS SEEN IN 2009.						
Owner/Manager:	TNC-COSUMNES RIVER PRESERVE						



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Occurrence No.	62	Map Index:	90215	EO Index:	91225	Element Last Seen:	1993-07-16
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1993-07-16	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-29	
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.27320 / -121.49676				Accuracy:	2/5 mile	
UTM:	Zone-10 N4237197 E631492				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 24, N (M)				Acres:	0.0	
Location:	DELTA MEADOWS RIVER PARK, 2 AIR MILES NORTHEAST OF LOCKE, JUST SOUTH OF TWIN CITIES BRIDGE, SNODGRASS SLOUGH.						
Detailed Location:	LOCALITY CONTINUED: "ALONG NW EDGE OF N-MOST ISLAND IN PARK." EXACT LOCATION UNKNOWN. UNSURE IF N-MOST ISLAND REFERS TO PENINSULA JUST SOUTH OF BRIDGE OR FIRST ISLAND TO THE SOUTH; MAPPED BY CNDDB TO INCLUDE BOTH OPTIONS.						
Ecological:	FRESHWATER MARSH. ASSOCIATED WITH GREEN ALGAE.						
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1993 COLLECTION BY BOWCUTT. NEEDS FIELDWORK.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						

Sagittaria sanfordii

Element Code: PMALI040Q0

Sanford's arrowhead

Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G3
	State:	None		State:	S3
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive			
Habitat:	General:	MARSHES AND SWAMPS.			
	Micro:	IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-605 M.			

Occurrence No.	16	Map Index:	24535	EO Index:	4949	Element Last Seen:	2004-07-08
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2004-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-08-12
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47838 / -121.39739				Accuracy:	specific area	
UTM:	Zone-10 N4260111 E639789				Elevation (ft):	35	
PLSS:	T07N, R05E, Sec. 11 (M)				Acres:	19.6	
Location:	ALONG AND BETWEEN BEACON CREEK AND ELDER CREEK, EAST OF POWER INN ROAD, ELK GROVE.						
Detailed Location:	MAPPED AS FIVE POLYGONS: TWO ALONG BEACON CREEK BETWEEN POWER INN ROAD AND RR TRACKS, ONE BETWEEN THE TWO CREEKS, AND TWO ALONG ELDER CREEK ON EITHER SIDE OF RR TRACKS. MAPPED FROM THE SW 1/4 OF SECTION 11 TO THE SW 1/4 OF SECTION 1.						
Ecological:	GROWING IN FLOWING STREAM, IN CEMENT-LINED CHANNEL WITH MUD, AND DRAINAGE CHANNEL. ASSOCIATED WITH ALISMA PLANTAGO-AQUATICUM, LUDWIGIA PEPLOIDES, LEPTOCHLOA FASCICULARIS, ECHINOCHLOA CRUS-GALLII, TYPHA LATIFOLIA, LEMNA, ETC.						
General:	ALONG ELDER CREEK, 400+ PLANTS SEEN IN 1992 AND "HUNDREDS" IN 2004. ABOUT 100 PLANTS EACH SEEN IN 2004 AT EASTERN BEACON CREEK SITE AND AT SITE BETWEEN THE TWO CREEKS. SEE CNDDB FOR FULL POPULATION DETAIL. INCLUDES FORMER EO #17.						
Owner/Manager:	PVT, ELK GROVE SCHOOL DIST						



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Occurrence No.	18	Map Index:	24539	EO Index:	17243	Element Last Seen:	1996-08-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1996-08-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:	2009-02-17		
Quad Summary:	Elk Grove (3812143), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45161 / -121.38856			Accuracy:	specific area		
UTM:	Zone-10 N4257154 E640611			Elevation (ft):	40		
PLSS:	T07N, R05E, Sec. 24, N (M)			Acres:	148.0		
Location:	STRAWBERRY CREEK. NORTHWEST & SOUTH OF CALVINE RD/ELK GROVE-FLORIN RD INTERSECTION, ELK GROVE.						
Detailed Location:	TRUE EXTENT OF POPULATION UNKNOWN. MAPPED ALONG STRAWBERRY CREEK STARTING ~0.25 MILE EAST OF POWER INN ROAD (HRUSA, 1993). EAST PORTION OF EO BASED ON MORE SPECIFIC MAP DATA.						
Ecological:	COLONY NEAR BAY TOWN CREEK IS CEMENT LINED CHANNEL. CENTER COLONIES ARE ALONG DRIED CREEK CHANNEL.						
General:	PORTION OF EO TRANSPLANTED INTO A GIANT GARTER SNAKE SITE. POP IN SEC 24 REPLANTED AT SITE AFTER STRAWBERRY CR REALIGNMENT (1990). 133,000 AT TRANSPLANTED SITE IN 1994 DECLINING TO 972 IN 1996. NEEDS FIELDWORK. FORMER EO #19 & #20 HERE.						
Owner/Manager:	SAC COUNTY-PUBLIC WORKS, PVT						

Occurrence No.	21	Map Index:	24540	EO Index:	17101	Element Last Seen:	1992-08-20
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1992-08-20		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1993-11-18		
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45765 / -121.41798			Accuracy:	80 meters		
UTM:	Zone-10 N4257779 E638033			Elevation (ft):	20		
PLSS:	T07N, R05E, Sec. 15, SE (M)			Acres:	0.0		
Location:	STRAWBERRY CREEK AT BRUCEVILLE ROAD, SACRAMENTO.						
Detailed Location:	JUST NORTH OF COSUMNES RIVER BLVD IN CREEK ALONG BOTH SIDES OF BRUCEVILLE ROAD, JUST WITHIN SACRAMENTO CITY LIMITS.						
Ecological:	IN SHALLOW SLOW MOVING WATER.						
General:	SEVERAL HUNDRED PLANTS OBSERVED IN 1992.						
Owner/Manager:	PVT						



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Occurrence No.	22	Map Index:	24534	EO Index:	19286	Element Last Seen:	1992-07-19
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	1992-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1995-11-13
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.43689 / -121.49674				Accuracy:	specific area	
UTM:	Zone-10 N4255360 E631198				Elevation (ft):	0	
PLSS:	T07N, R04E, Sec. 25 (M)				Acres:	11.0	
Location:	BEACH LAKE, ALONG DIKE ADJACENT TO MORRISON CREEK, 2 KM (1.8 MILES) SOUTH OF FREEPORT.						
Detailed Location:	HISTORIC BEACH LAKE EXTENDED ALONG EITHER SIDE OF WHAT IS NOW I-5. THIS PORTION OF BEACH LAKE REFERS TO MARSHY AREA SOUTH OF FREEPORT AND BETWEEN I-5 AND THE SACRAMENTO RIVER.						
Ecological:	GROWING JUST OFFSHORE IN 1-2 FEET OF WATER. ASSOCIATES INCLUDE TYPHA LATIFOLIA, LUDWIGIA PEPLOIDES, AND SCIRPUS ACUTUS. GIANT GARTER SNAKE (THAMNOPHIS GIGAS) OBSERVED JUST EAST OF THE SAGITTARIA.						
General:	3-4 COLONIES OBSERVED IN 1992. LAKE OWNED BY BEACH LAKE PROPERTIES BUT MAY BECOME PART OF A COUNTY PRESERVE. CALTRANS RECREATED WETLANDS MITIGATION BANK IS LOCATED TO THE EAST, BETWEEN BEACH LAKE AND I-5.						
Owner/Manager:	PVT-BEACH LAKE PROPERTIES						
Occurrence No.	40	Map Index:	30130	EO Index:	4954	Element Last Seen:	1993-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1993-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-09-27
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.49620 / -121.45163				Accuracy:	specific area	
UTM:	Zone-10 N4262007 E635025				Elevation (ft):	20	
PLSS:	T08N, R05E, Sec. 32, SE (M)				Acres:	11.0	
Location:	MORRISON CREEK AT FLORIN ROAD, SACRAMENTO.						
Detailed Location:	ALONG EITHER SIDE OF FLORIN ROAD, ABOUT 0.4 MILE EAST OF FRANKLIN BLVD.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	41	Map Index:	30131	EO Index:	4953	Element Last Seen:	1993-XX-XX
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2005-07-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-10-03
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47613 / -121.45121				Accuracy:	specific area	
UTM:	Zone-10 N4259781 E635099				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 08, NE (M)				Acres:	12.2	
Location:	ELDER CREEK AT FRANKLIN BLVD, SACRAMENTO.						
Detailed Location:	ALONG EITHER SIDE OF FRANKLIN BLVD, ABOUT 0.15 MILE NORTH OF MACK ROAD.						
Ecological:	CONCRETE CHANNEL. THE ONLY VEGETATION OBSERVED IN 1995 WAS VERY SPARSE LUDWIGIA PEPLOIDES. VERY LITTLE AVAILABLE SUBSTRATE.						
General:	UNKNOWN NUMBER OF PLANTS REPORTED AT THIS SITE BY NORTON IN 1993. REPEATED HIGH WATER EVENTS OR CHANNEL MAINTENANCE MAY HAVE SCOURED PLANTS FROM THIS CHANNEL; SHOULD BE MONITORED FOR RECOLONIZATION. NO PLANTS SEEN IN 2005.						
Owner/Manager:	CITY OF SACRAMENTO						

Occurrence No.	42	Map Index:	30132	EO Index:	4952	Element Last Seen:	1993-XX-XX
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1993-XX-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1994-08-04
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47068 / -121.41815				Accuracy:	specific area	
UTM:	Zone-10 N4259225 E637993				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 10, SW (M)				Acres:	16.7	
Location:	BEACON CREEK AT HWY 99 & STOCKTON ROAD, SACRAMENTO.						
Detailed Location:	MAPPED ABOUT 0.3 MILE SOUTHEAST OF ELSIE AVE AND EXTENDING FROM EAST OF STOCKTON ROAD TO JUST WEST OF HWY 99.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	43	Map Index:	30133	EO Index:	4947	Element Last Seen:	2011-05-06
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2011-05-06
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-05
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.41240 / -121.38828			Accuracy:	specific area		
UTM:	Zone-10 N4252803 E640712			Elevation (ft):	36		
PLSS:	T07N, R05E, Sec. 36, SW (M)			Acres:	9.0		
Location:	ELK GROVE CREEK ON BOTH SIDES OF HIGHWAY 99 IN BETWEEN LAGUNA SPRINGS DRIVE AND EMERALD VISTA DRIVE.						
Detailed Location:	ABOUT 0.25 MILE NORTH OF ELK GROVE BLVD IN CHANNEL BEHIND WALMART. SEVERAL COLONIES MAPPED BY CNDDDB AS 4 POLYGONS IN THE SE 1/4 OF SECTION 35 AND THE SW 1/4 OF SECTION 36.						
Ecological:	IN THE ORDINARY HIGH WATER MARK OF THE CREEK; MAJORITY OF PLANTS FOUND IN THE DRY PORTIONS OF THE CREEK.						
General:	UNKNOWN NUMBER OF PLANTS OBSERVED AT THIS LOCATION ACCORDING TO A 1993 MAP, UNKNOWN WHEN PLANTS SEEN. NO PLANTS OBSERVED IN 1998. 166 PLANTS OBSERVED IN 2011. SITE OWNED BY THE COSUMNES COMMUNITY SERVICES DISTRICT.						
Owner/Manager:	COSUMNES CSD						

Occurrence No.	47	Map Index:	23237	EO Index:	32757	Element Last Seen:	1994-08-02
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	1994-08-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	1997-12-23
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.15735 / -121.53594			Accuracy:	80 meters		
UTM:	Zone-10 N4224286 E628268			Elevation (ft):	5		
PLSS:	T04N, R04E, Sec. 34 (M)			Acres:	0.0		
Location:	ISLAND IN NORTH MOKELUMNE RIVER, APPROX 6 KM (3.6 MI) DUE EAST OF ISLETON.						
Detailed Location:	ALONG SW SHORELINE OF ERODING ISLAND.						
Ecological:	ASSOCIATED WITH LIMOSELLA SUBULATA AND LILAEOPSIS MASONII.						
General:	MANY THOUSANDS OF PLANTS BETWEEN TWO CHANNEL ISLANDS. ENTIRE POPULATION COVERING 500+ SQUARE FEET.						
Owner/Manager:	PVT						



