Appendix A

Figures
Figure 3
Land Use Map

Source: Base Map Layers (NearMap)
Figure 4

Zoning Map

Source: Base Map Layers (NearMap)

Project Boundary
Zoning Designation
- ARP-F; American River Parkway
- C-2; General Commercial
- C-2-LI; General Commercial
- C-2-LI-PC; General Commercial
- C-2-R-PC-PUD; General Commercial
- H-PC; Hospital
- M-1; Light Industrial
- M-1-LI; Light Industrial
- M-1-LI-PC; Light Industrial
- OB-LI; Office Business Low-Rise Mixed Use
- R-1; Single Unit Dwelling

F: Floodplain, LI: Labor Intensive, PC: Parkway Corridor, PUD: Planned Unit Development

HELIX
Environmental Planning

Zoning Map
Figure 4
TENTATIVE PARCEL MAP

PARCEL 2 - BOOK 229 OF PARCEL MAPS - PAGE 10

SACRAMENTO SELF STORAGE

500 LEISURE LANE
SACRAMENTO, CA

UTILITY PROVIDERS

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EXISTING NUMBER OF LOTS  (1) ONE
PROPOSED NUMBER OF LOTS   (4) FOUR
EXISTING USE   GENERAL COMMERCIAL
PROPOSED USE     GENERAL COMMERCIAL
EXISTING ZONING   C-2-LI - GENERAL COMMERCIAL
PROPOSED ZONING  C-2-LI - GENERAL COMMERCIAL

PROJECT ADDRESS  500 LEISURE LANE
PROJECT APN      275-0260-070
OWNER            COLUMBIA WOODLAKE, LLC
1910 FAIRVIEW AVENUE, SUITE 200
SEATTLE, WA 98102
ATTN: ALEX WASHBURN
DEVELOPER/APPLICANT COLUMBIA WOODLAKE, LLC
C/O LENITY ARCHITECTURE
3150 KETTLE CT. SE
SALEM, OR 98102
ATTN: GREG ELMORE
ENGINEER/SURVEYOR TSD ENGINEERING, INC
785 ORCHARD DRIVE, SUITE 110
FOLSOM, CA 95630
ATTN: CASEY FEICKERT
EXISTING NUMBER OF LOTS  (1) ONE
PROPOSED NUMBER OF LOTS   (4) FOUR
EXISTING USE   GENERAL COMMERCIAL
PROPOSED USE     GENERAL COMMERCIAL
EXISTING ZONING   C-2-LI - GENERAL COMMERCIAL
PROPOSED ZONING  C-2-LI - GENERAL COMMERCIAL

PROJECT INFORMATION

PARK DISTRICT CITY OF SACRAMENTO
SCHOOL DISTRICT TWIN RIVERS UNIFIED SCHOOL DISTRICT
WATER CITY OF SACRAMENTO WATER
SANITARY SEWER SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT
DISTRICT CITY OF SACRAMENTO UTILITIES
GAS PG&E
ELECTRIC SMUD
TELEPHONE AT&T
CABLE COMCAST
FIRE CITY OF SACRAMENTO FIRE DISTRICT

TENTS OF ELEVATION

NOTES

THE ELEVATIONS SHOWN HEREON ARE BASED UPON CITY OF SACRAMENTO BENCHMARK NO. 294-J1B, HAVING AN ELEVATION OF 41.74 FEET (NGVD29), BEING A HILTI NAIL IN THE NORTHEAST CORNER OF THE BRIDGE ON TRIBUTE ROAD OVER HIGHWAY 160 AT FEE DRIVE.

BASE OF BEARING

THE BASIS OF BEARINGS FOR THIS SURVEY IS IDENTICAL WITH THE CENTERLINE OF EXPO PARKWAY, AS SHOWN ON THE PLAT OF "WOODLAKE BUSINESS PARK", FILED IN BOOK 245 OF MAPS, MAP NO. 7, SACRAMENTO COUNTY RECORDS, BASED UPON FOUND MONUMENTS SHOWN HEREON.

TENTATIVE PARCEL MAP

MARCH 7, 2018

Source: TSD Engineering, Inc. 2018

Sacramento Self Storage

Figure 5
Appendix B

CALEEMOD Output and
Climate Action Plan Checklist
1.0 Project Characteristics

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1.2 Other Project Characteristics

- Urbanization: Urban
- Wind Speed (m/s): 3.5
- Precipitation Freq (Days): 58
- Climate Zone: 6
- Operational Year: 2021
- Utility Company: Sacramento Municipal Utility District

1.3 User Entered Comments & Non-Default Data

- CO2 Intensity (lb/MWhr): 590.31
- CH4 Intensity (lb/MWhr): 0.029
- N2O Intensity (lb/MWhr): 0.006
Project Characteristics -

Land Use -

Construction Phase - Grading commence October 2018
(Demolition and Site Prep complete)
Architectural Coating - low VOC coating
Vehicle Trips - Trip generation provided by Kimley Horn
Area Coating - low VOC coating

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation - Prior to issuance of building permits, the applicant shall comply with the alternative Climate Action Plan requirement to exceed the minimum energy efficiency standards under California Administrative Code Title 24

Water Mitigation - Per CalGreen

Waste Mitigation - Per AB-341

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### 2.1 Overall Construction

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<th>PM2.5 Total</th>
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<th>Total CO2</th>
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## 2.1 Overall Construction

### Mitigated Construction

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<th>NBio- CO2</th>
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### 3.0 Construction Detail

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 344,250; Residential Outdoor: 114,750; Non-Residential Indoor: 545,583; Non-Residential Outdoor: 181,861; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment
### Mitigation Measures Construction

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### 3.2 Grading - 2018

**Unmitigated Construction On-Site**

| Category                        | 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 |
|--------------------------------|-----|-----|-----|-----|---------------|--------------|------------|---------------|---------------|-------------|-----------|---------|---------|----------|-----|-----|------|
| Fugitive Dust                  |     |     |     |     | 0.2982        | 0.0000       | 0.2982     | 0.1200         | 0.0000        | 0.1200      | 0.0000   | 0.0000  | 0.0000  | 0.0000   |     |     |      |
| Off-Road                       | 0.1680 | 1.9642 | 1.1580 | 2.0500e-003 | 0.0869       | 0.0869      | 0.0800     | 0.0800         | 0.0000        | 186.9401   | 186.9401 | 0.0582  | 0.0000  | 188.3950 |
| Total                          | 0.1680 | 1.9642 | 1.1580 | 2.0500e-003 | 0.2982       | 0.0869      | 0.3851     | 0.1200         | 0.0800        | 0.1999      | 0.0000   | 186.9401 | 186.9401 | 0.0582  | 0.0000  | 188.3950 |
### 3.2 Grading - 2018

#### Unmitigated Construction Off-Site

| Category            | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2   | N Bio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------|--------|--------|--------|--------|---------------|--------------|------------|---------------|--------------|------------|------------|------------|------------|------------|-----|-----|------|
| 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              | 2.9400E-003 | 2.1300E-003 | 0.0226 | 5.0000E-005 | 4.8500E-003 | 4.0000E-005 | 4.8800E-003 | 1.2900E-003 | 3.0000E-005 | 1.3200E-003 | 0.0000     | 4.5869     | 4.5869     | 1.6000E-004 | 0.0000 | 4.5908 |
| Total               | 2.9400E-003 | 2.1300E-003 | 0.0226 | 5.0000E-005 | 4.8500E-003 | 4.0000E-005 | 4.8800E-003 | 1.2900E-003 | 3.0000E-005 | 1.3200E-003 | 0.0000     | 4.5869     | 4.5869     | 1.6000E-004 | 0.0000 | 4.5908 |

#### Mitigated Construction On-Site

| Category            | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2   | N Bio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------|--------|--------|--------|--------|---------------|--------------|------------|---------------|--------------|------------|------------|------------|------------|------------|-----|-----|------|
| Fugitive Dust       | 0.1342 | 0.0000 | 0.1342 | 0.0540 | 0.0000        | 0.0540       | 0.0000     | 0.0000        | 0.0000       | 0.0000     | 0.0000     | 0.0000     | 0.0000     | 0.0000     |     |     |      |
| Off-Road            | 0.1680 | 1.9642 | 1.1580 | 2.0500E-003 | 0.0869   | 0.0869       | 0.0800     | 0.0800       | 0.0000       | 186.9398   | 186.9398   | 0.0582     | 0.0000     | 188.3948   |     |     |      |
| Total               | 0.1680 | 1.9642 | 1.1580 | 2.0500E-003 | 0.1342   | 0.0869       | 0.2211     | 0.0540       | 0.0800       | 0.1340     | 0.0000     | 186.9398   | 186.9398   | 0.0582     | 0.0000 | 188.3948 |      |
### 3.2 Grading - 2018

#### Mitigated Construction Off-Site

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### 3.2 Grading - 2019

#### Unmitigated Construction On-Site

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<th>Total CO2</th>
<th>CH4</th>
<th>N2O</th>
<th>CO2e</th>
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### 3.2 Grading - 2019

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### 3.2 Grading - 2019

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### 3.3 Building Construction - 2019

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### 3.3 Building Construction - 2019

#### Unmitigated Construction Off-Site

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### 3.3 Building Construction - 2020

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### 3.4 Paving - 2020

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#### Mitigated Construction On-Site

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CalEEMod Version: CalEEMod.2016.3.2

Date: 6/6/2018 9:03 AM

Lenity - Sacramento Self Storage - Sacramento County, Annual
### 3.4 Paving - 2021

**Mitigated Construction Off-Site**

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### 3.5 Architectural Coating - 2021

**Unmitigated Construction On-Site**

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### 3.5 Architectural Coating - 2021

#### Unmitigated Construction Off-Site

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#### Mitigated Construction On-Site

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3.5 Architectural Coating - 2021
Mitigated Construction Off-Site

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity
Improve Walkability Design
### 4.2 Trip Summary Information

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### 4.3 Trip Type Information

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<th>Trip Purpose %</th>
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<td>H-O or C-NW</td>
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<tr>
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<td>5.00</td>
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<td>6.50</td>
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### 4.4 Fleet Mix

**Category** | **tons/yr** | **MT/yr**  
--- | --- | ---  
Mitigated | 1.2149 | 4.6321 | 11.4448 | 0.0307 | 2.4791 | 0.0290 | 2.5081 | 0.6648 | 0.0271 | 0.6919 | 0.0000  
Unmitigated | 1.2471 | 4.8599 | 12.2604 | 0.0337 | 2.7545 | 0.0316 | 2.7861 | 0.7386 | 0.0295 | 0.7682 | 0.0000  

**Bio-CO2** | **NBio-CO2** | **Total CO2** | **CH4** | **N2O** | **CO2e**  
--- | --- | --- | --- | --- |  
0.0000  | 0.1535 | 0.0000 | 2,818.282  
0.0000  | 0.1851 | 0.0000 | 3,104.580  

**Trip Summary Information**

**4.4 Trip Summary Information**

**Average Daily Trip Rate**

<table>
<thead>
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<th>Land Use</th>
<th>Average Daily Trip Rate</th>
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**4.3 Trip Type Information**

**Miles**

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**Trip Purpose %**

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### 5.0 Energy Detail

**Historical Energy Use:** N

#### 5.1 Mitigation Measures Energy

**Exceed Title 24**

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<th>HHD</th>
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<td>0.005939</td>
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CalEEMod Version: CalEEMod.2016.3.2

Date: 6/6/2018 9:03 AM

Lenity - Sacramento Self Storage - Sacramento County, Annual
## 5.2 Energy by Land Use - Natural Gas