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Occurrence No.	59	Map Index:	62284	EO Index:	62321	Element Last Seen:	2004-07-08
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2004-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-08-11
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45719 / -121.40680				Accuracy:	80 meters	
UTM:	Zone-10 N4257745 E639009				Elevation (ft):	25	
PLSS:	T07N, R05E, Sec. 14, SW (M)				Acres:	0.0	
Location:	STRAWBERRY CREEK, ABOUT 0.3 MILE NNE OF INTERSECTION OF HIGHWAY 99 AND CALVINE ROAD.						
Detailed Location:	MAPPED IN THE NW 1/4 OF THE SW 1/4 OF SECTION 14.						
Ecological:							
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 2004.						
Owner/Manager:	UNKNOWN						

Occurrence No.	61	Map Index:	62786	EO Index:	62840	Element Last Seen:	2005-06-27
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2005-06-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2005-10-04
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.45055 / -121.48776				Accuracy:	80 meters	
UTM:	Zone-10 N4256889 E631957				Elevation (ft):	5	
PLSS:	T07N, R04E, Sec. 24, NE (M)				Acres:	0.0	
Location:	MORRISON CREEK, EAST OF HIGHWAY 5, ABOUT 0.85 AIR MILE SOUTHEAST OF FREEPORT.						
Detailed Location:	ALONG PORTION OF MORRISON CREEK WHICH WAS REROUTED TO THE WEST OF THE BUFFERLANDS CELL, SEASONAL WETLANDS.						
Ecological:	THE PLANT COMMUNITY WITHIN THIS CREEK IS PREDOMINATELY LUDWIGIA SP. BOTH UP AND DOWNSTREAM OF THE ABOVE LOCATION. PERENNIAL AND ANNUAL SMARTWEEDS, POLYGONUM AMPHIBIUM VAR. EMERUM AND POLYGONUM PERSICARIA, ALSO OCCUR WITHIN THIS DRAINAGE.						
General:	5 PLANTS OBSERVED IN 2005.						
Owner/Manager:	SRCSD-BUFFERLANDS						

Occurrence No.	63	Map Index:	70038	EO Index:	70892	Element Last Seen:	2008-08-XX
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2008-08-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2008-08-12
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47102 / -121.49698				Accuracy:	1/10 mile	
UTM:	Zone-10 N4259148 E631115				Elevation (ft):	15	
PLSS:	T07N, R04E, Sec. 12, SW (M)				Acres:	0.0	
Location:	DITCH ADJACENT TO HOUSING DEVELOPMENT, 0.6 AIR MILE SOUTH OF MEADOWVIEW ROAD, JUST EAST OF I-5, SACRAMENTO.						
Detailed Location:							
Ecological:	FRESHWATER MARSH.						
General:	OVER 300 PLANTS OBSERVED IN 2005. SITE GRADED IN 2008; ALL HABITAT WAS LIKELY DESTROYED.						
Owner/Manager:	PVT?						



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Occurrence No.	76	Map Index:	83263	EO Index:	84295	Element Last Seen:	2009-09-03
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-03
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-30
Quad Summary:	Thornton (3812124)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.23488 / -121.48786				Accuracy:	specific area	
UTM:	Zone-10 N4232957 E632340				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 36, SE (M)				Acres:	1.0	
Location:	MOKELUMNE RIVER; ABOUT 0.5 AIR MILE NNE OF NEW HOPE LANDING.						
Detailed Location:	MAPPED IN THE NE 1/4 OF THE SE 1/4 OF SECTION 36 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SANDY SHORE.						
General:	50 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	77	Map Index:	83272	EO Index:	84300	Element Last Seen:	2009-09-14
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-14
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-06-30
Quad Summary:	Thornton (3812124), Isleton (3812125)						
County Summary:	Sacramento, San Joaquin						
Lat/Long:	38.22787 / -121.49731				Accuracy:	specific area	
UTM:	Zone-10 N4232166 E631526				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 01, N (M)				Acres:	8.0	
Location:	NORTH AND SOUTH MOKELUMNE RIVER; SOUTH SIDE OF DEAD HORSE ISLAND AND JUST WEST OF NEW HOPE LANDING.						
Detailed Location:	7 COLONIES MAPPED IN THE N 1/2 OF SECTION 1 AND THE SE 1/4 OF THE NE 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EXPOSED TIDAL MUD FLATS, SANDY SHORE LINES, AND SANDY MUDFLAT BEHIND SMALL LEVEE RIPRAP SETBACK. ASSOCIATED WITH TYPHA AND POLYGONUM AMPHIBIUM.						
General:	2009 POPULATION NUMBERS FOR COLONIES FROM EAST TO WEST: 2, 10, 3, "MANY PATCHES", 4, 40, AND 2.						
Owner/Manager:	TNC, UNKNOWN						



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Occurrence No.	78	Map Index:	83298	EO Index:	84303	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.20989 / -121.49127				Accuracy:	specific area	
UTM:	Zone-10 N4230179 E632087				Elevation (ft):	0	
PLSS:	T04N, R04E, Sec. 12, NE (M)				Acres:	5.0	
Location:	SOUTH MOKELUMNE RIVER; ABOUT 0.75 TO 1.3 MILES SOUTH OF NEW HOPE LANDING.						
Detailed Location:	7 COLONIES MAPPED IN THE SE 1/4 OF SW 1/4 OF SECTION 1, NE 1/4 OF SECTION 12, AND NW 1/4 OF SW 1/4 OF SECTION 7 ACCORDING TO 2010 DIGITAL DATA PROVIDED BY THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SANDY MUDFLATS/BEACHES AT LOW WATER'S EDGE. ASSOCIATED WITH JUNCUS EFFUSUS, LUDWIGIA, AND CYPERUS.						
General:	2009 POPULATION NUMBERS FOR COLONIES FROM EAST TO WEST: 20, 50, 20, 20, 20, 10, AND 10.						
Owner/Manager:	TNC, UNKNOWN						

Occurrence No.	79	Map Index:	83299	EO Index:	84304	Element Last Seen:	2009-08-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.19500 / -121.47789				Accuracy:	specific area	
UTM:	Zone-10 N4228546 E633285				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, NW (M)				Acres:	2.0	
Location:	AT BEAVER SLOUGH AND SOUTH MOKELUMNE RIVER CONFLUENCE; ABOUT 2.25 AIR MILES SSE OF NEW HOPE LANDING.						
Detailed Location:	3 COLONIES MAPPED IN THE SE 1/4 OF THE NW 1/4 OF SECTION 18 ACCORDING TO 2010 DIGITAL DATA PROVIDED BY THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SANDY MUDFLATS AND BEACHES AT LOW WATER'S EDGE, ON IN-CHANNEL ISLAND, AND BEHIND SMALL LEVEE RIPRAP SETBACK. EDGE OF RIPARIAN SCRUB WITH JUNCUS EFFUSUS.						
General:	2009 POPULATION NUMBERS FOR COLONIES FROM NORTH TO SOUTH: 100, 100, AND 150.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	80	Map Index:	83300	EO Index:	84305	Element Last Seen:	2010-06-08
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-06-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Thornton (3812124)						
County Summary:	San Joaquin						
Lat/Long:	38.18890 / -121.48509				Accuracy:	specific area	
UTM:	Zone-10 N4227859 E632666				Elevation (ft):	0	
PLSS:	T04N, R05E, Sec. 18, SW (M)				Acres:	2.0	
Location:	MILE 15 OF SOUTH MOKELUMNE RIVER; ABOUT 0.35 TO 0.65 MILE SSW OF CONFLUENCE WITH BEAVER SLOUGH.						
Detailed Location:	THREE COLONIES MAPPED IN THE SW 1/4 OF THE SW 1/4 OF SECTION 18 AND THE NW 1/4 OF THE NW 1/4 OF SECTION 19 ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	TIDAL MUD FLATS WITH SCIRPUS ACUTUS AND LUDWIGIA PEPLOIDES.						
General:	2009: 100 PLANTS OBSERVED IN NORTHERN POLYGON AND 200 PLANTS OBSERVED IN SOUTHERN POLYGON. 2010: 70 PLANTS OBSERVED IN MIDDLE POLYGON.						
Owner/Manager:	TNC, UNKNOWN						
Occurrence No.	81	Map Index:	83301	EO Index:	84306	Element Last Seen:	2010-07-08
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2010-07-08
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Isleton (3812125)						
County Summary:	Sacramento						
Lat/Long:	38.23747 / -121.51715				Accuracy:	specific area	
UTM:	Zone-10 N4233202 E629771				Elevation (ft):	10	
PLSS:	T05N, R04E, Sec. 35, NW (M)				Acres:	1.0	
Location:	EAST SIDE OF GEORGIANA SLOUGH, JUST SOUTH OF WALNUT GROVE.						
Detailed Location:	ADJACENT TO BRIDGE CONNECTING RIVER ROAD AND ISLETON ROAD. MAPPED IN THE SE 1/4 OF THE NW 1/4 OF SECTION 35 ACCORDING TO 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	ASSOCIATED WITH COONTAIL.						
General:	2 PLANTS OBSERVED IN 2010.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	82	Map Index:	83302	EO Index:	84307	Element Last Seen:	2005-08-15
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-15
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.24521 / -121.65906				Accuracy:	80 meters	
UTM:	Zone-10 N4233873 E617340				Elevation (ft):	4	
PLSS:	T05N, R03E, Sec. 28, SW (M)				Acres:	0.0	
Location:	MINER SLOUGH ON EAST SIDE OF PROSPECT ISLAND, ABOUT 1 AIR MILE NNE OF CONFLUENCE WITH CACHE SLOUGH.						
Detailed Location:	MAPPED IN THE NW 1/4 OF THE SW 1/4 OF SECTION 28 ACCORDING TO 2005 VEGCAMP COORDINATES.						
Ecological:	LOW RIPRAP ON LEVEE NORTH OF BEND. MODERATELY FINE SILTY CLAY LOAM. ASSOCIATED WITH RUBUS DISCOLOR, SALIX EXIGUA, S. LASIOLEPIS, ALNUS RHOMBIFOLIA, CEPHALANTHUS OCCIDENTALIS, ROSA CALIFORNICA, RUBUS URSINUS, VITIS CALIFORNICA, ETC.						
General:	0.2% COVER OF SAGITTARIA SEEN IN >5 ACRES IN 2005.						
Owner/Manager:	UNKNOWN						

Occurrence No.	83	Map Index:	83303	EO Index:	84308	Element Last Seen:	2009-10-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-10-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Rio Vista (3812126)						
County Summary:	Solano						
Lat/Long:	38.23391 / -121.67010				Accuracy:	specific area	
UTM:	Zone-10 N4232604 E616391				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 32, SW (M)				Acres:	1.0	
Location:	MINER SLOUGH; TIDAL FLAT JUST EAST OF CONFLUENCE WITH CACHE SLOUGH.						
Detailed Location:	MAPPED IN THE NE 1/4 OF THE SW 1/4 OF SECTION 32 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	GROWING ALONE ON AN EXPOSED TIDAL MUD FLAT.						
General:	30 PLANTS OBSERVED IN 2009 IN A 6 FT BY 4 FT PATCH.						
Owner/Manager:	DFG-MINER SLOUGH WA						



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Occurrence No.	84	Map Index:	83304	EO Index:	84309	Element Last Seen:	2009-09-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Rio Vista (3812126)						
County Summary:	Sacramento						
Lat/Long:	38.17503 / -121.65992			Accuracy:	specific area		
UTM:	Zone-10 N4226084 E617377			Elevation (ft):	5		
PLSS:	T04N, R03E, Sec. 20, SE (M)			Acres:	2.0		
Location:	SOUTH SIDE OF SACRAMENTO RIVER, ABOUT 1 MILE WEST OF WESTERN END OF IDA ISLAND.						
Detailed Location:	TWO COLONIES MAPPED IN THE NE 1/4 OF THE SE 1/4 OF SECTION 20 AND THE NW 1/4 OF THE SW 1/4 OF SECTION 21 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EXPOSED TIDAL SANDY SHORELINE WITH SCIRPUS AND POLYGONUM. THE RARE LILAEOPSIS MASONII ALSO OCCURS AT THIS SITE.						
General:	40 PLANTS OBSERVED IN WESTERN POLYGON AND 50 PLANTS OBSERVED IN EASTERN POLYGON IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	85	Map Index:	83305	EO Index:	84310	Element Last Seen:	2017-07-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2017-07-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-09-22
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.31896 / -121.50089			Accuracy:	specific area		
UTM:	Zone-10 N4242268 E631050			Elevation (ft):	5		
PLSS:	T05N, R04E, Sec. 1, NW (M)			Acres:	5.0		
Location:	ABOUT 2 AIR MILES WSW OF POINT PLEASANT AND 2 AIR MILES NORTHWEST OF KUHN RANCH, SOUTH OF STONE LAKE.						
Detailed Location:	MAPPED BY CNDDDB AS 5 POLYGONS IN THE NW 1/4 OF THE NW 1/4 OF SECTION 1 AND THE NE 1/4 OF THE NE 1/4 OF SECTION 2 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES AND 2017 KWONG COORDINATES.						
Ecological:	ALONG EDGE OF WATERWAY AND IN BED OF SUNKEN TRUCK. RIPARIAN AND MARSH HABITAT. MIX OF NATIVE (TULE, PENNYWORT, CATTAILS, WILLOWS, VALLEY OAKS, OTHER HERBS) AND NON-NATIVE VEGETATION (WATER PRIMROSE, WATER HYACINTH, EGERIA Densa, ETC.).						
General:	2009 POPULATION NUMBERS FOR POLYGONS FROM NORTH TO SOUTH: 355, 300, 125, 25, AND 300.10-15 PLANTS SEEN IN SOUTHERNMOST POLYGON IN 2017.						
Owner/Manager:	USFWS-STONE LAKES NWR, DWR?						



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Occurrence No.	86	Map Index:	83306	EO Index:	84311	Element Last Seen:	2009-08-11
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-08-11
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.27824 / -121.49848				Accuracy:	specific area	
UTM:	Zone-10 N4237753 E631332				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 13, SW (M)				Acres:	2.0	
Location:	WEST SIDE OF SNODGRASS SLOUGH; JUST NORTH AND SOUTH OF TWIN CITIES ROAD BRIDGE.						
Detailed Location:	TWO COLONIES MAPPED IN THE EAST 1/2 OF THE SW 1/4 OF SECTION 13 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	TIDAL MARSH AND EXPOSED TIDAL MUDFLATS, SOME SUBMERGED. ASSOCIATED WITH SCIRPUS.						
General:	2009: 30 PLANTS OBSERVED IN SCATTERED CLUMPS IN NORTHERN COLONY, 10 PLANTS OBSERVED IN A 4 SQ M PATCH IN SOUTHERN COLONY.						
Owner/Manager:	UNKNOWN						

Occurrence No.	87	Map Index:	83307	EO Index:	84312	Element Last Seen:	2009-09-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26856 / -121.48363				Accuracy:	specific area	
UTM:	Zone-10 N4236700 E632649				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 19, N (M)				Acres:	22.0	
Location:	SNODGRASS SLOUGH AND UNNAMED WATERWAY TO THE EAST; FROM 0.3 TO 2 AIR MILES ESE OF KXTL RADIO TOWER.						
Detailed Location:	SEVERAL COLONIES MAPPED BY CNDDB AS 21 POLYGONS IN THE NORTH 1/2 OF SECTION 19 AND THE NORTH 1/2 OF SECTION 24 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SHALLOW AND EXPOSED TIDAL MUDFLATS, MUD BANKS, INSTREAM ISLANDS, ETC. ASSOCIATED WITH SCIRPUS.						
General:	2009 POPULATION NUMBERS FOR POLYGONS FROM EAST TO WEST: 60, 55, 30, 40, 300, 100, 30, 40, 180, 10, 10, 80, 10, 16, 55, 42, 60, 200, 100, 55 IN 2ND NORTHERNMOST POLY, AND 100 IN NORTHERNMOST POLY.						
Owner/Manager:	DPR, TNC, STATE, UNKNOWN						



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Occurrence No.	88	Map Index:	83308	EO Index:	84313	Element Last Seen:	2009-07-31
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-01
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25556 / -121.49911				Accuracy:	specific area	
UTM:	Zone-10 N4235236 E631318				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 25, NW (M)				Acres:	1.0	
Location:	SNODGRASS SLOUGH; ABOUT 0.6 AIR MILE NORTHEAST OF LOCKE.						
Detailed Location:	MAPPED IN THE NE 1/4 OF THE NW 1/4 OF SECTION 25 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	EXPOSED TIDAL MUDFLAT WITH SCIRPUS AND JUNCUS EFFUSUS.						
General:	TWO SEPARATE 10 FT X 4 FT PATCHES OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	89	Map Index:	83309	EO Index:	84314	Element Last Seen:	2014-08-16
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2014-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-09-28
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25762 / -121.43058				Accuracy:	specific area	
UTM:	Zone-10 N4235564 E637312				Elevation (ft):	5	
PLSS:	T05N, R05E, Sec. 28, NE (M)				Acres:	20.0	
Location:	COSUMNES RIVER JUST NORTH OF MOKELUMNE CITY, ON EITHER SIDE OF THE RAILROAD BRIDGE CROSSING.						
Detailed Location:	SEVERAL SITES MAPPED BY CNDDB AS 12 POLYGONS IN THE NORTH HALF OF THE NE 1/4 OF SECTION 28 AND THE NW 1/4 OF THE NW 1/4 OF SECTION 27 ACCORDING TO 2011 DWR DIGITAL DATA, 2011 SLAKEY DIGITAL DATA, AND 2014 SLAKEY COORDINATES.						
Ecological:	RELATIVELY SHALLOW MUD FLATS ALONG EDGE OF RIVER AND SLOUGHS. MOST PLANTS DEEPLY SUBMERGED AT TIME OF SURVEY. ASSOCIATED WITH MYRIOPHYLLUM, LUDWIGIA PEPLOIDES, SCIRPUS ACUTUS, CEPHALANTHUS OCCIDENTALIS, CAREX BARBARAE, ETC.						
General:	305 PLANTS OBSERVED IN 2010. >2000 PLANTS OBSERVED IN 2011, OCCURRING IN ABOUT 30 COLONIES RANGING IN SIZE FROM A FEW INDIVIDUALS TO >250 INDIVIDUALS. ~140 PLANTS OBSERVED IN THE 2 NE-MOST POLYGONS IN 2014.						
Owner/Manager:	TNC						



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Occurrence No.	90	Map Index:	83310	EO Index:	84315	Element Last Seen:	2005-08-22
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	2005-08-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-05
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.29214 / -121.63307				Accuracy:	80 meters	
UTM:	Zone-10 N4239113 E619537				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 10, SE (M)				Acres:	0.0	
Location:	NORTH BANK OF MINER SLOUGH; ABOUT 0.6 MILE EAST OF FIVE POINTS.						
Detailed Location:	JUST WEST OF BRIDGE ACROSS SLOUGH. MAPPED ACCORDING TO 2005 COORDINATES FROM VEGCAMP.						
Ecological:	MIXED HARDWOOD WOODLAND; TREE CANOPY NEARLY CONTINUOUS, THOUGH MORE OPEN AT E END WITH MORE FORBS. MEDIUM TO VERY FINE, LOAMY SAND. ASSOCIATED WITH ALNUS RHOMBIFOLIA, ACER NEGUNDO, FRAXINUS LATIFOLIA, CEPHALANTHUS OCCIDENTALIS, ETC.						
General:	0.2% COVER OF SAGITTARIA OBSERVED IN 1-5 ACRES IN 2005.						
Owner/Manager:	UNKNOWN						

Occurrence No.	91	Map Index:	83311	EO Index:	84316	Element Last Seen:	2009-09-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-05
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.27887 / -121.63891				Accuracy:	specific area	
UTM:	Zone-10 N4237633 E619047				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 15, NW (M)				Acres:	1.0	
Location:	MINER SLOUGH; ABOUT 0.85 AIR MILE SSE OF FIVE POINTS.						
Detailed Location:	MAPPED IN THE SE 1/4 OF THE NW 1/4 OF SECTION 15 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	RIPRAP INTERMIXED WITH JUNCUS XIPHIODES.						
General:	40 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	92	Map Index:	83312	EO Index:	84317	Element Last Seen:	2009-09-04
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-09-04
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-05
Quad Summary:	Liberty Island (3812136)						
County Summary:	Solano						
Lat/Long:	38.25744 / -121.65218				Accuracy:	specific area	
UTM:	Zone-10 N4235238 E617921				Elevation (ft):	0	
PLSS:	T05N, R03E, Sec. 21, SW (M)				Acres:	1.0	
Location:	MINER SLOUGH; ABOUT 1 AIR MILE SOUTHWEST OF LENTS LANDING AND 0.3 MILE NORTHEAST OF DC STEWART LANDING.						
Detailed Location:	MAPPED IN THE SE 1/4 OF THE SW 1/4 OF SECTION 21 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SANDY SHORE.						
General:	60 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	93	Map Index:	83313	EO Index:	84318	Element Last Seen:	2009-06-22
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-06-22
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-07-05
Quad Summary:	Bruceville (3812134), Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.37716 / -121.48987				Accuracy:	specific area	
UTM:	Zone-10 N4248743 E631906				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 13, NE (M)				Acres:	3.0	
Location:	DRAINAGE CHANNEL BETWEEN 0.05 AND 0.5 MILE NORTH OF HOOD FRANKLIN ROAD, ABOUT 0.7 MILE WEST OF I-5.						
Detailed Location:	4 COLONIES MAPPED IN THE WEST 1/2 OF THE NE 1/4 OF SECTION 13 AND THE SW 1/4 OF THE SE 1/4 OF SECTION 12 ACCORDING TO 2010 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.						
Ecological:	SEASONALLY INUNDATED CHANNEL CONNECTION TO OPEN WATER AREA. ALSO FOUND IN EMERGENT MARSH WITH MOSTLY TYPHA.						
General:	2009 POPULATION NUMBERS FOR COLONIES FROM NORTH TO SOUTH: 4, 12, 150, AND 5.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	96	Map Index:	89324	EO Index:	90318	Element Last Seen:	2012-05-21
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2012-05-21
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2013-06-06
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.47556 / -121.43826				Accuracy:	80 meters	
UTM:	Zone-10 N4259737 E636229				Elevation (ft):	15	
PLSS:	T07N, R05E, Sec. 09, NW (M)				Acres:	0.0	
Location:	NORTH BANK OF ELDER CREEK, APPROXIMATELY 200 FT WEST OF THE CENTER PARKWAY BRIDGE OVER ELDER CREEK.						
Detailed Location:	NEAR A CITY OF SACRAMENTO SUMP OUTFALL. MAPPED IN THE SE 1/4 OF THE NW 1/4 OF SECTION 9 ACCORDING TO 2012 COORDINATES FROM ORSOLINI.						
Ecological:	ELDER CREEK IS LINED WITH CONCRETE; GROWING OUT OF CRACKS IN THE CONCRETE. VEGETATION IS SPARSE IN THE BED OF THE CREEK. ASSOCIATED WITH CYPERUS SP. AND LUDWIGIA SP.						
General:	5 PLANTS OBSERVED IN 2012.						
Owner/Manager:	UNKNOWN						
Occurrence No.	105	Map Index:	A6494	EO Index:	108255	Element Last Seen:	2014-08-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2014-08-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-09-22
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26174 / -121.41992				Accuracy:	specific area	
UTM:	Zone-10 N4236037 E638236				Elevation (ft):	7	
PLSS:	T05N, R05E, Sec. 22, SW (M)				Acres:	1.0	
Location:	NEAR THE NORTHERN END OF WOOD DUCK SLOUGH, ON THE EAST BANK OF THE SLOUGH, ABOUT 1 AIR MILE NE OF MOKELUMNE CITY.						
Detailed Location:	MAPPED IN THE SE 1/4 OF THE SW 1/4 OF SECTION 22 ACCORDING TO 2014 SLAKEY COORDINATES.						
Ecological:	FRESHWATER MARSH AT EDGE OF SLOUGH. ASSOCIATED WITH TYPHA, RUBUS, AZOLLA FILICULOIDES, AND LUDWIGIA.						
General:	ABOUT 20 PLANTS OBSERVED IN 2014.						
Owner/Manager:	BLM						