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<th>NOx</th>
<th>CO</th>
<th>SO2</th>
<th>Fugitive PM10</th>
<th>Exhaust PM10</th>
<th>Total PM10</th>
<th>Fugitive PM2.5</th>
<th>Exhaust PM2.5</th>
<th>Total PM2.5</th>
<th>Bio- CO2</th>
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<th>Total CO2</th>
<th>CH4</th>
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<th>CO2e</th>
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## 5.2 Energy by Land Use - Natural Gas

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<th>CO</th>
<th>SO2</th>
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<th>PM2.5 Total</th>
<th>PM2.5 Fugitive</th>
<th>Bio-CO2</th>
<th>NBio-CO2</th>
<th>Total CO2</th>
<th>CH4</th>
<th>N2O</th>
<th>CO2e</th>
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## 5.3 Energy by Land Use - Electricity

### Mitigated

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### 6.0 Area Detail

#### 6.1 Mitigation Measures Area
### 6.2 Area by SubCategory

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<th>Exhaust PM10</th>
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<th>Fugitive PM2.5</th>
<th>Exhaust PM2.5</th>
<th>PM2.5 Total</th>
<th>Bio-CO2</th>
<th>NBio-CO2</th>
<th>Total CO2</th>
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6.2 Area by SubCategory

Mitigated

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7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy
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<th>CO2e</th>
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### 7.2 Water by Land Use

#### Unmitigated

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<th>N2O</th>
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CalEEMod Version: CalEEMod.2016.3.2
Date: 6/6/2018 9:03 AM
Lenity - Sacramento Self Storage - Sacramento County, Annual
### 7.2 Water by Land Use

#### Mitigated

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<th>Indoor/Outdoor Use</th>
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<td><strong>0.0314</strong></td>
<td><strong>85.4780</strong></td>
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### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services
### Category/Year

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### 8.2 Waste by Land Use

#### Unmitigated

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## 8.2 Waste by Land Use

### Mitigated

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## 9.0 Operational Offroad

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<th>Load Factor</th>
<th>Fuel Type</th>
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## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

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<th>Hours/Year</th>
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### Boilers

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### User Defined Equipment
11.0 Vegetation
## 1.0 Project Characteristics

### 1.1 Land Usage

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<th>Floor Surface Area</th>
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</table>

### 1.2 Other Project Characteristics

- **Urbanization**: Urban
- **Wind Speed (m/s)**: 3.5
- **Precipitation Freq (Days)**: 58
- **Climate Zone**: 6
- **Operational Year**: 2021
- **Utility Company**: Sacramento Municipal Utility District
- **CO2 Intensity (lb/MWhr)**: 590.31
- **CH4 Intensity (lb/MWhr)**: 0.029
- **N2O Intensity (lb/MWhr)**: 0.006

### 1.3 User Entered Comments & Non-Default Data

---

Lenity - Sacramento Self Storage - Sacramento County, Winter
Project Characteristics -

Land Use -

Construction Phase - Grading commence October 2018
(Demolition and Site Prep complete)

Architectural Coating - low VOC coating

Vehicle Trips - Trip generation provided by Kimley Horn

Area Coating - low VOC coating

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation - Prior to issuance of building permits, the applicant shall comply with the alternative Climate Action Plan requirement to exceed the minimum energy efficiency standards under California Administrative Code Title 24

Water Mitigation - Per CalGreen

Waste Mitigation - Per AB-341

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2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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<tr>
<th>Year</th>
<th>ROG</th>
<th>NOx</th>
<th>CO</th>
<th>SO2</th>
<th>Fugitive PM10</th>
<th>Exhaust PM10</th>
<th>PM10 Total</th>
<th>Fugitive PM2.5</th>
<th>Exhaust PM2.5</th>
<th>PM2.5 Total</th>
<th>Bio- CO2</th>
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<th>Total CO2</th>
<th>CH4</th>
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### 2.1 Overall Construction (Maximum Daily Emission)

#### Mitigated Construction

<table>
<thead>
<tr>
<th>Year</th>
<th>ROG</th>
<th>NOx</th>
<th>CO</th>
<th>SO2</th>
<th>Fugitive PM10</th>
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<th>Bio-CO2</th>
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<tbody>
<tr>
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### 2.2 Overall Operational

#### Unmitigated Operational

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<th>NBio- CO2</th>
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<th>N2O</th>
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#### Mitigated Operational

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CalEEMod Version: CalEEMod.2016.3.2

Date: 6/6/2018 9:06 AM

Lenity - Sacramento Self Storage - Sacramento County, Winter
### 3.0 Construction Detail

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- **Acres of Grading (Site Preparation Phase):** 0
- **Acres of Grading (Grading Phase):** 187.5
- **Acres of Paving:** 0

Residential Indoor: 344,250; Residential Outdoor: 114,750; Non-Residential Indoor: 545,583; Non-Residential Outdoor: 181,861; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**
### 3.1 Mitigation Measures Construction

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3.2 Grading - 2018

Unmitigated Construction On-Site

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Water Exposed Area
Water Unpaved Roads
Reduce Vehicle Speed on Unpaved Roads
### Unmitigated Construction Off-Site

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**Category**:
- **ROG**: Regulatory Objective Goal
- **NOx**: Nitrogen Oxides
- **CO**: Carbon Monoxide
- **SO2**: Sulfur Dioxide
- **PM10**: Particulate Matter 10
- **PM2.5**: Particulate Matter 2.5
- **Bio-CO2**: Bio-diesel Carbon Dioxide
- **NBio-CO2**: Non-Bio-diesel Carbon Dioxide
- **Total CO2**: Total Carbon Dioxide
- **CH4**: Methane
- **N2O**: Nitrous Oxide
- **CO2e**: Carbon Dioxide Equivalent
### 3.2 Grading - 2018

**Mitigated Construction Off-Site**

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### 3.2 Grading - 2019

**Unmitigated Construction On-Site**

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3.2 Grading - 2019

Unmitigated Construction Off-Site

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Mitigated Construction On-Site

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### 3.2 Grading - 2019

#### Mitigated Construction Off-Site

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### 3.3 Building Construction - 2019

#### Unmitigated Construction On-Site

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### Unmitigated Construction Off-Site

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### 3.3 Building Construction - 2019

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### 3.4 Paving - 2020

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</table>
### 3.4 Paving - 2021

#### Unmitigated Construction Off-Site

<table>
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<th>Category</th>
<th>ROG lb/day</th>
<th>NOx lb/day</th>
<th>CO lb/day</th>
<th>SO2 lb/day</th>
<th>Fugitive PM10 lb/day</th>
<th>Exhaust PM10 lb/day</th>
<th>PM10 Total lb/day</th>
<th>Fugitive PM2.5 lb/day</th>
<th>Exhaust PM2.5 lb/day</th>
<th>PM2.5 Total lb/day</th>
<th>Bio-CO2 lb/day</th>
<th>NBio-CO2 lb/day</th>
<th>Total CO2 lb/day</th>
<th>CH4 lb/day</th>
<th>N2O lb/day</th>
<th>CO2e lb/day</th>
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<td>7.1000e-004</td>
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#### Mitigated Construction On-Site

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<th>NOx lb/day</th>
<th>CO lb/day</th>
<th>SO2 lb/day</th>
<th>Fugitive PM10 lb/day</th>
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<th>PM10 Total lb/day</th>
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<th>Exhaust PM2.5 lb/day</th>
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<th>Bio-CO2 lb/day</th>
<th>NBio-CO2 lb/day</th>
<th>Total CO2 lb/day</th>
<th>CH4 lb/day</th>
<th>N2O lb/day</th>
<th>CO2e lb/day</th>
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<td>0.6777</td>
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### 3.4 Paving - 2021

#### Mitigated Construction Off-Site

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<th>SO2</th>
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<th>Exhaust PM2.5</th>
<th>PM2.5 Total</th>
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<th>NBio-CO2</th>
<th>Total CO2</th>
<th>CH4</th>
<th>N2O</th>
<th>CO2e</th>
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<tr>
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### 3.5 Architectural Coating - 2021

#### Unmitigated Construction On-Site

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<th>PM2.5 Total</th>
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<th>Total CO2</th>
<th>CH4</th>
<th>N2O</th>
<th>CO2e</th>
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### 3.5 Architectural Coating - 2021

#### Unmitigated Construction Off-Site

| Category   | 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   |
|------------|-------|-------|-------|-------|---------------|--------------|------------|---------------|---------------|------------|----------|---------|----------|---------|-------|-------|--------|
| 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 |
| 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 |
| Worker     | 0.1993| 0.1368| 1.3779| 3.6500e-003| 0.4108     | 2.7700e-003 | 0.4136     | 0.1090        | 2.5600e-003 | 0.1115    | 363.5087 | 363.5087 | 9.6900e-003 | 363.7509 |
| Total      | 0.1993| 0.1368| 1.3779| 3.6500e-003| 0.4108     | 2.7700e-003 | 0.4136     | 0.1090        | 2.5600e-003 | 0.1115    | 363.5087 | 363.5087 | 9.6900e-003 | 363.7509 |

#### Mitigated Construction On-Site

| Category    | 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   |
|-------------|-------|-------|-------|-------|---------------|--------------|------------|---------------|---------------|------------|----------|---------|----------|---------|-------|-------|--------|
| Archit. Coating | 49.9924 |       |       |       | 0.0000        | 0.0000       | 0.0000     | 0.0000        | 0.0000        | 0.0000     | 0.0000   | 0.0000  | 0.0000   | 0.0000  | 0.0000 |
| Off-Road    | 0.2189| 1.5268| 1.8176| 2.9700e-003| 0.0941     | 0.0941       | 0.0941     | 0.0941        | 0.0941        | 0.0941     | 281.4481 | 281.4481 | 0.0193   | 281.9309 |
| Total       | 50.2113| 1.5268| 1.8176| 2.9700e-003| 0.0941     | 0.0941       | 0.0941     | 0.0941        | 0.0941        | 0.0941     | 281.4481 | 281.4481 | 0.0193   | 281.9309 |
### 3.5 Architectural Coating - 2021

#### Mitigated Construction Off-Site

| Category   | 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  |
|------------|------|-------|-------|-------|---------------|---------------|------------|----------------|----------------|------------|----------|---------|---------|----------|-------|-------|-------|
| 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     | 0.1993 | 0.1368 | 1.3779 | 3.6500e-003 | 0.4108     | 2.7700e-003 | 0.4136     | 0.1090         | 2.5600e-003 | 0.1115     | 363.5087 | 363.5087 | 9.6900e-003 | 363.7509 |
| Total      | 0.1993 | 0.1368 | 1.3779 | 3.6500e-003 | 0.4108     | 2.7700e-003 | 0.4136     | 0.1090         | 2.5600e-003 | 0.1115     | 363.5087 | 363.5087 | 9.6900e-003 | 363.7509 |

**4.0 Operational Detail - Mobile**

#### 4.1 Mitigation Measures Mobile

- Increase Diversity
- Improve Walkability Design
### 4.2 Trip Summary Information

<table>
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<tr>
<th>Land Use</th>
<th>Average Daily Trip Rate</th>
<th>Unmitigated Annual VMT</th>
<th>Mitigated Annual VMT</th>
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<td>Saturday</td>
<td>Sunday</td>
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<tr>
<td>Hotel</td>
<td>834.00</td>
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<td>834.00</td>
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<td>Regional Shopping Center</td>
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<td>2,992.00</td>
<td>2,992.00</td>
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<tr>
<td>Retirement Community</td>
<td>508.30</td>
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<tr>
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<tr>
<td>Total</td>
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### 4.3 Trip Type Information

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<td>H-O or C-NW</td>
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<tr>
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<td>Retirement Community</td>
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### 4.4 Fleet Mix
### 5.0 Energy Detail