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Occurrence No.	106	Map Index:	A6495	EO Index:	108257	Element Last Seen:	2014-05-26
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	2014-05-26
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2017-09-22
Quad Summary:	Florin (3812144)						
County Summary:	Sacramento						
Lat/Long:	38.48541 / -121.44018				Accuracy:	80 meters	
UTM:	Zone-10 N4260828 E636045				Elevation (ft):	20	
PLSS:	T07N, R05E, Sec. 4, SW (M)				Acres:	5.0	
Location:	FLORIN CREEK PARK AND EDGES OF FLORIN CREEK BELOW PARK, BETWEEN PERSIMMON AVE AND CIRCLE PARKWAY, FLORIN.						
Detailed Location:	MAPPED NEAR THE CENTER OF THE SW 1/4 OF SECTION 4.						
Ecological:	AROUND SHALLOW FRINGES OF A POND IN ACTIVE PARK AND ALONG EDGES OF FLORIN CREEK IMMEDIATELY BELOW OUTFALL FROM POND. CREEK IS CONCRETE LINED - PLANTS IN SEAMS AND OTHER OPENINGS.						
General:	50 PLANTS OBSERVED IN 2014; PLANTS HAVE BEEN THERE FOR 10 YEARS. BASED ON 2016-2017 AERIAL IMAGERY, THE PONDS IN THE PARK AND THE ADJACENT PORTION OF FLORIN CREEK HAVE BEEN SCRAPED AND RECONSTRUCTED, PLANTS POSSIBLY EXTIRPATED.						
Owner/Manager:	SAC COUNTY						

Carex comosa

Element Code: PMCYP032Y0

bristly sedge

Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G5
	State:	None		State:	S2
	Other:	Rare Plant Rank - 2B.1			
Habitat:	General:	MARSHES AND SWAMPS, COASTAL PRAIRIE, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	LAKE MARGINS, WET PLACES; SITE BELOW SEA LEVEL IS ON A DELTA ISLAND. -5-1010 M.			

Occurrence No.	11	Map Index:	67109	EO Index:	67259	Element Last Seen:	2009-06-16
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-06-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25052 / -121.50669				Accuracy:	specific area	
UTM:	Zone-10 N4234666 E630664				Elevation (ft):	0	
PLSS:	T05N, R04E, Sec. 26, SE (M)				Acres:	1.0	
Location:	SW END OF DELTA MEADOWS RIVER PARK, JUST EAST OF LOCKE.						
Detailed Location:	MAPPED BY CNDDDB IN THE NE 1/4 OF THE SE 1/4 OF SECTION 26 ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA.						
Ecological:	ON A PARTIALLY SUBMERGED LOG.						
General:	5 PLANTS OBSERVED IN 2009.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						



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Occurrence No.	15	Map Index:	83578	EO Index:	84611	Element Last Seen:	2009-06-24
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-24
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.36023 / -121.49025				Accuracy:	specific area	
UTM:	Zone-10 N4246864 E631904				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 24, N (M)				Acres:	11.0	
Location:	NE END OF SOUTH STONE LAKE; ABOUT 1.2 AIR MILES EAST OF HOOD JUNCTION, WEST SIDE OF I-5, SOUTH OF SACRAMENTO.						
Detailed Location:	MAPPED BY CNDDB AS 7 POLYGONS MOSTLY IN THE NE 1/4 OF SECTION 24 ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA.						
Ecological:	IN RIPARIAN AREAS, EDGES OF MARSH, AND EDGES OF OPEN WATER. ASSOCIATES INCLUDE TYPHA LATIFOLIA, SCIRPUS ACUTUS, RUBUS DISCOLOR, SALIX GOODINGII, AND POPULUS FREMONTII.						
General:	ABOUT 92 PLANTS OBSERVED IN 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR, UNK						
Occurrence No.	16	Map Index:	83579	EO Index:	84613	Element Last Seen:	2009-06-23
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-06-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-24
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.34442 / -121.49301				Accuracy:	specific area	
UTM:	Zone-10 N4245105 E631691				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 25, NW (M)				Acres:	1.0	
Location:	EAST ARM OF SOUTH STONE LAKE; ABOUT 1.7 AIR MILES SSE OF HOOD JUNCTION, WEST SIDE OF I-5, SOUTH OF SACRAMENTO.						
Detailed Location:	NORTH SHORE OF LAKE. MAPPED BY CNDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SE 1/4 OF THE NW 1/4 OF SECTION 25.						
Ecological:	MARSH. ON WATER'S EDGE WITH SCIRPUS ACUTUS.						
General:	7 PLANTS OBSERVED IN 2009.						
Owner/Manager:	USFWS-STONE LAKES NWR						



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Occurrence No.	17	Map Index:	83580	EO Index:	84614	Element Last Seen:	2009-06-23
Occ. Rank:	Excellent			Presence:	Presumed Extant	Site Last Seen:	2009-06-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.32849 / -121.49900				Accuracy:	specific area	
UTM:	Zone-10 N4243329 E631196				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 36, NW (M)				Acres:	1.0	
Location:	SOUTH END OF SOUTH STONE LAKE; ABOUT 1.9 AIR MILES WNW OF THE I-5 OVERPASS AT LAMBERT ROAD, SOUTH OF SACRAMENTO.						
Detailed Location:	ON THE EASTERN LAKE SHORE. MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE NW 1/4 OF SECTION 36.						
Ecological:	MARSH.						
General:	40 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						
Occurrence No.	18	Map Index:	83581	EO Index:	84615	Element Last Seen:	2009-06-18
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-18
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134), Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32006 / -121.49851				Accuracy:	specific area	
UTM:	Zone-10 N4242394 E631254				Elevation (ft):	10	
PLSS:	T05N, R04E, Sec. 01, NW (M)				Acres:	1.0	
Location:	SOUTH END OF SOUTH STONE LAKE JUST S OF LAMBERT RD ABOUT 1.8 & 2 MILES W OF I-5 OVERPASS AT LAMBERT RD, S OF SACRAMENTO.						
Detailed Location:	MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE NW 1/4 OF THE NW 1/4 OF SECTION 1 AND IN THE NE 1/4 OF THE NE 1/4 OF SECTION 2.						
Ecological:	RIPARIAN EDGE WITH SCIRPUS.						
General:	IN 2009, 20 PLANTS WERE OBSERVED IN THE WESTERN POLYGON AND 5 PLANTS WERE OBSERVED IN THE EASTERN POLYGON.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	19	Map Index:	83583	EO Index:	84616	Element Last Seen:	2009-08-10
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-08-10	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-23	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.26618 / -121.46264	Accuracy:	specific area
UTM:	Zone-10 N4236466 E634489	Elevation (ft):	5
PLSS:	T05N, R05E, Sec. 20, SW (M)	Acres:	1.0

Location: EAST OF DELTA MEADOWS RIVER PARK; ABOUT 1.1 AIR MILES NW OF I-5 BRIDGE AT MOKELUMNE RIVER, SOUTH OF SACRAMENTO.

Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE NW 1/4 OF THE SW 1/4 OF SECTION 20.

Ecological: TIDAL MARSH AT WATER'S EDGE. AT BASE OF BLACKBERRY THICKET WITH VITIS.

General: 1 PLANT OBSERVED IN 2009.

Owner/Manager: TNC

Occurrence No.	20	Map Index:	83584	EO Index:	84617	Element Last Seen:	2009-09-08
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-09-08	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-23	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.27005 / -121.46826	Accuracy:	specific area
UTM:	Zone-10 N4236888 E633991	Elevation (ft):	5
PLSS:	T05N, R05E, Sec. 19, NE (M)	Acres:	1.0

Location: EAST OF DELTA MEADOWS RIVER PARK; ABOUT 1.5 AIR MILES NNW OF THE JUNCTION OF I-5 AND THE MOKELUMNE RIVER.

Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SE 1/4 OF THE NE 1/4 OF SECTION 19.

Ecological: FALLEN LOG.

General: 1 PLANT OBSERVED IN 2009.

Owner/Manager: STATE



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Occurrence No.	21	Map Index:	83585	EO Index:	84618	Element Last Seen:	2009-09-09
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-09-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.26768 / -121.48741				Accuracy:	specific area	
UTM:	Zone-10 N4236597 E632320				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24 (M)				Acres:	3.0	
Location:	EAST OF DELTA MEADOWS RIVER PARK; UNNAMED SLOUGH 0.3 TO 0.7 MILE EAST OF SNODGRASS SLOUGH, NE OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDB AS 4 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE NW 1/4 OF SECTION 19 AND IN THE SE 1/4 OF THE NE 1/4 OF SECTION 24.						
Ecological:	TIDAL MARSH ON EXPOSED LOGS WITH LYCOPUS, JUNCUS EFFUSUS, AND AGROSTIS.						
General:	1 PLANT OBSERVED IN EACH POLYGON IN 2009.						
Owner/Manager:	TNC, UNKNOWN						

Occurrence No.	22	Map Index:	83586	EO Index:	84619	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.25917 / -121.49505				Accuracy:	specific area	
UTM:	Zone-10 N4235642 E631666				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, SE (M)				Acres:	1.0	
Location:	EAST EDGE OF DELTA MEADOWS RIVER PARK, ABOUT 0.9 AIR MILE NE OF LOCKE, NORTH OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDB AS 2 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE SE 1/4 OF SECTION 24 AND IN THE NW 1/4 OF THE NE 1/4 OF SECTION 25.						
Ecological:	TIDAL MARSH. ISOLATED EXPOSED CLUMP ON WATER'S EDGE.						
General:	1 PLANT OBSERVED IN EACH POLYGON IN 2009.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						

Occurrence No.	23	Map Index:	83587	EO Index:	84620	Element Last Seen:	2009-06-16
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-16
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.25902 / -121.50389				Accuracy:	specific area	
UTM:	Zone-10 N4235613 E630893				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, SW (M)				Acres:	1.0	
Location:	WEST EDGE OF DELTA MEADOWS RIVER PARK, ABOUT 0.7 AIR MILE NORTH OF LOCKE, NORTH OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDB AS 2 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE SW 1/4 OF SECTION 24 AND IN THE SE 1/4 OF THE SE 1/4 OF SECTION 23.						
Ecological:	ALONG SCIRPUS ACUTUS BANK AND BANK OF OPEN WATER.						
General:	20 PLANTS OBSERVED IN EACH POLYGON IN 2009.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						



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Occurrence No.	24	Map Index:	83589	EO Index:	84621	Element Last Seen:	2009-07-31
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-31
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.26697 / -121.50280				Accuracy:	specific area	
UTM:	Zone-10 N4236497 E630974				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 24, NW (M)				Acres:	1.0	
Location:	NW EDGE OF DELTA MEADOWS RIVER PARK; ALONG THE MEADOWS SLOUGH, ABOUT 1.2 AIR MILES NORTH OF LOCKE, N OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SW 1/4 OF THE NW 1/4 OF SECTION 24.						
Ecological:	TIDAL MARSH.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	DPR-DELTA MEADOWS RIVER PARK						
Occurrence No.	25	Map Index:	83590	EO Index:	84622	Element Last Seen:	2010-06-09
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2010-06-09
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Bruceville (3812134)						
County Summary:	Sacramento						
Lat/Long:	38.28172 / -121.49823				Accuracy:	specific area	
UTM:	Zone-10 N4238140 E631348				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 13, NW (M)				Acres:	1.0	
Location:	SNODGRASS SLOUGH, 0.3 MI N OF THE N EDGE OF DELTA MEADOWS RIVER PARK, ABOUT 2.2 AIR MI NNE OF LOCKE, N OF WALNUT GROVE.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2011 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SE 1/4 OF THE NW 1/4 OF SECTION 13.						
Ecological:	FRESHWATER MARSH.						
General:	17 PLANTS OBSERVED IN 2010.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	26	Map Index:	83591	EO Index:	84624	Element Last Seen:	2009-07-28
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2009-07-28
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-30
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.30365 / -121.51180				Accuracy:	specific area	
UTM:	Zone-10 N4240554 E630122				Elevation (ft):	5	
PLSS:	T05N, R04E, Sec. 11, NW (M)				Acres:	1.0	
Location:	ALONG SNODGRASS SLOUGH, APPROX 0.75 AIR MILE SSE OF END OF RUSSEL RD AT SNODGRASS SLOUGH, ~3.3 AIR MILES NORTH OF LOCKE.						
Detailed Location:	ABOUT 0.3 MILE NORTH OF "PUMPING STATION" ON TOPO. MAPPED BY CNDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE NE 1/4 OF THE NW 1/4 OF SECTION 11.						
Ecological:	RIPARIAN AREA UNDER QUERCUS LOBATA.						
General:	1 PLANT OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						

Occurrence No.	27	Map Index:	83592	EO Index:	84625	Element Last Seen:	2009-06-02
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2009-06-02
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2011-08-23
Quad Summary:	Courtland (3812135)						
County Summary:	Sacramento						
Lat/Long:	38.32482 / -121.51990				Accuracy:	specific area	
UTM:	Zone-10 N4242892 E629376				Elevation (ft):	5	
PLSS:	T06N, R04E, Sec. 34, SE (M)				Acres:	9.0	
Location:	ALONG SNODGRASS SLOUGH, FROM JUST NORTH TO ABOUT 0.5 MILE NORTH OF LAMBERT ROAD CROSSING OVER SNODGRASS SLOUGH.						
Detailed Location:	MAPPED BY CNDDB AS 5 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE EAST HALF OF THE SE 1/4 OF SECTION 34.						
Ecological:	RIPARIAN AREA WITH TYPHA AND SCIRPUS ACUTUS.						
General:	IN 2009, NORTHERNMOST POLYGON HAD PLANTS OCCURRING SPORADICALLY ALONG THE WATER'S EDGE. THE FOUR REMAINING POLYGONS FROM NORTH TO SOUTH HAD 4, 1, 3, AND 3 PLANTS OBSERVED IN 2009.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	28	Map Index:	83593	EO Index:	84626	Element Last Seen:	2009-06-22
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-06-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-23	

Quad Summary: Courtland (3812135), Clarksburg (3812145)

County Summary: Sacramento

Lat/Long:	38.37175 / -121.50964	Accuracy:	specific area
UTM:	Zone-10 N4248114 E630189	Elevation (ft):	5
PLSS:	T06N, R04E, Sec. 14 (M)	Acres:	12.0

Location: FROM 0.15 TO 0.75 MILE NORTH OF HOOD FRANKLIN ROAD ALONG RAILROAD TRACKS, BETWEEN SACRAMENTO RIVER AND I-5, E OF HOOD.

Detailed Location: MAPPED BY CNDDDB AS 3 POLYGONS ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA THROUGH THE MIDDLE OF SECTION 14.

Ecological: RIPARIAN.

General: IN 2009, SOUTHERNMOST POLYGON HAD 50 PLANTS, THE CENTRAL POLYGON HAD 3 PLANTS, AND THE NORTHERN POLYGON HAD 1 PLANT.

Owner/Manager: UNKNOWN

Occurrence No.	29	Map Index:	83594	EO Index:	84628	Element Last Seen:	2009-07-31
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-07-31	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-23	

Quad Summary: Bruceville (3812134)

County Summary: Sacramento

Lat/Long:	38.25343 / -121.49944	Accuracy:	specific area
UTM:	Zone-10 N4234999 E631293	Elevation (ft):	5
PLSS:	T05N, R04E, Sec. 25, NW (M)	Acres:	1.0

Location: SE END OF DELTA MEADOWS RIVER PARK, ABOUT 0.6 AIR MILE ENE OF LOCKE, NE OF WALNUT GROVE.

Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2010 CALIFORNIA DEPARTMENT OF WATER RESOURCES DIGITAL DATA IN THE SE 1/4 OF THE NW 1/4 OF SECTION 25.

Ecological: TIDAL MARSH. ISOLATED EXPOSED CLUMP ON WATER'S EDGE.

General: 1 PLANT OBSERVED IN 2009.

Owner/Manager: DPR-DELTA MEADOWS RIVER PARK

Neostapfia colusana

Element Code: PMPOA4C010

Colusa grass

Listing Status:	Federal:	Threatened	CNDDDB Element Ranks:	Global:	G1
	State:	Endangered		State:	S1
	Other:	Rare Plant Rank - 1B.1			

Habitat: **General:** VERNAL POOLS.
Micro: USUALLY IN THE BOTTOMS OF LARGE, OR DEEP VERNAL POOLS; ADOBE SOILS. 5-125 M.



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Occurrence No.	49	Map Index:	89194	EO Index:	5744	Element Last Seen:	2017-07-19
Occ. Rank:	Good			Presence:	Presumed Extant	Site Last Seen:	2017-07-19
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2020-04-21
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49106 / -121.68525			Accuracy:	specific area		
UTM:	Zone-10 N4261120 E614659			Elevation (ft):	25		
PLSS:	T08N, R03E, Sec. 31, SE (M)			Acres:	6.0		
Location:	DAVIS AIR FORCE COMMUNICATION FACILITY. 4 MILES SOUTH OF INTERSTATE 80, EAST OF ROAD 104, BETWEEN ROAD 34 AND ROAD 35.						
Detailed Location:	DAVIS COMMUNICATIONS ANNEX. POPULATION IS IN DRAINAGE IN THE SOUTHERN PORTION OF THE FACILITY. IN POOL #9. 2 POLYGONS MAPPED IN THE WEST HALF OF THE SE 1/4 OF SEC 31. WITHIN 1/4 MI OF EO #74, WHICH IS A TRANSPLANTED POPULATION.						
Ecological:	PLAYA TYPE VERNAL POOL ON LOW AREA ON PESCADERO CLAY LOAM. ASSOCIATED WITH DOWNINGIA, LASTHENIA FREMONTII, PLAGIOBOTHRYIS, PSILOCARPHUS, MYOSURUS, LEPIDIUM LATIFOLIUM, CRYPIS SCHOENOIDES, CRESSA TRUXILLENSIS, & TUCTORIA MUCRONATA.						
General:	N POLY: >1000 IN 1993, 36000 IN '96, >100 IN '01, 8435 IN '03, 43732 IN '04, 22671 IN '05, 10897 IN '06, 0 IN '07, 8486 IN '08, 11314 IN '09, 20816 IN '10, 37400+ IN '11, 200+ IN '17. S POLY SEEN IN 2004 PER LEE, 0 IN 2003-2011 PER GERLACH.						
Owner/Manager:	DOD-MCCLELLAN AFB						

Occurrence No.	58	Map Index:	25471	EO Index:	5800	Element Last Seen:	2011-10-15
Occ. Rank:	Poor			Presence:	Presumed Extant	Site Last Seen:	2011-10-15
Occ. Type:	Natural/Native occurrence			Trend:	Decreasing	Record Last Updated:	2016-02-09
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49593 / -121.67732			Accuracy:	specific area		
UTM:	Zone-10 N4261671 E615342			Elevation (ft):	25		
PLSS:	T08N, R03E, Sec. 32, NW (M)			Acres:	1.0		
Location:	IN DRAINAGE ON THE EAST SIDE OF THE DAVIS AIR FORCE COMMUNICATIONS FACILITY, 2.5 MILES NNW OF SAXON.						
Detailed Location:	FACILITY IS 4 MILES SOUTH OF DAVIS, EAST OF ROAD 104 AND BETWEEN ROAD 35 AND ROAD 36. MAPPED ALONG SECTION LINE BETWEEN THE SE 1/4 OF NE 1/4 OF SECTION 31 AND SW 1/4 OF NW 1/4 OF SECTION 32 ACCORDING TO 2013 WITHAM DIGITAL DATA. IN POOL #3.						
Ecological:	PLAYA TYPE VERNAL POOL ON PESCADERO CLAY LOAM. GROWING PRIMARILY ON DISTURBED GROUND IN AREAS OF LOW COMPETITION. THIS POPULATION OCCURS AS A VIRTUAL MONOCULTURE. WITH DOWNINGIA SPP., LASTHENIA FREMONTII, PLAGIOBOTHRYIS, PSILOCARPHUS, ETC.						
General:	SEVERAL THOUSAND PLANTS IN 1993. 1000 IN 1996. 2,208 PLANTS BETWEEN THIS EO AND EO #49 IN 2004. 842 PLANTS IN 2005, 9013 IN 2006, 0 IN 2007, 12 IN 2008, 0 IN 2009, 21 IN 2010, 100 IN 2011. POOL DAMAGED IN 2009 WHEN CONCRETE ANCHOR REMOVED.						
Owner/Manager:	DOD-MCCLELLAN AFB, YOL COUNTY						



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Occurrence No.	74	Map Index:	89258	EO Index:	90255	Element Last Seen:	2011-10-15
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2011-10-15
Occ. Type:	Transplant Outside of Native Hab./Range			Trend:	Unknown	Record Last Updated:	2013-05-22
Quad Summary:	Saxon (3812146)						
County Summary:	Yolo						
Lat/Long:	38.49464 / -121.68853				Accuracy:	specific area	
UTM:	Zone-10 N4261514 E614367				Elevation (ft):	25	
PLSS:	T08N, R03E, Sec. 31, SW (M)				Acres:	1.0	
Location:	YOLO GRASSLANDS REGIONAL PARK; APPROXIMATELY 0.8 AIR MILE EAST OF TREMONT CEMETERY.						
Detailed Location:	2 POOLS MAPPED AS A SINGLE POLYGON ACCORDING TO 2013 WITHAM DIGITAL DATA IN THE NE 1/4 OF THE SW 1/4 OF SEC 31. THIS IS WITHIN A 1/4 MI OF EO#49, BUT KEPT AS A SEPARATE OCCURRENCE BECAUSE THESE ARE TRANSPLANTED PLANTS IN CREATED POOLS.						
Ecological:	CREATED VERNAL POOLS, MOSTLY BARE GROUND. THE RARE TUCTORIA MUCRONATA ALSO PLANTED IN ONE OF THE POOLS.						
General:	327 PLANTS SEEN IN 2009, 167 PLANTS SEEN IN 2010, AND 282 PLANTS SEEN IN 2011.						
Owner/Manager:	YOL COUNTY						

<i>Puccinellia simplex</i>				Element Code: PMPOA53110			
California alkali grass							
Listing Status:	Federal:	None		CNDDB Element Ranks:	Global:	G3	
	State:	None			State:	S2	
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive					
Habitat:	General:	MEADOWS AND SEEPS, CHENOPOD SCRUB, VALLEY AND FOOTHILL GRASSLANDS, VERNAL POOLS.					
	Micro:	ALKALINE, VERNALLY MESIC. SINKS, FLATS, AND LAKE MARGINS. 1-915 M.					