**Historical Energy Use:** N

#### 5.1 Mitigation Measures Energy

Exceed Title 24

---

**Table: Energy Details**

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<th>MDV</th>
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<th>HHD</th>
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<th>UBUS</th>
<th>MCY</th>
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<td>0.002157</td>
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<td>0.039752</td>
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<td>0.005402</td>
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5.2 Energy by Land Use - NaturalGas

Unmitigated

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CalEEMod Version: CalEEMod.2016.3.2
Date: 6/6/2018 9:06 AM
Lenity - Sacramento Self Storage - Sacramento County, Winter
## 5.2 Energy by Land Use - Natural Gas

### Mitigated

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Natural Gas Use</th>
<th>ROG</th>
<th>NOx</th>
<th>CO</th>
<th>SO2</th>
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<th>Exhaust PM10</th>
<th>PM10 Total</th>
<th>Fugitive PM2.5</th>
<th>Exhaust PM2.5</th>
<th>PM2.5 Total</th>
<th>Bio- CO2</th>
<th>NBio- CO2</th>
<th>Total CO2</th>
<th>CH4</th>
<th>N2O</th>
<th>CO2e</th>
</tr>
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<tbody>
<tr>
<td>Hotel</td>
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<td>0.1816</td>
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<td>0.1254</td>
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<td>5</td>
<td>0.0380</td>
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<td>0.0561</td>
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### 6.0 Area Detail

#### 6.1 Mitigation Measures Area
<table>
<thead>
<tr>
<th>Category</th>
<th>ROG</th>
<th>NOx</th>
<th>CO</th>
<th>SO2</th>
<th>Fugitive PM10</th>
<th>Exhaust PM10</th>
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<th>Fugitive PM2.5</th>
<th>Exhaust PM2.5</th>
<th>PM2.5 Total</th>
<th>Bio-CO2</th>
<th>NBio-CO2</th>
<th>Total CO2</th>
<th>CH4</th>
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<th>CO2e</th>
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</thead>
<tbody>
<tr>
<td>Mitigated</td>
<td>12.6038</td>
<td>0.1625</td>
<td>14.0674</td>
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<td>25.3216</td>
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<tr>
<td>Unmitigated</td>
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### 6.2 Area by SubCategory

#### Unmitigated

<table>
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<tr>
<th>SubCategory</th>
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<th>CO2e</th>
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</tr>
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</tr>
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<td></td>
<td></td>
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<td></td>
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</tr>
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<td>Landscaping</td>
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6.2 Area by SubCategory

Mitigated

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<th>SO2</th>
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<th>Exhaust PM10</th>
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<th>Bio- CO2</th>
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<th>N2O</th>
<th>CO2e</th>
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<tr>
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<tr>
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7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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<th>Number</th>
<th>Hours/Day</th>
<th>Days/Year</th>
<th>Horse Power</th>
<th>Load Factor</th>
<th>Fuel Type</th>
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</thead>
</table>

CalEEMod Version: CalEEMod.2016.3.2

Date: 6/6/2018 9:06 AM

Lenity - Sacramento Self Storage - Sacramento County, Winter
## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

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<tr>
<th>Equipment Type</th>
<th>Number</th>
<th>Hours/Day</th>
<th>Hours/Year</th>
<th>Horse Power</th>
<th>Load Factor</th>
<th>Fuel Type</th>
</tr>
</thead>
</table>

### Boilers

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<th>Heat Input/Year</th>
<th>Boiler Rating</th>
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</table>

### User Defined Equipment

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Number</th>
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</table>

## 11.0 Vegetation
Attachment B

Climate Action Plan - Consistency Review Checklist
CLIMATE ACTION PLAN – CONSISTENCY REVIEW CHECKLIST

The purpose of the Climate Action Plan Consistency Review Checklist (CAP Consistency Review Checklist) is to provide a streamlined review process for proposed new development projects which are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).

CEQA Guidelines require the analysis of greenhouse gas (GHG) emissions and potential climate change impacts from new development. The Sacramento Climate Action Plan qualifies under section 15183.5 of the CEQA Guidelines as a plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. This allows projects that demonstrate consistency with the CAP to be eligible for this streamlining procedure. Projects that demonstrate consistency with the CAP and the Sacramento 2030 General Plan may be able to answer “No additional significant environmental effect” in the City’s initial study checklist. Projects that do not demonstrate consistency may, at the City’s discretion, prepare a more comprehensive project-specific analysis of GHG emissions consistent with CEQA requirements. (See FAQ about the CAP Consistency Review Checklist for more details.)

The diagram below shows the context for the CAP Consistency Review Checklist within the planning review process framework.
CLIMATE ACTION PLAN – CONSISTENCY REVIEW CHECKLIST

Application Submittal Requirements

1. The CAP Consistency Review Checklist is required only for proposed new development projects which are subject to CEQA review (non-exempt projects)
2. If required, the CAP Consistency Review Checklist must be submitted in addition to the basic set of requirements set forth in the Universal Application and the Planning Application Submittal Matrix.
3. The applicant shall work with staff to meet the requirements of this checklist. These requirements will be reflected in the conditions of approval and/or mitigation measures.
4. All conditions of approval and mitigation measures from this checklist shall be shown on full-size sheets for building plan check submittals.

Application Information

Project Number: LEA-03
Address of Property: 500 Leisure Lane
Was a special consultant retained to complete this checklist? ☑ Yes ☐ No. If yes, complete following
Consultant Name*: Victor Ortiz
Company: HELIX Environmental Planning Inc.
Phone: 619-462-1515 E-Mail: victoro@helixepi.com
# CAP Consistency Checklist Form for Projects that are Not Exempt from CEQA

## Checklist Item (Check the appropriate box, and provide explanation for your answer).

<table>
<thead>
<tr>
<th>Yes</th>
<th>No*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

1. **Is the proposed project substantially consistent with the City’s over-all goals for land use and urban form, allowable floor area ratio (FAR) and/or density standards in the City’s 2035 General Plan, as it currently exists?**

   Please explain how proposed project compares to 2035 General Plan with respect to density standards, FAR, land use and urban form. (See directions for filling out CAP Checklist)

   The project is consistent with the General Plan land use designation (Suburban Center); additionally, it would not require any change to the current zoning (C-2-LI, or General Commercial).

2. **Would the project incorporate traffic calming measures?** *(Examples of traffic calming measures include, but are not limited to: curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers.)*

   Please explain how the proposed project meets this requirement (list traffic calming measures). If “not applicable” (NA), explain why traffic calming measures were not required.

   The proposed project does not include any roadway or facility improvements, traffic calming measures do not apply.

*If “No”, equivalent or better GHG reduction must be demonstrated as part of the project and incorporated into the conditions of approval.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.
<table>
<thead>
<tr>
<th>Checklist Item (Check the appropriate box, and provide explanation for your answer).</th>
<th>Yes</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.</strong> Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City’s Pedestrian Master Plan?</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Please explain how the proposed project meets this requirement. If “not applicable” (NA), explain why this was not required.

The proposed project site plan features numerous pedestrian access points and pedestrian access features with opportunities for pedestrians to access the site from surrounding streets and other parts of the site. Sidewalk improvements will extend east of the project site, so major conflicts between vehicles and pedestrians are not expected. The project would also comply with the City development standards and regulations, which address hazards or barriers for pedestrian or bicycle access.

| **4.** Would the project incorporate bicycle facilities consistent with the City’s Bikeway Master Plan, and meet or exceed minimum standards for bicycle facilities in the Zoning Code and CALGreen? | X | |

Please explain how the proposed project meets this requirement. If “not applicable” (NA), explain why this was not required.

The project would also comply with the City development standards and regulations, which address hazards or barriers for pedestrian or bicycle access.

*If “No”, equivalent or better GHG reduction must be demonstrated as part of the project and incorporated into the conditions of approval.

**Note:** Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.
Checklist Item (Check the appropriate box, and provide explanation for your answer).

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No*</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. For residential projects of 10 or more units, commercial projects greater than 25,000 square feet, or industrial projects greater than 100,000 square feet, would the project include on-site renewable energy systems (e.g., photovoltaic systems) that would generate at least a minimum of 15% of the project's total energy demand on-site? (CAP Actions: 3.4.1 and 3.4.2)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please explain how the proposed project meets this requirement. If “not applicable” (NA), explain why this was not required. If project does not meet requirements, see DIRECTIONS FOR FILLING OUT CAP CONSISTENCY REVIEW CHECKLIST re: alternatives to meeting checklist requirements.

Prior to issuance of building permits, the applicant shall comply with the alternative Climate Action Plan requirement to exceed the minimum energy efficiency standards under California Administrative Code Title 24 by 5% for residential land uses and 5% for commercial land uses. Measures to increase the energy efficiency of the project buildings shall include, but are not limited to:
- Increased wall insulation, smart meters, above-standard ventilation systems or energy efficiency lighting fixtures
- Enrollment in Greenery (SMUD) or other program achieving programmatic reductions in greenhouse gas emissions
- Purchase of energy efficiency credits (SMAQMD) or other program achieving programmatic improvements in building efficiency

The applicant shall submit energy calculations with building plans and certification of any required professional to demonstrate compliance with this condition, including specific reference to the percentage improvements required under the Climate Action Plan.

Attach a copy of the CalEEMod input and output. Record the model and version here ___________________.
Do NOT select the “use historical” box in CalEEMod for energy demand analysis related to this requirement.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Would the project (if constructed on or after January 1, 2014) comply with minimum CALGreen Tier I water efficiency standards?</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Please explain how the proposed project meets this requirement. If “not applicable” (NA), explain why this was not required.

The project shall comply with the adopted CAP by meeting the Tier 1 Voluntary Standards for Health Facilities (OSHPD 1, 2 & 4) in the 2013 California Green Building Standards Code (CALGreen).

*If “No”, equivalent or better GHG reduction must be demonstrated as part and incorporated into the conditions of approval. Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.
Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Signature: ________________________________ Date: June 7, 2018
DIRECTIONS FOR FILLING OUT CAP CONSISTENCY REVIEW CHECKLIST

General Plan Consistency & Sustainable Land Use

1. **Is the proposed project substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City’s 2035 General Plan?**

   Consistency with the General Plan land use and urban form designation, FAR and/or density standards is a key determining factor in whether or not the CAP Consistency Review procedure can be used. This is because future growth and development consistent with the General Plan was used to estimate business as usual emission forecasts, as well as emission reductions from actions that would be applicable to new development.

   Refer to the 2035 General Plan, Land Use and Urban Form Designations and Development Standards starting on page 2-29. If a project is not fully consistent with the General Plan, the project still may qualify for consistency with the CAP, but this determination will need to be closely coordinated with the City. The City will determine whether the proposed land uses under consideration could be found consistent with the growth projections and assumptions used to develop the GHG emissions inventory and projections in the CAP.

Mobility

2. **Would the project incorporate traffic calming measures? (Applicable CAP Action: 2.1.1)**

   List the traffic calming measures that have been incorporated into the project. These may include, but are not limited to: curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers.

   The project proponent and City staff should consult with staff in the Department of Public Works-Transportation Division to verify that traffic calming measures are adequate and in compliance with the City's Street Design Standards.

   If the proposed project does not include any roadway or facility improvements, traffic calming measures may not apply. For example, certain infill projects may not result in on-street or transportation facility improvements because sufficient infrastructure already exists.

3. **Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City’s Pedestrian Master Plan? (Applicable CAP Action: 2.2.1)**

   List the pedestrian facilities and connections to public transportation that have been included in the proposed project on the Checklist. These may include, but are not limited to: sidewalks on both sides of streets, marked crosswalks, count-down signal timers, curb extensions, median islands, transit shelters, street lighting.