Occurrence No.	50	Map Index:	98761	EO Index:	100236	Element Last Seen:	1955-03-24
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1955-03-24	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-01-22	
Quad Summary:	Saxon (3812146), Davis (3812156)						
County Summary:	Solano						
Lat/Long:	38.49505 / -121.70965				Accuracy:	2/5 mile	
UTM:	Zone-10 N4261533 E612525				Elevation (ft):		
PLSS:	T08N, R02E, Sec. 36 (M)				Acres:	280.0	
Location:	JUST WEST OF WESTMINSTER PRESBYTERIAN CHURCH OF TREMONT, 4.5 MILES SOUTHEAST OF THE CITY OF DAVIS.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB JUST WEST OF GIVEN CHURCH (LABELED AS "TREMONT CEMETARY" ON TOPO MAP).						
Ecological:	GROWING IN BARE ALKALI PATCHES OF AN ALKALINE MEADOW.						
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1955 CRAMPTON COLLECTION. BASED ON 2015 AERIAL IMAGERY, NO SUITABLE NATURAL HABITAT REMAINS IN THIS AREA; SITE PRESUMED EXTIRPATED.						
Owner/Manager:	UNKNOWN						



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Tuctoria mucronata

Element Code: PMPOA6N020

Crampton's tuctoria or Solano grass

Listing Status: **Federal:** Endangered

CNDDDB Element Ranks: **Global:** G1

State: Endangered

State: S1

Other: Rare Plant Rank - 1B.1, SB_RSABG-Rancho Santa Ana Botanic Garden

Habitat: **General:** VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND.

Micro: CLAY BOTTOMS OF DRYING VERNAL POOLS AND LAKES IN VALLEY GRASSLAND. 5-15 M.

Occurrence No.	3	Map Index:	89194	EO Index:	6337	Element Last Seen:	2011-10-15
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2011-10-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-09-14	

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.49106 / -121.68525	Accuracy:	specific area
UTM:	Zone-10 N4261120 E614659	Elevation (ft):	25
PLSS:	T08N, R03E, Sec. 31, SE (M)	Acres:	6.0

Location: DAVIS AIR FORCE COMMUNICATION FACILITY, EAST OF ROAD 104, BETWEEN ROAD 34 AND ROAD 35, 4 MILES SOUTH OF I-80.

Detailed Location: DAVIS COMMUNICATIONS ANNEX. 2 POLYGONS MAPPED ACCORDING TO 2013 WITHAM DIGITAL DATA IN THE WEST HALF OF THE SE 1/4 SECTION 31. PART OF OCCURRENCE MANAGED BY YOLO COUNTY PARKS. WITHIN 1/4 MI OF EO#4, WHICH IS A TRANSPLANTED POPULATION.

Ecological: LOW AREA ON PESCADERO CLAY LOAM. N SUBPOP RESTRICTED TO DISTURBED GROUND. S SUBPOP IN ALKALI SCALD, ALSO SHOWS SIGNS OF DISTURBANCE. ASSOCIATES INCLUDE CRYPIS SCHOENOIDES AND LEPIDIUM LATIFOLIUM. NEOSTAFIA COLUSANA ALSO PRESENT.

General: 2 POLYGONS WITH ~10,000 PLANTS TOTAL IN 1993, 2700 IN 1996, 1993 IN 2001, 4588 IN 2003, ~24,000 IN 2004, 10,364 IN 2005, 2216 IN 2006, 0 IN 2007, 5350 IN 2008, 364 IN 2009, 6970 IN 2010, 11,400 IN 2011. WEEDS TAKING OVER BY 2001.

Owner/Manager: DOD-MCCLELLAN AFB, YOL COUNTY

Occurrence No.	4	Map Index:	89196	EO Index:	90198	Element Last Seen:	2011-10-15
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2011-10-15	
Occ. Type:	Transplant Outside of Native Hab./Range	Trend:	Unknown	Record Last Updated:		2013-05-10	

Quad Summary: Saxon (3812146)

County Summary: Yolo

Lat/Long:	38.49464 / -121.68879	Accuracy:	specific area
UTM:	Zone-10 N4261513 E614344	Elevation (ft):	25
PLSS:	T08N, R03E, Sec. 31, SW (M)	Acres:	2.0

Location: YOLO GRASSLANDS REGIONAL PARK; APPROXIMATELY 0.8 AIR MILE EAST OF TREMONT CEMETARY.

Detailed Location: 2 POOLS MAPPED AS A SINGLE POLYGON ACCORDING TO 2013 WITHAM DIGITAL DATA IN THE NE 1/4 OF THE SW 1/4 OF SEC 31. THIS IS WITHIN A 1/4 MI OF EO#3, BUT KEPT AS A SEPARATE OCCURRENCE BECAUSE THESE ARE TRANSPLANTED PLANTS IN CREATED POOLS.

Ecological: CREATED VERNAL POOLS, MOSTLY BARE GROUND. THE RARE NEOSTAFIA COLUSANA ALSO PLANTED IN ONE OF THE POOLS.

General: 16 PLANTS OBSERVED IN 2011.

Owner/Manager: YOL COUNTY

*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

Plant List

31 matches found. [Click on scientific name for details](#)

Search Criteria

Found in Quads 3812146, 3812145, 3812144, 3812136, 3812135, 3812134, 3812126 3812125 and 3812124;

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Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Listing Status	Federal Listing Status	Lowest Elevation	Highest Elevation	Habitats
Astragalus tener var. ferrisiae	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	1B.1			2 m	75 m	<ul style="list-style-type: none"> • Meadows and seeps (vernally mesic) • Valley and foothill grassland (subalkaline flats)
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	1B.2			1 m	60 m	<ul style="list-style-type: none"> • Playas • Valley and foothill grassland (adobe clay) • Vernal pools
Brasenia schreberi	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	Jun-Sep	2B.3			30 m	2200 m	<ul style="list-style-type: none"> • Marshes and swamps (freshwater)
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	2B.1			0 m	625 m	<ul style="list-style-type: none"> • Coastal prairie • Marshes and swamps (lake margins) • Valley and foothill grassland
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	annual herb	May-Nov	1B.2			0 m	420 m	<ul style="list-style-type: none"> • Chaparral • Coastal prairie • Meadows and seeps • Marshes and swamps (coastal salt) • Valley and foothill grassland (vernally mesic)
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	4.2			0 m	100 m	<ul style="list-style-type: none"> • Valley and foothill grassland • Vernal pools
Cicuta maculata var. bolanderi	Bolander's water-hemlock	Apiaceae	perennial herb	Jul-Sep	2B.1			0 m	200 m	<ul style="list-style-type: none"> • Marshes and swamps Coastal, fresh or brackish water
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2			15 m	280 m	<ul style="list-style-type: none"> • Marshes and swamps (freshwater)
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2			1 m	445 m	<ul style="list-style-type: none"> • Valley and foothill grassland (mesic) • Vernal pools
Eryngium jepsonii	Jepson's coyote thistle	Apiaceae	perennial herb	Apr-Aug	1B.2			3 m	300 m	<ul style="list-style-type: none"> • Valley and foothill grassland • Vernal pools
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2			1 m	835 m	<ul style="list-style-type: none"> • Chenopod scrub • Meadows and seeps • Playas • Valley and foothill grassland
Hesperervax caulescens	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	4.2			0 m	505 m	<ul style="list-style-type: none"> • Valley and foothill grassland (mesic, clay) • Vernal pools (shallow)
Hibiscus lasiocarpus var. occidentalis	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	1B.2			0 m	120 m	<ul style="list-style-type: none"> • Marshes and swamps (freshwater)
Juglans hindsii	Northern California black walnut	Juglandaceae	perennial deciduous tree	Apr-May	1B.1			0 m	440 m	<ul style="list-style-type: none"> • Riparian forest • Riparian woodland
Lasthenia ferrisiae	Ferris' goldfields	Asteraceae	annual herb	Feb-May	4.2			20 m	700 m	<ul style="list-style-type: none"> • Vernal pools (alkaline, clay)
Lathyrus jepsonii var. jepsonii	Delta tule pea	Fabaceae	perennial herb	May-Jul (Aug-Sep)	1B.2			0 m	5 m	<ul style="list-style-type: none"> • Marshes and swamps (freshwater and brackish)
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1			1 m	880 m	<ul style="list-style-type: none"> • Vernal pools
Lepidium latipes var. heckardii	Heckard's pepper-grass	Brassicaceae	annual herb	Mar-May	1B.2			2 m	200 m	<ul style="list-style-type: none"> • Valley and foothill grassland (alkaline flats)

Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	1B.1	CR		0 m	10 m	<ul style="list-style-type: none"> Marshes and swamps (brackish or freshwater) Riparian scrub
Limosella australis	Delta mudwort	Scrophulariaceae	perennial stoloniferous herb	May-Aug	2B.1			0 m	3 m	<ul style="list-style-type: none"> Marshes and swamps (freshwater or brackish) Riparian scrub
Myosurus minimus ssp. apus	little mousetail	Ranunculaceae	annual herb	Mar-Jun	3.1			20 m	640 m	<ul style="list-style-type: none"> Valley and foothill grassland Vernal pools (alkaline)
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1			5 m	1740 m	<ul style="list-style-type: none"> Cismontane woodland Lower montane coniferous forest Meadows and seeps Valley and foothill grassland Vernal pools
Neostapfia colusana	Colusa grass	Poaceae	annual herb	May-Aug	1B.1	CE	FT	5 m	200 m	<ul style="list-style-type: none"> Vernal pools (adobe, large)
Plagiobothrys hystriculus	bearded popcornflower	Boraginaceae	annual herb	Apr-May	1B.1			0 m	274 m	<ul style="list-style-type: none"> Valley and foothill grassland (mesic) Vernal pools margins
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	1B.2			2 m	930 m	<ul style="list-style-type: none"> Chenopod scrub Meadows and seeps Valley and foothill grassland Vernal pools
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	1B.2			0 m	650 m	<ul style="list-style-type: none"> Marshes and swamps (assorted shallow freshwater)
Scutellaria galericulata	marsh skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Sep	2B.2			0 m	2100 m	<ul style="list-style-type: none"> Lower montane coniferous forest Meadows and seeps (mesic) Marshes and swamps
Scutellaria lateriflora	side-flowering skullcap	Lamiaceae	perennial rhizomatous herb	Jul-Sep	2B.2			0 m	500 m	<ul style="list-style-type: none"> Meadows and seeps (mesic) Marshes and swamps
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	1B.2			0 m	3 m	<ul style="list-style-type: none"> Marshes and swamps (brackish and freshwater)
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2			0 m	300 m	<ul style="list-style-type: none"> Marshes and swamps Valley and foothill grassland (mesic, alkaline) Vernal pools
Tuctoria mucronata	Crampton's tuctoria or Solano grass	Poaceae	annual herb	Apr-Aug	1B.1	CE	FE	5 m	10 m	<ul style="list-style-type: none"> Valley and foothill grassland (mesic) Vernal pools