   The project proponent and City staff should consult with Department of Public Works-Transportation Division staff to verify that pedestrian facilities are consistent with the Pedestrian Master Plan. As in the previous example, if “not applicable”, an explanation shall be documented in the Checklist. For example, certain infill projects may not require on-street or transportation facility improvements because sufficient infrastructure already exists.
The “Pedestrian Review Process Guide” (Appendix A to the Master Plan) will be used to determine consistency, as follows:

- For typical infill development projects where existing streets will serve the site (no new streets are proposed): the level of pedestrian improvements necessary to determine Pedestrian Master Plan consistency will be measured according to the “Basic, Upgrade or Premium” categories defined in Appendix A to the Pedestrian Master Plan, which are based on project location, surrounding land uses, proximity to transit, etc. If the proposed project does not include the minimum level of improvements per the assigned category for the project’s location, the project will be required as a condition of approval to include appropriate features, per the approval of the Department of Public Works-Transportation Division.

- For new “greenfield” projects and/or larger infill development projects where new streets are proposed as part of the project, the following will apply:
  - “Basic, Upgrade or Premium” levels of improvement will be required based on the proposed project’s location and context, where applicable, consistent with the criteria defined in the Master Plan. If the proposed project does not include the minimum level of improvements per the assigned category, the project will be required as a condition of approval to include appropriate features, per the approval of the Department of Public Works-Transportation Division.
  - The “Pedestrian Smart Growth Scorecard” (Appendix A to the Master Plan) will be required to be completed for the project, and a minimum score of 3 or better will need to be achieved. If the proposed project cannot achieve the minimum score, changes to the proposed project may be required, and/or the project may be required as a condition of approval to include certain improvements such that the average score will meet 3 or better. (Note: an Excel version of the Pedestrian Smart Growth Scorecard is available, to assist in automating the rating & scoring process)

4. Would the project incorporate bicycle facilities consistent with the City’s Bikeway Master Plan, and meet or exceed minimum standards for bicycle facilities in the Zoning Code and CALGreen? (Applicable CAP Action: 2.3.1)

List the bicycle facilities that are incorporated into the proposed project on the Checklist. These include, but are not limited to: Class I bike trails and Class II bike lanes connecting the project site to an existing bike network and transit stations, bike parking [bike racks, indoor secure bike parking, bike lockers], end-of-trip facilities at non-residential land uses [showers, lockers]).

The project proponent and City staff should consult with staff in the Transportation Division of the Department of Public Works to verify that such facilities are consistent with the Bikeway Master Plan and meet or exceed Zoning Code and CALGreen standards. Generally, the following guidelines will be used:

- If existing on-street and off-street bikeways are already present and determined to be consistent with the Bikeway Master Plan, no additional on-street bikeways will be required. Check the “not applicable” box if appropriate. However, on-site facilities shall still be required to meet or exceed minimum Zoning and CALGreen requirements.
- If not applicable, fully document the reasons why using the Checklist.
If on-street bicycle facilities are not present or are only partially consistent with the Master Plan, the project will be required as a condition of approval to construct or pay for its fair-share of on-street and/or off-street bikeways described in the Master Plan, in addition to meeting or exceeding minimum on-site facilities.

In some cases, a combination of new or upgraded on-street and off-street bikeways may be used to determine consistency with the Master Plan, at the discretion of the Department of Public Works-Transportation Division staff.

Energy Efficiency and Renewable Energy

5. For residential projects of 10 or more units, commercial projects greater than 25,000 square feet, or industrial projects greater than 100,000 square feet, would the project include on-site renewable energy systems (e.g., solar photovoltaic, solar water heating etc.) that would generate at least 15% of the project's total energy demand? (CAP Actions: 3.4.1 and 3.4.2)

For projects of the minimum size specified in this measure, a commitment in the project description or in a mitigation measure that the project shall generate a minimum of 15% of the project's energy demand on-site is sufficient to demonstrate consistency with this measure. However, the project conditions of approval or mitigation measures should specify the intended renewable energy technology to be used (e.g. solar photovoltaic, solar water heating, wind, etc.) and estimated size of the systems to meet project demand based on the project description.

“Total energy demand” refers to the energy (electricity and natural gas) consumed by the built environment (including HVAC systems, water heating systems, and lighting systems) as well as uses that are independent of the construction of buildings, such as office equipment and other plug-ins.

Applicants may estimate the total energy demand of their projects using California Emissions Estimator Model (CalEEMod 2013.2), the same software used to estimate greenhouse gas emissions. For CalEEMod estimates of energy demand to meet this specific requirement, the user should NOT select the “use historical” box, otherwise they will be “double-counting” emissions reductions that have already been counted. CalEEMod outputs for electricity demand are provided in annual kWh, and natural gas demand is provided in annual kBTU.

The energy demand estimate by CalEEMod is based on two datasets:

- The California Commercial End Use Survey (CEUS);
- The Residential Appliance Saturation Survey (RASS)

CalEEMod takes energy use intensity data (above) and forecasts energy demand based on climate zone, land use subtype (such as “hospital”, “arena”, or “apartments, mid rise”), building area, and the number of buildings or units. This is an appropriate level of analysis for use at the planning submittal stage, but it may not provide an accurate picture of actual project energy demand because it does not factor project specifics such as building design.

Therefore, the applicant is advised (but not required) to run a more comprehensive energy simulation once project-specific details are known: basic building design, square-footage, building envelope, lighting design (at least rudimentary), and the mechanical system (at least minimally zoned). Some of the energy simulation programs that are appropriate for this level of analysis include: DOE 2.2, Trace 700, and Energy Pro.
The U.S. DOE maintains a list of energy simulation programs that are available. 
http://apps1.eere.energy.gov/buildings/tools_directory/subjects.cfm/pagename=subjects/pagename_menu=whole_building_analysis/pagename_submenu=energy_simulation

The applicant may then revise the estimate and make a final determination regarding the size of the PV system that is required.

**Substitutions:** Projects may substitute a quantity of energy efficiency for renewable energy, as long as the substituted GHG reduction does not “double count” GHG reductions already taken by the CAP. In other words, substitutions must reduce GHG emissions from the project beyond what is already accounted for in the CAP (to avoid double-counting).

- Additional mitigation may include equivalent or better GHG reduction from individual measures or a combination of:
- In lieu of installing PV systems that would generate 15% of the project's total energy, the project may exceed energy efficiency standards of Title 24, part 6 of the California Building Code, such as building to CALGreen Tier 1 energy standards. (Residential projects shall exceed the 2013 Title 24 energy efficiency by a minimum of 10% and commercial projects shall exceed 2013 Title 24 energy efficiency by a minimum of 5%).

### 6. Would the project comply with minimum CALGreen Tier I water efficiency standards? (CAP Action: 5.1.1)

The California Green Building Standards Code (CALGreen) includes mandatory green building measures, as well as voluntary measures that local jurisdictions may choose to adopt to achieve higher performance tiers, at either Tier 1 or Tier 2 compliance levels. Sacramento has adopted Tier 1 Water Efficiency Standards to be required on or after January 1, 2014. Currently, in order to meet the Tier 1 Water Efficiency Standards, buildings are required to implement all mandatory water efficiency and conservation measures as well as certain Tier 1 specific measures that exceed minimum mandatory measures (e.g. 30% increase in indoor water efficiency). Specific Tier 1 provisions can be found in the CALGreen Code at [http://www.bsc.ca.gov/Home/CALGreen.aspx](http://www.bsc.ca.gov/Home/CALGreen.aspx).

The City recognizes that project construction details are often not known at the environmental review stage, and it may be premature for a project proponent to identify compliance with precise requirements of CALGreen. A condition of approval requiring the project to comply with minimum CALGreen Tier 1 water efficiency and conservation standards is sufficient to demonstrate consistency with this criterion.

Planning approval of your project will include the following condition:
Project must meet CALGreen Tier 1 water efficiency and conservation standards. Copies of the appropriate CalGreen checklist (see FAQ) shall be included on the full-size sheets for building plan check submittals.

*Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.*
Appendix C

CNDDDB Records Search
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<th>Scientific Name: Spea hammondii</th>
<th>Common Name: western spadefoot</th>
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<td>IUCN_NT-Near Threatened</td>
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**General Habitat:**
OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY-FOOTHILL HARDWOOD WOODLANDS.

**Micro Habitat:**
VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING.

**Last Date Observed:** 1997-01-XX
**Last Survey Date:** 1997-01-XX
**Owner/Manager:** SAC COUNTY
**Presence:** Presumed Extant

**Location:**
0.4 MILE NNW OF JUNCTION OF KIEFER BLVD AND EAGLES NEST ROAD, MATHER REGIONAL PARK.

**Detail Location:**
3 VERNAL POOLS IN THIS PortION OF THE COMPLEX WERE FOUND TO CONTAIN WESTERN SPADEFOOT. PART OF THE OLD MATHER AFB. 1993 REPORT INDICATED THAT THERE WERE 6 VERNAL POOLS & SWALES WHERE THEY WERE SEEN BUT NO MAP OR COORDINATES GIVEN.

**Ecological:**
VERNAL POOLS, AND DISTURBED VERNAL POOLS.

**Threats:**
IMPACTED BY HUMANS.

**General:**
OBSERVED SEVERAL POPULATIONS IN 1993 AND 1996-97 IN THE VICINITY OF EAGLES NEST ROAD. ALSO OBSERVED LEPIDURUS PACKARDI & LINDERIELLA OCCIDENTALIS.

**PLSS:** T08N, R06E, Sec. 24 (M) **Accuracy:** specific area
**UTM:** Zone-10 N4266445 E651135 **Latitude/Longitude:** 38.53359 / -121.26601
**County Summary:** Sacramento **Area (acres):** 10 **Elevation (feet):** 140
**Quad Summary:** Carmichael (3812153)
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

| Map Index Number: | 70289 | EO Index: | 71179 |
| Key Quad: | Carmichael (3812153) | Element Code: | AAABF02020 |
| Occurrence Number: | 396 | Occurrence Last Updated: | 2007-11-01 |

| Scientific Name: | Spea hammondii | Common Name: | western spadefoot |
| Listing Status: | Federal: None | Rare Plant Rank: | BLM_S-Sensitive |
| | State: None | Other Lists: | CDFW_SSC-Species of Special Concern |
| | | | IUCN_NT-Near Threatened |

| CNNDB Element Ranks: | Global: G3 | State: S3 |

**General Habitat:**  
OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY-FOOTHILL HARDWOOD WOODLANDS.

| Micro Habitat: | VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING. |

| Last Date Observed: | 2007-02-25 | Occurrence Type: | Natural/Native occurrence |
| Last Survey Date: | 2007-02-25 | Occurrence Rank: | Fair |
| Owner/Manager: | SAC COUNTY | Trend: | Unknown |
| Presence: | Presumed Extant |

**Location:**  
0.2 MILE EAST OF EAGLES NEST ROAD AND 0.4 MILE NORTH OF KIEFER BOULEVARD, MATHER REGIONAL PARK.

**Detailed Location:**  
POND IS LOCATED ON FORMER MATHER AIR FORCE BASE PROPERTY; THIS WAS AT ONE TIME A BOMB DISPOSAL SITE, AND SIGNS STILL WARN OF THIS THREAT.

**Ecological:**  
HABITAT CONSISTS OF A POND SURROUNDED BY UNGRAZED ANNUAL GRASSLAND. SITE IS HIGHLY-DISTURBED, WITH INVASIVE PLANRS SPECIES, ORV'S, AND DEBRIS FROM CRASHED MODEL AIRPLANES.

**Threats:**  
THREATENED BY ROAD DEVELOPMENT.

**General:**  

**PLSS:**  
T08N, R07E, Sec. 19 (M)  
Accuracy: 80 meters  
Area (acres): 0

**UTM:**  
Zone-10 N4266360 E651888  
Latitude/Longitude: 38.53269 / -121.25738  
Elevation (feet): 147

**County Summary:**  
Sacramento

**Quad Summary:**  
Carmichael (3812153)

**Sources:**  
CHA06F0025 CHANG, A.T. (UNIVERSITY OF CALIFORNIA, DAVIS) - FIELD SURVEY FORM FOR SPEA HAMMONDI 2006-12-03
**Map Index Number:** 11286  
**EO Index:** 13106  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 22  
**Occurrence Last Updated:** 1995-12-07  

**Scientific Name:** *Phalacrocorax auritus*  
**Common Name:** double-crested cormorant  

**Listing Status:**  
- **Federal:** None  
- **State:** None  

**CNDDDB Element Ranks:**  
- **Global:** G5  
- **State:** S4  

**General Habitat:**  
COLONIAL NESTER ON COASTAL CLIFFS, OFFSHORE ISLANDS, & ALONG LAKE MARGINS IN THE INTERIOR OF THE STATE.  

**Micro Habitat:**  
NESTS ALONG COAST ON SEQUESTERED ISLETS, USUALLY ON GROUND WITH SLOPING SURFACE, OR IN TALL TREES ALONG LAKE MARGINS.  

**Last Date Observed:** 1988-XX-XX  
**Last Survey Date:** 1988-XX-XX  
**Owner/Manager:** SAC COUNTY, PVT  
**Presence:** Presumed Extant  
**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.  

**Threats:**  
GRAZING IS MAIN THREAT; IT DOES NOT ALLOW REGENERATION OF TREES.  

**General:**  
GREAT BLUE HERON AND GREAT EGRET ALSO NEST HERE. COUNTY OF SACRAMENTO LEASES THIS PROPERTY TO A PRIVATE PARTY.  

**PLSS:** T06N, R04E, Sec. 12 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0  

**UTM:** Zone-10 N4249814 E631712  
**Latitude/Longitude:** 38.38685 / -121.49190  
**Elevation (feet):** 5  

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)  

**Sources:**  
- MID88F0001 MIDDLETON, J. - FIELD SURVEY FORM FOR ARDEA HERODIAS 1988-05-02  
- MID88F0002 MIDDLETON, J. - FIELD SURVEY FORM FOR ARDEA ALBA 1988-05-02  
- VEN88F0001 VENNARD, M. - FIELD SURVEY FORM FOR PHALACROCORAX AURITUS AT NORTH STONE LAKE, S OF SACRAMENTO. 1988-XX-XX
### Scientific Name: Phalacrocorax auritus

**Common Name:** double-crested cormorant

### Listing Status:
- **Federal:** None
- **State:** None

### CNDDB Element Ranks:
- **Global:** G5
- **State:** S4

### General Habitat:
COLONIAL NESTER ON COASTAL CLIFFS, OFFSHORE ISLANDS, & ALONG LAKE MARGINS IN THE INTERIOR OF THE STATE.

### Micro Habitat:
NESTS ALONG COAST ON SEQUESTERED ISLETS, USUALLY ON GROUND WITH SLOPING SURFACE, OR IN TALL TREES ALONG LAKE MARGINS.

### Last Date Observed: 2005-03-26

### Location:
NORTHERN ISLAND ON BLACK CROWN LAKE, JUST UPSTREAM (EAST) OF I-5, 6.5 MILES NW OF ELK GROVE.

### Detailed Location:
NEST TREES WERE POPULUS FREMONTII GROWING ON THE ISLAND. SURROUNDING AREA IS MANAGED SEASONAL WETLANDS AND RIPARIAN/GRASSLAND RESTORATION SITES.

### Threats:
THREATENED BY LOSS OF TREES TO BEAVER PREDATION.

### General:
2 ACTIVE DCCO NESTS PRESENT DURING 2005.

### Accuracy: 80 meters

### Area (acres): 0

### Elevation (feet): 10

### Sources:
ALBRIGHT, J. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - FIELD SURVEY FORM FOR PHALACROCORAX AURITUS (ROOKERY SITE) 2005-03-26
Map Index Number: 66452
Key Quad: Florin (3812144)
Occurrence Number: 39
EO Index: 66556
Element Code: ABNFD01020
Occurrence Last Updated: 2006-09-27

Scientific Name: Phalacrocorax auritus
Common Name: double-crested cormorant

Listing Status: Federal: None
State: None

Rare Plant Rank: CDFW_WL-Watch List
IUCN_LC-Least Concern

Key Quad: Florin (3812144)
Element Code: ABNFD01020
Occurrence Number: 39
Occurrence Last Updated: 2006-09-27

Scientific Name: Phalacrocorax auritus
Common Name: double-crested cormorant

Listing Status: Federal: None
State: None

Rare Plant Rank: CDFW_WL-Watch List
IUCN_LC-Least Concern

CNDDB Element Ranks: Global: G5
State: S4

General Habitat: COLONIAL NESTER ON COASTAL CLIFFS, OFFSHORE ISLANDS,
& ALONG LAKE MARGINS IN THE INTERIOR OF THE STATE.

Micro Habitat: NESTS ALONG COAST ON SEQUESTERED ISLETS, USUALLY ON
GROUND WITH SLOPING SURFACE, OR IN TALL TREES ALONG LAKE
MARGINS.

Last Date Observed: 2005-03-25
Last Survey Date: 2005-03-25

Owner/Manager: SRCSD-BUFFERLANDS

Presence: Presumed Extant

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.

Threats:
THREATENED BY LOSS OF TREES TO BEAVER PREDATION.

General:
28 ACTIVE DCCO NESTS PRESENT DURING 2005.

PLSS: T07N, R05E, Sec. 19 (M)
Area (acres): 0
Accuracy: 80 meters

UTM: Zone-10 N4256530 E632498
Latitude/Longitude: 38.44723 / -121.48163
Elevation (feet): 5

County Summary: Sacramento

Quad Summary:
Frorin (3812144)

Sources:
ALBRIGHT, J. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - FIELD SURVEY FORM FOR PHALACROCORAX AURITUS (ROOKERY SITE) 2005-03-25
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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#### General Habitat:
COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

#### Micro Habitat:
ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

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<td>Presence:</td>
<td>Presumed Extant</td>
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#### Location:
NORTH STONE LAKE, NEAR JCT SE ARM & 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.

#### Threats:
MAIN THREAT IS GRAZING, WHICH DOES NOT ALLOW FOR REGENERATION OF COTTONWOOD TREES.

#### General:
COUNTY OF SACRAMENTO LEASES THE AREA TO A PRIVATE PARTY.

#### PLSS:
T06N, R04E, Sec. 12 (M)  
Accuracy: 1/5 mile  
Area (acres): 0

#### UTM:
Zone-10 N4249814 E631712  
Latitude/Longitude: 38.38685 / -121.49190  
Elevation (feet): 5

#### County Summary:
Sacramento

#### Quad Summary:
Florin (3812144)

#### Sources:
- MID88F0001 MIDDLETON, J. - FIELD SURVEY FORM FOR ARDEA HERODIAS 1988-05-02
- MID88F0002 MIDDLETON, J. - FIELD SURVEY FORM FOR ARDEA ALBA 1988-05-02
- VEN88F0001 VENNARD, M. - FIELD SURVEY FORM FOR PHALACROCORAX AURITUS AT NORTH STONE LAKE, S OF SACRAMENTO. 1988-XX-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11602
Key Quad: Carmichael (3812153)
Occurrence Number: 2
EO Index: 25978
Element Code: ABNGA04010
Occurrence Last Updated: 2005-03-21

Scientific Name: Ardea herodias
Common Name: great blue heron

Listing Status: Federal: None
State: None
Rare Plant Rank:

CNDDDB Element Ranks: Global: G5
State: S4
Other Lists: CDF_S-Sensitive
IUCN_LC-Least Concern

General Habitat:
COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

Micro Habitat:
ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

Last Date Observed: 2005-03-18
Last Survey Date: 2005-03-18
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Good
Trend: Unknown
Presence: Presumed Extant

Location:
ALONG SOUTH SIDE OF THE AMERICAN RIVER, ACROSS FROM WILLIAM POND PARK, PART OF THE AMERICAN RIVER PARKWAY, CARMICHAEL.

Detailed Location:
SOME NEST TREES ARE LOCATED IN THE BACKYARDS OF RESIDENCES ON THE SOUTH SIDE OF THE RIVER; OTHERS ARE PART OF THE NATIVE RIPARIAN ALONG THE AMERICAN RIVER.

Ecological:
NEST TREES APPEAR TO BE A MIX OF NATIVE OAKS AND EXOTIC TREES. GREAT EGRETS ALSO NEST AT THIS SITE.

Threats:
POSSIBLE THREAT OF DISTURBANCE FROM RIVER RECREATION.

General:
1988: 24 NESTS LOCATED IN 5 TREES, 3 OF WHICH ARE IN BACKYARDS. 1990: 12 NESTS/20 ADULTS FOUND IN 1 TREE IN A BACKYARD. 2004: ~20 ACTIVE NESTS (10 GBHE/10 GREG). 18 MAR 2005: 15 ACTIVE GBHE NESTS.

PLSS: T08N, R06E, Sec. 04 (M) Accuracy: specific area Area (acres): 35
UTM: Zone-10 N4271447 E645687 Latitude/Longitude: 38.57955 / -121.32743 Elevation (feet): 40
County Summary: Sacramento Carmichael (3812153)

Sources:
JOH04F0001 JOHNSON, D.L. - FIELD SURVEY FORM FOR ARDEA HERODIAS & ARDEA ALBA (ROOKERY SITE) 2004-06-XX
JOH88F0004 JOHNSON, D.L. - FIELD SURVEY FORM FOR ARDEA HERODIAS ALONG AMERICAN RIVER, 0.5 MI. SSW OF GOETHE PARK, CARMICHAEL 1988-05-04
SOG90F0002 SOGGE, M. - FIELD SURVEY FORM FOR ARDEA HERODIAS 1990-01-26
WAR05F0003 WARENYCIA, D. & D. JOHNSON (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR ARDEA HERODIAS (ROOKERY SITE) 2005-03-18
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**Scientific Name:** *Ardea herodias*

**Common Name:** great blue heron

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S4

**General Habitat:**
COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

**Micro Habitat:**
ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

**Last Date Observed:** 2002-04-04

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Excellent

**Trend:** Increasing

**Location:**
DRY CREEK, 0.5 MILE SOUTH OF THE JUNCTION OF WEST 2ND STREET AND ASCOT AVENUE, RIO LINDA

**Detailed Location:**
ROOKERY IS LOCATED MIDWAY BETWEEN DRAINAGE CANAL AND RIO LINDA / MARYSVILLE BOULEVARD.

**Ecological:**
HABITAT CONSISTS OF A NARROW VALLEY OAK RIPARIAN CORRIDOR ALONG DRY CREEK. BOTH GREAT EGRETS AND GREAT BLUE HERONS NEST HERE.

**Threats:**

**General:**
NESTING OBSERVED IN A SINGLE OAK TREE IN MAR 1988. 8 OCCUPIED NESTS OBSERVED ON 11 APR 2001. 18 OCCUPIED NESTS OBSERVED ON 4 APR 2002.