Suggested Citation

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Questions and Comments

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Scientific N	Common N	Family	Lifeform	CRPR	GRank	SRank	CESA	FESA
Astragalus	Ferris' milk	Fabaceae	annual her	1B.1	G2T1	S1	None	None
Astragalus	alkali milk-	Fabaceae	annual her	1B.2	G2T1	S1	None	None
Brasenia	sc watershiel	Cabombac	perennial r	2B.3	G5	S3	None	None
Carex	combristly sedg	Cyperaceae	perennial r	2B.1	G5	S2	None	None
Centromad	pappose ta	Asteraceae	annual her	1B.2	G3T2	S2	None	None
Centromad	Parry's rou	Asteraceae	annual her		4.2 G3T3	S3	None	None
Cicuta	mac Bolander's	Apiaceae	perennial h	2B.1	G5T4T5	S2?	None	None
Cuscuta	ob Peruvian d	Convolvula	annual vine	2B.2	G5T4?	SH	None	None
Downingia	dwarf dow	Campanula	annual her	1B.2	GU	S2	None	None
Eryngium	j Jepson's co	Apiaceae	perennial h	1B.2	G2?	S2?	None	None
Extriplex	jo San Joaqui	Chenopodi	annual her	1B.2	G2	S2	None	None
Hespereva	hogwallow	Asteraceae	annual her		4.2 G3	S3	None	None
Hibiscus	las woolly rose	Malvaceae	perennial r	1B.2	G5T3	S3	None	None
Juglans	hin Northern C	Juglandace	perennial d	1B.1	G1	S1	None	None
Lasthenia	f Ferris' gold	Asteraceae	annual her		4.2 G3	S3	None	None
Lathyrus	je Delta tule	Fabaceae	perennial h	1B.2	G5T2	S2	None	None
Legenere	li legenere	Campanula	annual her	1B.1	G2	S2	None	None
Lepidium	l Heckard's	Brassicace	annual her	1B.2	G4T1	S1	None	None
Lilaeopsis	r Mason's lil	Apiaceae	perennial r	1B.1	G2	S2	CR	None
Limosella	a Delta mud	Scrophulari	perennial s	2B.1	G4G5	S2	None	None
Myosurus	r little mous	Ranunculac	annual her		3.1 G5T2Q	S2	None	None
Navarretia	Baker's nav	Polemonia	annual her	1B.1	G4T2	S2	None	None
Neostapfia	Colusa gras	Poaceae	annual her	1B.1	G1	S1	CE	FT
Plagioboth	bearded pc	Boraginace	annual her	1B.1	G2	S2	None	None
Puccinellia	California a	Poaceae	annual her	1B.2	G3	S2	None	None
Sagittaria	s Sanford's a	Alismatace	perennial r	1B.2	G3	S3	None	None
Scutellaria	marsh skull	Lamiaceae	perennial r	2B.2	G5	S2	None	None
Scutellaria	side-flower	Lamiaceae	perennial r	2B.2	G5	S2	None	None
Symphyotr	Suisun Mar	Asteraceae	perennial r	1B.2	G2	S2	None	None
Trifolium	h saline clov	Fabaceae	annual her	1B.2	G2	S2	None	None
Tuctoria	m Crampton's	Poaceae	annual her	1B.1	G1	S1	CE	FE

Blooming P	Habitat	Micro Habi	Elevation L	Elevation L	Elevation H	Elevation H	CA	Endemi	States
Apr-May	Meadows and seeps (v		2	5	75	245	T		
Mar-Jun	Playas, Vall alkaline		1	0	60	195	T		
Jun-Sep	Marshes and swamps (		30	95	2200	7220	F		AK, AL, AR,
May-Sep	Coastal prairie, Marshes		0	0	625	2050	F		AL, AR, CT,
May-Nov	Chaparral, often alkali		0	0	420	1380	T		
May-Oct	Valley and alkaline, ve		0	0	100	330	T		
Jul-Sep	Marshes and swamps (		0	0	200	655	F		AZ, NM, W.
Jul-Oct	Marshes and swamps (		15	45	280	920	F		AL, AR, BA,
Mar-May	Valley and foothill gras		1	0	445	1460	F		SA
Apr-Aug	Valley and clay		3	5	300	985	T		
Apr-Oct	Chenopod alkaline		1	0	835	2740	T		
Mar-Jun	Valley and sometimes		0	0	505	1655	T		
Jun-Sep	Marshes ar Often in rip		0	0	120	395	T		
Apr-May	Riparian forest, Riparia		0	0	440	1445	T		
Feb-May	Vernal pools (alkaline,		20	65	700	2295	T		
May-Jul(Au	Marshes and swamps (		0	0	5	15	T		
Apr-Jun	Vernal pools		1	0	880	2885	T		
Mar-May	Valley and foothill gras		2	5	200	655	T		
Apr-Nov	Marshes and swamps (		0	0	10	35	T		
May-Aug	Marshes ar Usually mu		0	0	3	10	F		CT, DE, MA
Mar-Jun	Valley and foothill gras		20	65	640	2100	F		BA, OR
Apr-Jul	Cismontane Mesic		5	15	1740	5710	T		
May-Aug	Vernal pools (adobe, la		5	15	200	655	T		
Apr-May	Valley and often verna		0	0	274	900	T		
Mar-May	Chenopod Alkaline, ve		2	5	930	3050	F		OR, UT
May-Oct(N	Marshes and swamps (		0	0	650	2135	T		
Jun-Sep	Lower montane conife		0	0	2100	6890	F		AK, AL, AZ,
Jul-Sep	Meadows and seeps (r		0	0	500	1640	F		AK, AL, AR,
(Apr)May-J	Marshes and swamps (		0	0	3	10	T		
Apr-Jun	Marshes and swamps,		0	0	300	985	T		
Apr-Aug	Valley and foothill gras		5	15	10	35	T		

Counties	Quads	EO Total	EO A	EO B	EO C	EO D	EO X	EO U
BUT, COL,	Liberty Isla	18	1	0	0	1	5	11
ALA, CCA,	Salinas (36	65	1	27	1	2	28	6
BUT, CAL,	Kern Lake (	43	6	1	0	0	4	32
CCA, LAK,	San Bernar	29	1	7	11	0	4	6
BUT, COL,	Montara M	39	1	6	2	4	1	25
BUT, COL,	Santa Rita Bridge (3712015), Los Banos (3712017), Sandy Mush (3712025), San Luis Ranch (3							
CCA, MRN,	Casmalia (3	17	0	2	1	0	0	14
BUT, LAX,	Redlands (3	6	0	0	0	0	1	5
AMA, FRE,	Friant (361	132	13	50	10	6	7	46
ALA, AMA,	Patterson M	10	0	0	0	0	0	10
ALA, CCA,	Morro Bay	127	5	28	25	8	13	48
ALA, AMA,	Adelaida (3512067), San Miguel (3512076), Bradley (3512077), Planada (3712033), Merced							
BUT, CCA,	Clifton Cou	173	0	78	38	16	1	40
CCA, LAK,	Las Trampas Ridge (3712271), Isleton (3812125), Rio Vista (3812126), Courtland (3812135),							
ALA, BUT,	Wells Ranch (3511916), Painted Rock (3511927), Chimineas Ranch (3511928), Gosford (351							
CCA, NAP,	Stockton W	133	5	20	21	11	2	74
ALA, LAK,	Salinas (36	83	11	30	10	3	9	20
GLE, MER,	Arena (371	14	4	4	2	0	0	4
ALA, CCA,	Union Islan	197	4	84	36	9	1	63
CCA, SAC,	Clifton Court Forebay (3712175), Woodward Island (3712185), Terminous (3812114), Bould							
ALA, CCA,	Otay Moun	24	1	7	1	1	0	14
COL, GLE,	San Rafael	64	5	8	3	0	10	38
COL, GLE,	El Nido (37	66	3	13	21	3	21	5
NAP, SOL,	Antioch No	15	3	4	1	0	0	7
ALA, BUT,	Lucerne Va	80	4	3	2	0	15	56
BUT, DNT,	Newport B	126	14	35	29	4	9	35
ELD, LAS,	Woodward	39	5	14	4	1	0	15
INY, SAC,	S. Terminous	13	0	7	5	0	0	1
CCA, NAP,	Vernalis (3	175	6	26	49	15	0	79
ALA, CCA,	San Luis Ok	55	1	10	4	1	10	29
SOL, YOL	Dozier (381	4	0	1	2	0	0	1

EO Historic	EO Recent	EO Extant	EO Possibly	EO Extirpat	Notes	Full Scientific Name	Synonyms	Element	Code
16	2	13	5	0	Rediscovered	<i>Astragalus tener</i> Gray		PDFAB0F8F	
41	24	37	18	10	Threatened	<i>Astragalus tener</i> Gray		PDFAB0F8F	
25	18	39	2	2	Many occurrences	<i>Brasenia schreberi</i> J.F.		PDCAB010F	
10	19	25	4	0	Location, rare	<i>Carex comosa</i> Boott		PMCYP032	
15	24	38	0	1	Threatened	<i>Centromadia parryi</i> (G.)		PDAST4R0F	
3712027), Brush Lake (3712151), Peters (3712181), Stock						Threatened	<i>Centromadia parryi</i> (G.)	PDAST4R0F	
11	6	17	0	0	Threatened	<i>Cicuta maculata</i> L. var.		PDAP10M0F	
6	0	5	0	1	Last seen in	<i>Cuscuta obtusiflora</i> Ku		PDCUS011F	
89	43	125	2	5	Threatened	<i>Downingia</i>	<i>Downingia</i>	PDCAM06C	
10	0	10	0	0	Possibly threatened	<i>Eryngium jepsonii</i> J.M.		PDPHR011F	
55	72	114	4	9	Many occurrences	<i>Extriplex jo</i>	<i>Atriplex jo</i>	PDCHE041F	
(3712034), Byron Hot Springs (3712176), Brentwood (371						Threatened	<i>Hesperis matronalis</i>	PDASTE50F	
73	100	172	0	1	Most occur	<i>Hibiscus lasiocarpus</i>	<i>Hibiscus californicus</i>	PDMAL0H0	
Florin (3812144), Clarksburg (3812145), Napa (3812233), Only one at						<i>Juglans hin</i>	<i>Juglans californica</i>	PDJUG020F	
1931), California Valley (3512031), La Panza NE (3512041)						Threatened	<i>Lasthenia ferrisiae</i> Orn	PDAST5L0F	
81	52	131	2	0	Most populations	<i>Lathyrus jepsonii</i> Gree		PDFAB250F	
43	40	74	1	8	Many historical	<i>Legenere limosa</i> (Gree)		PDCAM0CC	
6	8	14	0	0	Many plants	<i>Lepidium latipes</i> Hook.		PDBRA1MC	
96	101	196	0	1	Locally common	<i>Lilaeopsis masonii</i> Mat		PDAP1190F	
in Island (3812115), Jersey Island (3812116), Antioch North						Threatened	<i>Limosella alba</i>	PDSCR100F	
23	1	24	0	0	Move to List	<i>Myosurus minimus</i> L.		PDRAN0H0	
41	23	54	6	4	May be monotypic	<i>Navarretia leucocephala</i>		PDPLM0C0	
31	35	45	7	14	Threatened	<i>Neostapfia colusana</i> (L.)		PMPOA4CC	
4	11	15	0	0	Rediscovered	<i>Plagiobothrys hystricul</i>		PDBOR0V0	
58	22	65	10	5	Threatened	<i>Puccinellia simplex</i> Scr		PMPOA531	
47	79	117	8	1	Extirpated	<i>Sagittaria sanfordii</i> Gre		PMALI040C	
13	26	39	0	0	Possibly threatened	<i>Scutellaria galericulata</i>		PDLAM1UC	
1	12	13	0	0	Need quadrat	<i>Scutellaria lateriflora</i> L.		PDLAM1UC	
76	99	175	0	0	Seriously threatened	<i>Symphyotrichum chile</i>		PDASTE84F	
27	28	45	3	7	Many sites	<i>Trifolium hirsutum</i>	<i>Trifolium d</i>	PDFAB400F	
0	4	4	0	0	Only four populations	<i>Tuctoria minor</i>	<i>Orcuttia minor</i>	PMPOA6NF	

USDA PLAN Flora Status: CBR Reason Date Added Date Change Last Update

ASTEF	1/1/1994	#####
ASTET2	1/1/1994	#####
BRSC	#####	#####
CACO8	1/1/1994	#####
CEPAP4	1/1/2004	#####
CEPAR4	#####	1/6/2015
CIMAB	1/1/1974	2/6/2019
CUOBG	#####	3/1/2019
DOPU3	1/1/1980	#####
30	#####	#####
3	1/1/1988	#####
HECA30	1/1/2001	#####
IR3	1/1/1974	#####
JUHI	1/1/1974	2/4/2013
LAFE	1/1/2001	#####
LAJEJ	1/1/1974	1/3/2014
LELI	1/1/1974	#####
LELAH2	1/1/1994	#####
LIMA7	1/1/1974	#####
LIAU6	1/1/1994	#####
MYSE2	1/1/1980	2/4/2013
NALEB	1/1/1994	#####
NECO2	1/1/1974	7/6/2015
PLHY	1/1/1974	4/4/2017
.10	#####	#####
SASA2	1/1/1984	#####
SCGA	1/1/1994	1/6/2015
SCLA2	1/1/1994	5/8/2019
STYLE2	1/1/1974	4/5/2018
35	1/1/2001	#####
TUMU	1/1/1974	5/8/2019