**Accuracy:** specific area

**Area (acres):** 10

**PLSS:** T09N, R05E, Sec. 06 (M)

**UTM:** Zone-10 N4280455 E633421

**Latitude/Longitude:** 38.66263 / -121.46649

**Elevation (feet):** 30

**County Summary:** Sacramento

**Quad Summary:** Rio Linda (3812164)

**Sources:**
- KIN02F0002 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ARDEA HERODIAS (ROOKERY SITE) 2002-04-04
- VEN88F0003 VENNARD, M. - FIELD SURVEY FORM & MAP FOR ARDEA HERODIAS 1988-03-XX
Map Index Number: 54474  
EO Index: 54474  
Key Quad: Rio Linda (3812164)  
Element Code: ABNGA04010  
Occurrence Number: 71  
Occurrence Last Updated: 2004-02-25

Scientific Name: Ardea herodias  
Common Name: great blue heron

Listing Status: Federal: None  
State: None

Rare Plant Rank:  
Other Lists: CDF_S-Sensitive  
IUCN_LC-Least Concern

CNDDB Element Ranks:  
Global: G5  
State: S4

General Habitat:  
COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

Micro Habitat:  
ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

Last Date Observed: 2001-04-11  
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2002-XX-XX  
Occurrence Rank: Excellent

Owner/Manager: SAC AREA FLOOD CONTROL AGENCY  
Trend: Unknown

Presence: Presumed Extant

Location: NORTH SIDE OF ROBLA CREEK, DIRECTLY NORTH OF KELTON WAY, RIO LINDA.

Detailed Location: GREAT EGRETS ARE ALSO PART OF THIS COLONY.

Ecological:  
NEST TREE IS AN ISOLATED VALLEY OAK, WITH GRASSLAND TO THE NORTH AND LEVEE/RESIDENTIAL TO THE SOUTH.

Threats:  
General:

2 OCCUPIED NESTS OBSERVED ON 11 APR 2001. IN 2002, HERONS DID NOT OCCUPY THIS TREE, POSSIBLY DUE TO THE PRESENCE OF A NESTING PAIR OF RED-TAILED HAWKS.

PLSS: T09N, R05E, Sec. 05 (M)  
Accuracy: 80 meters  
Area (acres): 0

UTM: Zone-10 N4280180 E633470  
Latitude/Longitude: 38.66015 / -121.46597  
Elevation (feet): 35

County Summary:  
Sacramento  
Rio Linda (3812164)

Sources:  
KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ARDEA HERODIAS (NESTING COLONY) 2001-04-11
**Map Index Number:** 54478  
**EO Index:** 54478  
**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 72  
**Occurrence Last Updated:** 2004-02-25

**Scientific Name:** *Ardea herodias*  
**Common Name:** great blue heron

**Listing Status:**  
- **Federal:** None  
- **State:** None

**Rare Plant Rank:**  
- **CDF_S-Sensitive**  
- **IUCN_LC-Least Concern**

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S4

**General Habitat:**  
COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

**Micro Habitat:**  
ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

**Last Date Observed:** 2002-04-04  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Fair  
**Trend:** Unknown

**Owner/Manager:** CITY OF SACRAMENTO  
**Presence:** Presumed Extant

**Location:**  
ALONG ROBLA CREEK, JUST EAST OF THE WPRR TRACKS, RIO LINDA.

**Detailed Location:**  
NEST TREE IS AN ISOLATED VALLEY OAK AND SNAG, SURROUNDED BY A MANAGED FLOODPLAIN WITH CATTLE GRAZING; LIGHT INDUSTRIAL TO THE SOUTH AND NEMDC TO THE WEST.

**Threats:**  
- 2 NESTS OBSERVED IN APR 2001. 3 OCCUPIED NESTS OBSERVED ON 4 APR 2002.

**PLSS:** T09N, R05E, Sec. 06 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4279957 E632920  
**Latitude/Longitude:** 38.65822 / -121.47233  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
KIN02F0017  
KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ARDEA HERODIAS (NESTING COLONY) 2002-04-04
# Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**General Habitat:**

COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

**Micro Habitat:**

ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

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<td>Occurrence Rank: Good</td>
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<td>Owner/Manager:</td>
<td>SAC COUNTY-PARKS &amp; REC</td>
<td>Trend: Unknown</td>
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<td>Presence:</td>
<td>Presumed Extant</td>
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**Location:**

SACRAMENTO BAR ACCESS TO THE AMERICAN RIVER, ON THE NORTH SIDE OF THE RIVER, UPSTREAM OF THE SAN JUAN RAPIDS, FAIR OAKS.

**Detailed Location:**

NEST TREES ARE BORDERED BY THE AMERICAN RIVER TO THE SOUTH AND A DIRT ACCESS ROAD TO THE NORTH.

**Ecological:**

NEST TREES ARE COTTONWOODS LOCATED WITHIN 30' OF THE RIVER; SURROUNDED BY RIPARIAN HABITAT THAT HAS TAKEN OVER DREDGER TAILINGS LEFT OVER FROM THE GOLDRUSH OF THE LATE 1800'S. ACTIVITIES IN THE VICINITY INCLUDE HIKING, RAFTING, AND FISHING.

**Threats:**

**General:**

2 NESTS ACTIVE IN SUMMER 2004, BOTH FLEDGING YOUNG.

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<td>Citrus Heights (3812163)</td>
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**Sources:**

JOH04F0002  JOHNSON, D.L. - FIELD SURVEY FORM FOR ARDEA HERODIAS (ROOKERY SITE) 2004-06-XX
<table>
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<th>Map Index Number:</th>
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**Scientific Name:** Ardea herodias  
**Common Name:** great blue heron

**Listing Status:**  
- Federal: None  
- State: None

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S4

**General Habitat:**  
COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

**Micro Habitat:**  
ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

**Last Date Observed:** 2005-03-25  
**Last Survey Date:** 2005-03-25  
**Owner/Manager:** SRCSD-BUFFERLANDS  
**Presence:** Presumed Extant

**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.

**Threats:**  
THREATENED BY LOSS OF NEST TREES TO AGE OF FOREST AND BEAVER PREDATION.

**General:**  
46 ACTIVE GBHE NESTS PRESENT DURING 2005.

**PLSS:** T07N, R04E, Sec. 24 (M)  
**Accuracy:** 1/10 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4256172 E632196  
**Latitude/Longitude:** 38.44405 / -121.48516  
**Elevation (feet):** 10

**County Summary:**  
Sacramento

**Sources:**  
ALB05F0007 ALBRIGHT, J. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - FIELD SURVEY FORM FOR ARDEA HERODIAS (ROOKERY SITE) 2005-03-25
## Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

### Key Information

<table>
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<th>Map Index Number:</th>
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<td>Occurrence Last Updated:</td>
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### Scientific Name

| Scientific Name: | Ardea herodias |

### Common Name

| Common Name: | great blue heron |

### Listing Status

| Federal: | None |
| State: | None |

### Rare Plant Rank

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<th>Other Lists:</th>
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<td>CDF_S-Sensitive</td>
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<td>IUCN_LC-Least Concern</td>
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### General Habitat

**Colonial Nester in Tall Trees, Cliffsides, and Sequestered Spots on Marshes.**

### Micro Habitat

**Rookery Sites in Close Proximity to Foraging Areas: Marshes, Lake Margins, Tide-Flats, Rivers and Streams, Wet Meadows.**

### Last Date Observed: 2008-06-04

### Last Survey Date: 2008-06-04

### Owner/Manager: PVT

### Presence: Presumed Extant

### Location:

**NORTH SIDE OF AMERICA RIVER, JUST EAST OF RIVER MILE 1, SOUTH OF POND, AND EAST OF DISCOVERY PARK, SACRAMENTO.**

### Detailed Location:

**MAPPED TO PROVIDED COORDINATES.**

### Ecological:

**HABITAT DESCRIBED AS DISCONTINUOUS PORTIONS OF RIPARIAN HABITAT ALONG RIVER CONTAINING POPULUS FREMONTII, SALIX EXIGUA, S. GOODDINGII, S. LUCIDA LASIANDRA, CEPHALANTHUS OCCIDENTALIS, & SAMBUCUS MEXICANA. INLAND SITE WITH OPEN-WATER POND.**

### Threats:

**THREATENED BY GRAVEL MINING, AND POSSIBLE LAND CONVERSION.**

### General:

**FIVE NESTS (4 IN 1 TREE) WERE OBSERVED IN COTTONWOOD TREES WITH A TOTAL AT LEAST 4 JUVENILES PRESENT ON 4 JUN 2008.**

### PLSS:

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### County Summary:

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<td>Quad Summary:</td>
<td>Sacramento East (3812154)</td>
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### Sources:

CRO08F0004  CROUCH, K. (PADRE ASSOCIATES, INC.) - FIELD SURVEY FORM FOR ARDEA HERODIAS 2008-06-04
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<th>Map Index Number: 78763</th>
<th>EO Index: 79705</th>
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**Scientific Name:** Ardea herodias  
**Common Name:** great blue heron

**Listing Status:** Federal: None  
State: None

**Rare Plant Rank:** CDF_S-Sensitive  
IUCN_LC-Least Concern

**CNDDDB Element Ranks:** Global: G5  
State: S4

**General Habitat:** COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

**Micro Habitat:** ROCKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

**Last Date Observed:** 2010-05-02  
**Last Survey Date:** 2010-05-02

**Owner/Manager:** YOL COUNTY-ELKHORN REG PARK  
**Presence:** Presumed Extant

**Location:** 1 MILE SE OF I-5 AT SACRAMENTO RIVER, ALONG OLD RIVER RD (LEVEE) & THE SACRAMENTO RIVER, ELKHORN REGIONAL PARK, KIESEL.

**Detailed Location:** ROCKERY COVERS A LARGE AREA NORTH FROM THE BOAT RAMP PARKING AREA, EAST OF OLD RIVER RD/RAILROAD TRACKS, & WEST OF SACRAMENTO RIVER. NESTS CAN BE OBSERVED FROM WALKING THE RAILROAD TRACKS.

**Ecological:** NESTS IN COTTONWOODS. AREA APPEARS TO BE THE LARGEST RIPARIAN HABITAT LEFT IN VICINITY. ALSO DETECTED & LIKELY NESTING WERE SWAINSON'S & RED-TAILED HAWKS, ASH-THROATED FLYCATCHER, WESTERN KINGBIRD, TREE SWALLOW, & NUTTALL'S WOODPECKER.

**Threats:** POTENTIAL DISTURBANCE (NOISE) FROM BOATS & CARS, & POSSIBLY VEHICLE COLLISIONS ON ROAD (PROBABLY RARE).

**General:** SITE FOUND 24 APR 2010. 155 NESTS WERE COUNTED (MORE LIKELY PRESENT) W/ INCUBATING ADULTS ON 2 MAY 2010; 95% GREAT EGRET (THROUGHOUT), 5% GREAT BLUE HERON (NORTH END). 2 SWAINSON'S HAWKS (1 LIGHT, 1 DARK PHASE) WERE PERCHED IN COTTONWOODS.

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**County Summary:**  
**Quad Summary:** Yolo  
Taylor Monument (3812165)

**Sources:**  
ACORD, B. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-CALIFORNIA NATURAL DIVERSITY DATABASE) - FIELD SURVEY FORM FOR ARDEA HERODIAS & ARDEA ALBA 2010-05-02
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

<table>
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### Scientific Name

**Scientific Name:** Ardea alba  
**Common Name:** great egret

### Listing Status

**Federal:** None  
**State:** None

### CNDDDB Element Ranks

**Global:** G5  
**State:** S4

### General Habitat

COLONIAL NESTER IN LARGE TREES.

### Last Date Observed

1988-05-02

### Occurrence Type

Natural/Native occurrence

### Ownership

**Owner/Manager:** SAC COUNTY, PVT

### Presence

**Presence:** Presumed Extant

### Location

SE ARM OF NORTH STONE LAKE, NEAR JCT OF MAIN BODY OF LAKE, APPROX 6 MILES SOUTH OF SACRAMENTO.

### Detailed Location

GREAT BLUE HERONS AND DOUBLE-CRESTED CORMORANTS ALSO NEST AT THIS ROOKERY SITE.

### Threats

THREATENED BY CATTLE GRAZING ON ALL SIDES OF ROOKERY, WHICH ELIMINATES REGENERATION OF TREES.

### 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.

### PLSS

**PLSS:** T06N, R04E, Sec. 12 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

### UTM

**UTM:** Zone-10 N4249814 E631712  
**Latitude/Longitude:** 38.38685 / -121.49190  
**Elevation (feet):** 5

### Sources

- MID88F0001  
  MIDDLETON, J. - FIELD SURVEY FORM FOR ARDEA HERODIAS 1988-05-02
- MID88F0002  
  MIDDLETON, J. - FIELD SURVEY FORM FOR ARDEA ALBA 1988-05-02
- VEN88F0001  
  VENNARD, M. - FIELD SURVEY FORM FOR PHALACROCORAX AURITUS AT NORTH STONE LAKE, S OF SACRAMENTO. 1988-XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 11602

**EO Index:** 25946

**Key Quad:** Carmichael (3812153)

**Occurrence Number:** 2

**Occurrence Code:** ABNGA04040

**Occurrence Last Updated:** 2005-03-21

**Scientific Name:** Ardea alba

**Common Name:** great egret

**Listing Status:**
- **Federal:** None
- **State:** None

**Rare Plant Rank:**
- CDF_S-Sensitive
- IUCN_LC-Least Concern

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S4

**General Habitat:**
COLONIAL NESTER IN LARGE TREES.

**Micro Habitat:**
ROOKERY SITES LOCATED NEAR MARSHES, TIDE-FLATS, IRRIGATED PASTURES, AND MARGINS OF RIVERS AND LAKES.

**Last Date Observed:** 2005-03-18

**Last Survey Date:** 2005-03-18

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Good

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
ALONG SOUTH SIDE OF THE AMERICAN RIVER, ACROSS FROM WILLIAM POND PARK, PART OF THE AMERICAN RIVER PARKWAY, CARMICHAEL.

**Detailed Location:**
SOME NEST TREES ARE LOCATED IN THE BACKYARDS OF RESIDENCES ON THE SOUTH SIDE OF THE RIVER; OTHERS ARE PART OF THE NATIVE RIPARIAN ALONG THE AMERICAN RIVER.

**Ecological:**
NEST TREES APPEAR TO BE A MIX OF NATIVE OAKS AND EXOTIC TREES. GREAT BLUE HERONS ALSO NEST AT THIS SITE.

**Threats:**
POSSIBLE THREAT OF DISTURBANCE FROM RIVER RECREATION.

**General:**

**PLSS:** T08N, R06E, Sec. 04 (M)

**Accuracy:** specific area

**UTM:** Zone-10 N4271447 E645687

**Latitude/Longitude:** 38.57955 / -121.32743

**Elevation (feet):** 40

**Area (acres):** 35

**County Summary:** Sacramento

**Quad Summary:** Carmichael (3812153)

**Sources:**
- JOH04F0001 JOHNSON, D.L. - FIELD SURVEY FORM FOR ARDEA HERODIAS & ARDEA ALBA (ROOKERY SITE) 2004-06-XX
- JOH88F0003 JOHNSON, D.L. - FIELD SURVEY FORM FOR ARDEA ALBA ALONG AMERICAN RIVER, 0.5 MI. SSW OF GOETHE PARK, CARMICHAEL. 1988-06-24
- WAR05F0005 WARENYCI, D. & D. JOHNSON (SACRAMENTO AUDUBON) - FIELD SURVEY FORM FOR ARDEA ALBA (ROOKERY SITE) 2005-03-18
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 11341
**EO Index:** 25940
**Key Quad:** Rio Linda (3812164)
**Occurrence Number:** 9
**Occurrence Last Updated:** 2003-02-27

**Scientific Name:** *Ardea alba*  
**Common Name:** great egret

**Listing Status:**  
**Federal:** None  
**State:** None

**Rare Plant Rank:** CDF_S-Sensitive  
**Other Lists:** IUCN_LC-Least Concern

**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S4

**General Habitat:**  
COLONIAL NESTER IN LARGE TREES.

**Micro Habitat:**  
ROOKERY SITES LOCATED NEAR MARSHES, TIDE-FLATS, IRRIGATED PASTURES, AND MARGINS OF RIVERS AND LAKES.

**Last Date Observed:** 2002-04-04  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2002-04-04  
**Occurrence Rank:** Excellent

**Owner/Manager:** CITY OF SACRAMENTO  
**Trend:** Increasing

**Presence:** Presumed Extant  
**Location:**  
DRY CREEK, 0.5 MILE SOUTH OF THE JUNCTION OF WEST 2ND STREET AND ASCOT AVENUE, RIO LINDA.

**Detailed Location:**  
ROOKERY IS LOCATED MIDWAY BETWEEN DRAINAGE CANAL AND RIO LINDA / MARYSVILLE BOULEVARD.

**Ecological:**  
HABITAT CONSISTS OF A NARROW VALLEY OAK RIPARIAN CORRIDOR ALONG DRY CREEK. BOTH GREAT EGRETS AND GREAT BLUE HERONS NEST HERE.

**Threats:**  
**General:**  
NESTING OBSERVED IN A SINGLE OAK TREE IN MAR 1988. 15 OCCUPIED NESTS OBSERVED ON 11 APR 2001. 34 OCCUPIED NESTS OBSERVED ON 4 APR 2002.

**PLSS:** T09N, R05E, Sec. 06 (M)  
**Accuracy:** specific area  
**Area (acres):** 10

**UTM:** Zone-10 N4280455 E633421  
**Latitude/Longitude:** 38.66263 / -121.46649  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**

- KIN02F0003 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ARDEA ALBA (ROOKERY SITE) 2002-04-04
- VEN88F0004 VENNARD, M. - FIELD SURVEY FORM & MAP FOR ARDEA ALBA 1988-03-XX
**Map Index Number:** 17136  
**EO Index:** 9707  
**Key Quad:** Taylor Monument (3812165)  
**Element Code:** ABNGA04040  
**Occurrence Number:** 17  
**Occurrence Last Updated:** 1992-02-19

**Scientific Name:** *Ardea alba*  
**Common Name:** great egret

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S4

**General Habitat:**  
COLONIAL NESTER IN LARGE TREES.

**Last Date Observed:** 1989-06-19  
**Occurrence Type:** Natural/Native occurrence

**Occurrence Last Updated:** 1992-02-19  
**Occurrence Rank:** Excellent

**Owner/Manager:** UNKNOWN  
**Trend:** Stable

**Presence:** Presumed Extant

**Location:**  
SMALL DRAINAGE CANAL CROSSING ELVERTA RD, APPROXIMATELY 600 M WEST OF POWERLINE RD, JUST N OF SACRAMENTO METRO AIRPORT.

**Detailed Location:**  
ALTHOUGH NO NESTS COULD BE SEEN, APPROXIMATELY 30 BIRDS WERE FLUSHED FROM THE TREES.

**Ecological:**  
HABITAT IS A DENSE WILLOW RIPARIAN STRIP, APPROXIMATELY 20-30 M WIDE, WITH A FEW COTTONWOOD TREES. SURROUNDING HABITAT CONSISTS OF RICE FIELDS AND DRY CROP AGRICULTURE.

**Threats:**  
POTENTIAL THREAT OF CONVERSION TO AGRICULTURE.

**General:**  
SNOWY EGRETS AND BLACK-CROWNED NIGHT HERONS ALSO BREED AT THIS LOCATION.

**PLSS:**  
T10N, R04E, Sec. 18 (M)  
**Accuracy:** specific area  
**Area (acres):** 32

**UTM:**  
Zone-10 N4286241 E622850  
**Latitude/Longitude:** 38.71629 / -121.58692  
**Elevation (feet):** 15

**County Summary:**  
Sacramento  
Taylor Monument (3812165)

**Sources:**  
SOG89F0002  
SOGGE, M.K. - FIELD SURVEY FORM FOR ARDEA ALBA 1989-06-19
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 54474
Key Quad: Rio Linda (3812164)
Occurrence Number: 29

EO Index: 54475
Element Code: ABNGA04040
Occurrence Last Updated: 2004-02-25

Scientific Name: Ardea alba
Common Name: great egret

Listing Status: Federal: None
State: None

Rare Plant Rank: CDF_S-Sensitive
IUCN_LC-Least Concern

CNDDB Element Ranks: Global: G5
State: S4

General Habitat: COLONIAL NESTER IN LARGE TREES.
Micro Habitat: ROOKERY SITES LOCATED NEAR MARSHES, TIDE-FLATS, IRRIGATED PASTURES, AND MARGINS OF RIVERS AND LAKES.

Last Date Observed: 2001-04-11
Last Survey Date: 2002-XX-XX
Owner/Manager: SAC AREA FLOOD CONTROL AGENCY
Presence: Presumed Extant
Location: NORTH SIDE OF ROBLA CREEK, DIRECTLY NORTH OF KELTON WAY, RIO LINDA.
Detailed Location: GREAT BLUE HERONS ARE ALSO PART OF THIS COLONY.

Ecological: NEST TREE IS AN ISOLATED VALLEY OAK, WITH GRASSLAND TO THE NORTH AND LEVEE/RESIDENTIAL TO THE SOUTH.

Threats:
General: 10 OCCUPIED NESTS OBSERVED ON 11 APR 2001. IN 2002, EGRETS DID NOT OCCUPY THIS TREE, POSSIBLY DUE TO THE PRESENCE OF A NESTING PAIR OF RED-TAILED HAWKS.

PLSS: T09N, R05E, Sec. 05 (M)
Accuracy: 80 meters
Area (acres): 0
UTM: Zone-10 N4280180 E633470
Latitude/Longitude: 38.66015 / -121.46597
Elevation (feet): 35

County Summary: Sacramento
Quad Summary: Rio Linda (3812164)

Sources:
KIN01F0002 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ARDEA ALBA (NESTING COLONY) 2001-04-11
### Occurrence Report

#### California Department of Fish and Wildlife

California Natural Diversity Database

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<td>Occurrence Number:</td>
<td>33</td>
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| Scientific Name:       | Ardea alba     | Common Name:      | great egret   |
| Listing Status:        | Federal: None  | Rare Plant Rank:  |               |
|                        | State: None    | Other Lists:      |               |
| CNDDB Element Ranks:   | Global: G5     | CDF_S-Sensitive  |               |
|                        | State: S4      | IUCN_LC-Least Concern |           |

#### General Habitat:

- COLONIAL NESTER IN LARGE TREES.

#### Micro Habitat:

- ROOKERY SITES LOCATED NEAR MARSHES, TIDE-FLATS, IRRIGATED PASTURES, AND MARGINS OF RIVERS AND LAKES.

| Last Date Observed:    | 2005-03-25          | Occurrence Type: | Natural/Native occurrence |
| Last Survey Date:      | 2005-03-25          | Occurrence Rank: | Excellent               |
| Owner/Manager:         | SRCSD-BUFFERLANDS   | Trend:           | Unknown                 |
| Presence:              | Presumed Extant     |                 |                         |

#### 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 GOODDINGII. ROOKERY SITE INCLUDES NESTING GREAT BLUE HERONS, GREAT EGRETS, AND DOUBLE-CRESTED CORMORANTS.

**Threats:**

THREATENED BY LOSS OF NEST TREES TO AGE OF FOREST AND BEAVER PREDATION.