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Sacramento, Solano and Yolo counties, California



Local office

San Francisco Bay-Delta Fish And Wildlife

☎ (916) 930-5603

📠 (916) 930-5654

650 Capitol Mall
Suite 8-300
Sacramento, CA 95814

[http://kim_squires@fws.gov](mailto:kim_squires@fws.gov)

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Delta Green Ground Beetle <i>Elaphrus viridis</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2319	Threatened
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Delta Smelt <i>Hypomesus transpacificus</i> https://ecos.fws.gov/ecp/species/321#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that

occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

Common Yellowthroat *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

Nuttall's Woodpecker *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

Oak Titmouse *Baeolophus inornatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

Breeds Mar 15 to Jul 15

Song Sparrow *Melospiza melodia*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Feb 20 to Sep 5

Spotted Towhee *Pipilo maculatus clementae*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/4243>

Breeds Apr 15 to Jul 20

Wrentit *Chamaea fasciata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 10

Yellow-billed Magpie *Pica nuttalli*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9726>

Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

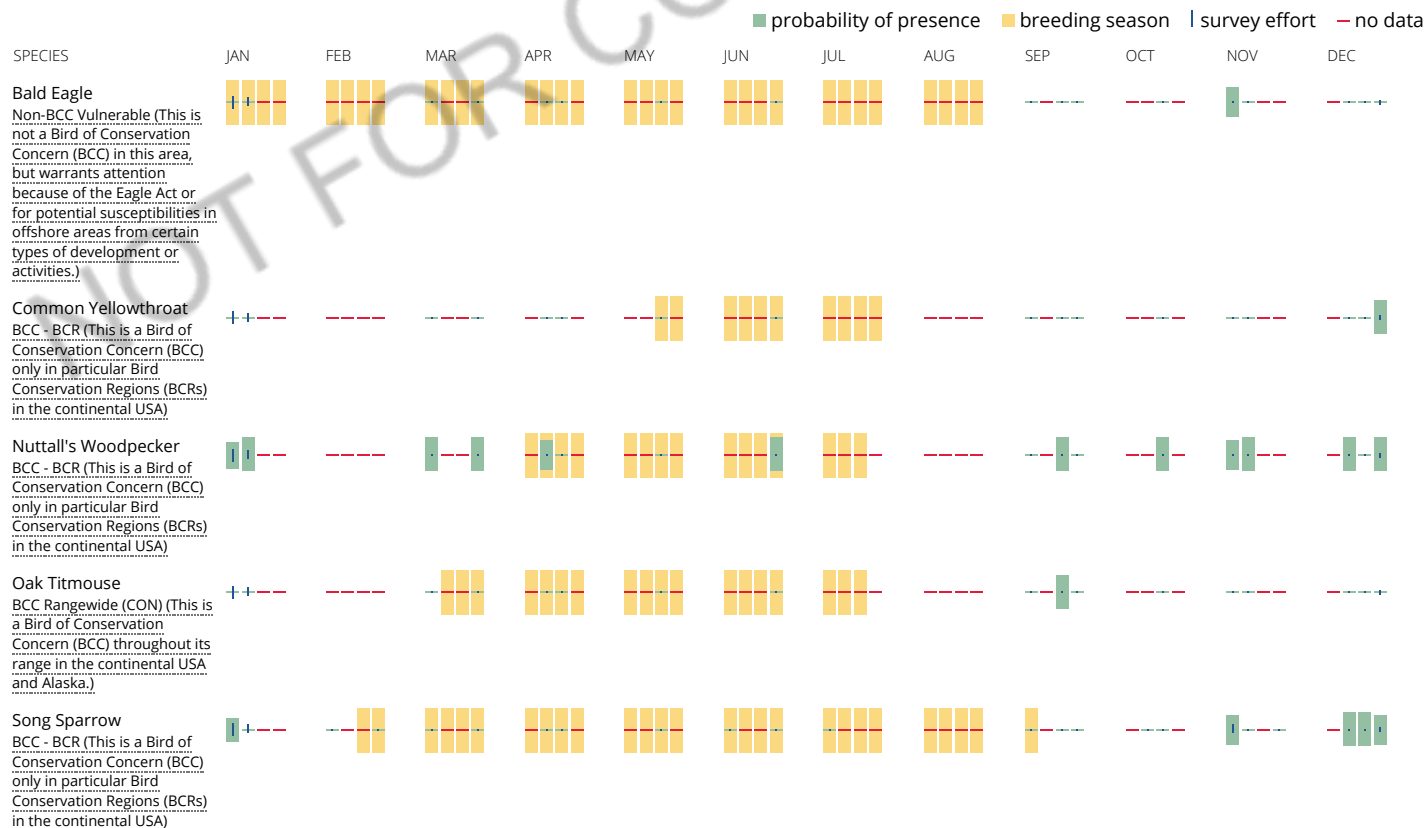
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

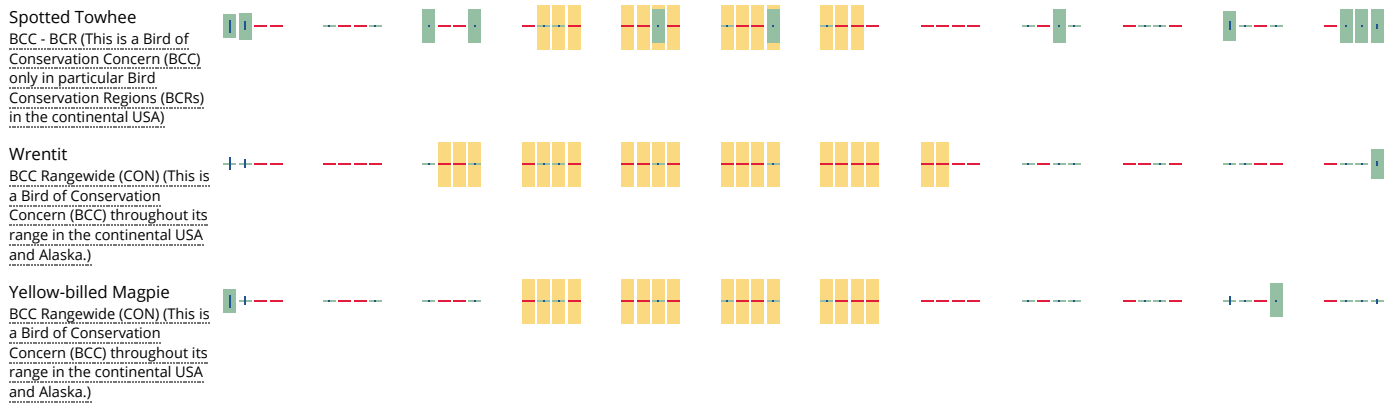
No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

NMFS List

Quad Name **Courtland**

Quad Number **38121-C5**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) - **X**

SRWR Chinook Salmon ESU (E) - **X**

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) - **X**

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat - **X**

SRWR Chinook Salmon Critical Habitat - **X**

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat - **X**

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat - **X**

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

X

Groundfish EFH -

X

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

**See list at left and consult the NMFS Long Beach office
562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -

Appendix D. Tribal Consultation

Appendix D - Native American Consultation



YOCHA DEHE
CULTURAL RESOURCES

July 23, 2020

GEI Consultants
Attn: Jesse Martinez, Senior Archaeologist
2868 Prospect Park Drive, Suite 400
Rancho Cordova, CA 95670

RE: Sutter Slough Levee Unit 3 Flood System Repair Project

Dear Mr. Martinez:

Thank you for your project notification letter dated, July 13, 2020, regarding cultural information on or near the proposed Sutter Slough Levee Unit 3 Flood System Repair Project, Yolo and Solano Counties. We appreciate your effort to contact us and wish to respond.

The Cultural Resources Department has reviewed the project and concluded that it is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we have a cultural interest and authority in the proposed project area and would like to initiate a formal consultation with the lead agency. Additionally, please provide our Cultural Resources Department with a project timeline, detailed project information and the latest cultural study for the proposed project prior to the consultation.

Please contact the following individual to coordinate a date and time for the consultation meeting:

Kristin Jensen, CRD Administrative Assistant
Yocha Dehe Wintun Nation
Office: (530) 796-0105
Email: kjensen@yochadehe-nsn.gov

Please refer to identification number YD-07202020-02 in any correspondence concerning this project.

Thank you for providing us the opportunity to comment.

Sincerely,


Leland Kinter (Jul 28, 2020 11:20 PDT)

Tribal Historic Preservation Officer

From: [Martinez, Jesse](#)
To: [Bishop, Erica](#); [Jurich, Denise](#)
Subject: FW: Sutter Slough Levee Flood System Repair Project
Date: Thursday, August 13, 2020 8:50:18 AM
Attachments: [image001.png](#)

See below. UAIC believes the project is out of their aboriginal territory.



JESSE MARTINEZ, RPA
Senior Archaeologist
916.631.4500 cell: 916.214.5931 fax: 916.631.4501
2868 Prospect Park Drive, Suite 400, Rancho Cordova, CA 95670



From: Anna Starkey <astarkey@auburnrancheria.com>
Sent: Wednesday, August 12, 2020 4:31 PM
To: Martinez, Jesse <jmartinez@geiconsultants.com>
Cc: 'anderson@mbkengineers.com' <anderson@mbkengineers.com>
Subject: [EXT] Sutter Slough Levee Flood System Repair Project

Good afternoon,

Thank you for then notification for the Sutter Slough Levee Flood System Repair Project. We checked our database and we don't have any records in this area. I believe it is right outside of UIAC's tribal territory. I suggest to follow up with Yocha Dehe if you've not heard back from them yet.

Thank you.

Best,

Anna



Anna M. Starkey, M.A., RPA
Cultural Regulatory Specialist
Tribal Historic Preservation Department | UAIC
10720 Indian Hill Road
Auburn, CA 95603
Direct line: (916) 251-1565 | Cell: (530) 863-6503
astarkey@auburnrancheria.com | www.auburnrancheria.com

Nothing in this e-mail is intended to constitute an electronic signature for purposes of the Electronic Signatures in Global and National Commerce Act (E-Sign Act), 15, U.S.C. §§ 7001 to 7006 or the Uniform Electronic Transactions Act of any state or the

federal government unless a specific statement to the contrary is included in this e-mail.

**Native American Heritage Commission
Tribal Consultation List
Solano, Yolo Counties
7/8/2020**

***Cortina Rancheria - Kletsel
Dehe Band of Wintun Indians***

Charlie Wright, Chairperson
P.O. Box 1630 Wintun
Williams, CA, 95987
Phone: (530) 473 - 3274
Fax: (530) 473-3301

Guidiville Indian Rancheria

Merlene Sanchez, Chairperson
P.O. Box 339 Pomo
Talmage, CA, 95481
Phone: (707) 462 - 3682
Fax: (707) 462-9183
admin@guidiville.net

***United Auburn Indian
Community of the Auburn
Rancheria***

Gene Whitehouse, Chairperson
10720 Indian Hill Road Maidu
Auburn, CA, 95603 Miwok
Phone: (530) 883 - 2390
Fax: (530) 883-2380
bguth@auburnrancheria.com

Yocha Dehe Wintun Nation

Anthony Roberts, Chairperson
P.O. Box 18 Patwin
Brooks, CA, 95606
Phone: (530) 796 - 3400
Fax: (530) 796-2143
aroberts@yochadehe-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Rd 999 Erosion Repairs Project, Solano, Yolo Counties.