**General:**

44 ACTIVE GBEG NESTS PRESENT DURING 2005.

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#### County Summary:

- Sacramento
- Florin (3812144)

#### Sources:

- ALB05F0006 ALBRIGHT, J. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - FIELD SURVEY FORM FOR ARDEA ALBA (ROOKERY SITE) 2005-03-25
### Occurrence Report
#### California Department of Fish and Wildlife
California Natural Diversity Database

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<tr>
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**Scientific Name:** *Ardea alba*

**Common Name:** great egret

**Listing Status:**
- Federal: None
- State: None

**CNDDB Element Ranks:**
- Global: G5
- State: S4

**General Habitat:**
 COLONIAL NESTER IN LARGE TREES.

**Micro Habitat:**
ROOKERY SITES LOCATED NEAR MARSHES, TIDE-FLATS, IRRIGATED PASTURES, AND MARGINS OF RIVERS AND LAKES.

**Last Date Observed:** 2010-05-02

**Last Survey Date:** 2010-05-02

**Owner/Manager:** YOL COUNTY-ELKHORN REG PARK

**Presence:** Presumed Extant

**Location:**
1 MILE SE OF I-5 AT SACRAMENTO RIVER, ALONG OLD RIVER RD (LEVEE) & THE SACRAMENTO RIVER, ELKHORN REGIONAL PARK, KIESEL.

**Detailed Location:**
ROOKERY COVERS A LARGE AREA NORTH FROM THE BOAT RAMP PARKING AREA, EAST OF OLD RIVER RD/RAILROAD TRACKS, & WEST OF SACRAMENTO RIVER. NESTS CAN BE OBSERVED FROM WALKING THE RAILROAD TRACKS.

**Ecological:**
NESTS IN COTTONWOODS. AREA APPEARS TO BE THE LARGEST RIPARIAN HABITAT LEFT IN VICINITY. ALSO DETECTED & LIKELY NESTING WERE SWAINSON'S & RED-TAILED HAWKS, ASH-THROATED FLYCATCHER, WESTERN KINGBIRD, TREE SWALLOW, & NUTTALL'S WOODPECKER.

**Threats:**
POTENTIAL DISTURBANCE (NOISE) FROM BOATS & CARS, & POSSIBLY VEHICLE COLLISIONS ON ROAD (PROBABLY RARE).

**General:**
SITE FOUND 24 APR 2010. 155 NESTS WERE COUNTED (MORE LIKELY PRESENT) W/ INCUBATING ADULTS ON 2 MAY 2010; 95% GREAT EGRET (THROUGHOUT), 5% GREAT BLUE HERON (NORTH END). 2 SWAINSON'S HAWKS (1 LIGHT, 1 DARK PHASE) WERE PERCHED IN COTTONWOODS.

**PLSS:** T09N, R03E, Sec. 02 (M)  
**Accuracy:** specific area  
**Area (acres):** 14

**UTM:** Zone-10 N4280269 E620566  
**Latitude/Longitude:** 38.66280 / -121.61422  
**Elevation (feet):** 25

**County Summary:**  
Yolo  
**Quad Summary:**  
Taylor Monument (3812165)

**Sources:**
ACORD, B. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-CALIFORNIA NATURAL DIVERSITY DATABASE) - FIELD SURVEY FORM FOR ARDEA HERODIAS & ARDEA ALBA 2010-05-02
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<th>Scientific Name:</th>
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<th>General Habitat:</th>
<th>COLONIAL NESTER, WITH NEST SITES SITUATED IN PROTECTED BEDS OF DENSE TULES.</th>
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<tr>
<td>Micro Habitat:</td>
<td>ROOKERY SITES SITUATED CLOSE TO FORAGING AREAS: MARSHES, TIDAL-FLATS, STREAMS, WET MEADOWS, AND BORDERS OF LAKES.</td>
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<th>Last Date Observed:</th>
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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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**Location:**

SMALL DRAINAGE CANAL CROSSING ELVERTA RD, APPROXIMATELY 600 M WEST OF POWERLINE RD, JUST N OF SACRAMENTO METRO AIRPORT.

**Detailed Location:**

ALTHOUGH NO NESTS COULD BE SEEN, APPROXIMATELY 50 BIRDS WERE FLUSHED FROM THE TREES.

**Ecological:**

HABITAT IS A DENSE WILLOW RIPARIAN STRIP, APPROXIMATELY 20-30 M WIDE, WITH A FEW TALL COTTONWOOD TREES. SURROUNDING HABITAT CONSISTS OF RICE FIELDS AND DRY CROP AGRICULTURE.

**Threats:**

POTENTIAL THREAT OF CONVERSION TO AGRICULTURE.

**General:**

GREAT EGRETS AND BLACK-CROWNED NIGHT HERONS ALSO NEST AT THIS LOCATION.

<table>
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<th>PLSS:</th>
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<td>County Summary:</td>
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<td>Elevation (feet):</td>
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| Sources:            | SOG89F0003 SOGGE, M.K. - FIELD SURVEY FORM FOR EGRETTA THULA (NESTING COLONY) 1989-XX-XX |

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**Report Printed on Tuesday, September 15, 2015**

**Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch**

**Information Expires 3/1/2016**
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 17136  
EO Index: 9708

Key Quad: Taylor Monument (3812165)  
Element Code: ABNGA11010

Occurrence Number: 3  
Occurrence Last Updated: 1992-02-19

Scientific Name: Nycticorax nycticorax  
Common Name: black-crowned night heron

Listing Status: 
Federal: None  
State: None

Rare Plant Rank:  
Other Lists: IUCN_LC-Least Concern

CNDDB Element Ranks: 
Global: G5  
State: S4

General Habitat: COLONIAL NESTER, USUALLY IN TREES, OCCASIONALLY IN TULE PATCHES.  
Micro Habitat: ROOKERY SITES LOCATED ADJACENT TO FORAGING AREAS: LAKE MARGINS, MUD-BORDERED BAYS, MARSHY SPOTS.

Last Date Observed: 1989-06-19  
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1989-06-19  
Occurrence Rank: Excellent

Owner/Manager: UNKNOWN  
Trend: Stable

Presence: Presumed Extant

Location: SMALL DRAINAGE CANAL CROSSING ELVERTA RD, APPROXIMATELY 600 M WEST OF POWERLINE RD, JUST N OF SACRAMENTO METRO AIRPORT.

Detailed Location: ALTHOUGH NO NESTS COULD BE SEEN, APPROXIMATELY 120 BIRDS (50 ADULTS AND 70 JUVENILES) WERE FLUSHED FROM THE TREES.

Ecological: HABITAT IS A DENSE WILLOW RIPARIAN STRIP, APPROXIMATELY 20-30 M WIDE, WITH A FEW TALL COTTONWOOD TREES. SURROUNDING HABITAT CONSISTS OF RICE FIELDS AND DRY CROP AGRICULTURE.

Threats: POTENTIAL THREAT OF CONVERSION TO AGRICULTURE.

General: SOME ADULTS WERE OBSERVED CARRYING NEST MATERIAL TO TREES. ADULTS AND IMMATURES OBSERVED FORAGING IN ADJACENT FIELDS. GREAT EGRETS AND SNOWY EGRETS ALSO NEST AT THIS LOCATION.

PLSS: T10N, R04E, Sec. 18 (M)  
Accuracy: specific area  
Area (acres): 32

UTM: Zone-10 N4286241 E622850  
Latitude/Longitude: 38.71629 / -121.58692  
Elevation (feet): 15

County Summary: Sacramento  
Quad Summary: Taylor Monument (3812165)

Sources: SOG89F0001  SOGGE, M.K. - FIELD SURVEY FORM FOR NYCTICORAX NYCTICORAX (BLACK-CROWNED NIGHT HERON) 1989-06-19
Map Index Number: 64809  
EO Index: 64888  
Key Quad: Florin (3812144)  
Element Code: ABNGA11010  
Occurrence Number: 15  
Occurrence Last Updated: 2006-06-05  

Scientific Name: *Nycticorax nycticorax*  
Common Name: black-crowned night heron  

Listing Status:  
Federal: None  
State: None  

Rare Plant Rank:  
Other Lists: IUCN_LC-Least Concern  

CNDDB Element Ranks:  
Global: G5  
State: S4  

General Habitat:  
COLONIAL NESTER, USUALLY IN TREES, OCCASIONALLY IN TULE PATCHES.  

Micro Habitat:  
ROOKERY SITES LOCATED ADJACENT TO FORAGING AREAS: LAKE MARGINS, MUD-BORDERED BAYS, MARSHY SPOTS.  

Last Date Observed: 2005-02-01  
Occurrence Type: Natural/Native occurrence  

Last Survey Date: 2005-02-01  
Occurrence Rank: Good  

Owner/Manager: SRCSD-BUFFERLANDS  
Trend: Unknown  

Presence: Presumed Extant  

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*.  

Threats:  
POSSIBLE THREAT FROM BEAVER DAMAGE TO EXISTING TREES AND LOSS OF TREES TO INUNDATION.  

General:  
42 INDIVIDUALS OBSERVED AT THIS ROOKERY ON 1 FEB 2005.  

PLSS: T07N, R05E, Sec. 30 (M)  
Accuracy: 80 meters  
Area (acres): 0  

UTM: Zone-10 N4254851 E632653  
Latitude/Longitude: 38.43208 / -121.48017  
Elevation (feet): 7  

County Summary: Sacramento  
Quad Summary: Florin (3812144)  

Sources:  
ALB05F0001  
ALBRIGHT, J. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - FIELD SURVEY FORM FOR NYCTICORAX NYCTICORAX 2005-02-01
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 64810
**EO Index:** 64889
**Key Quad:** Florin (3812144)
**Element Code:** ABNGA11010
**Occurrence Number:** 16
**Occurrence Last Updated:** 2006-06-05

**Scientific Name:** *Nycticorax nycticorax*
**Common Name:** black-crowned night heron

**Listing Status:**
- Federal: None
- State: None

**CNDDDB Element Ranks:**
- Global: G5
- State: S4

**General Habitat:**
COLONIAL NESTER, USUALLY IN TREES, OCCASIONALLY IN TULE PATCHES.

**Micro Habitat:**
ROOKERY SITES LOCATED ADJACENT TO FORAGING AREAS: LAKE MARGINS, MUD-BORDERED BAYS, MARSHY SPOTS.

**Last Date Observed:** 2005-03-16
**Occurrence Type:** Natural/Native occurrence
**Occurrence Rank:** Good
**Trend:** Unknown

**Owner/Manager:** SRCSD-BUFFERLANDS
**Presence:** Presumed Extant

**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).

**Threats:**
12 INDIVIDUALS OBSERVED AT THIS ROOKERY ON 16 MAR 2005.

**PLSS:** T07N, R05E, Sec. 20 (M)
**Accuracy:** 80 meters
**Area (acres):** 0

**UTM:** Zone-10 N4256360 E635383
**Latitude/Longitude:** 38.44527 / -121.44861
**Elevation (feet):** 7

**County Summary:**
Sacramento

**Detailed Location:**

**Sacramento**
Florin (3812144)

**Sources:**
ALB05F0002 ALBRIGHT, J. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - FIELD SURVEY FORM FOR NYCTICORAX NYCTICORAX 2005-03-16
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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<td>Location:</td>
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<td>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).</td>
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<td>Florin (3812144)</td>
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<td>Sources:</td>
<td>ALBRIGHT, J. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - FIELD SURVEY FORM FOR NYCTICORAX NYCTICORAX 2005-03-16</td>
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**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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**Scientific Name:** *Elanus leucurus*  
**Common Name:** white-tailed kite

**Listing Status:**  
Federal: None  
State: None

**CNNDDB Element Ranks:**  
Global: G5  
State: S3S4

**General Habitat:**  
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**  
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

**Last Date Observed:** 1990-04-22  
**Last Survey Date:** 1990-04-22

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
EAST SIDE OF HEDGE AVENUE, 0.5 MILE SOUTH OF ELDER CREEK ROAD, EAST OF SACRAMENTO.

**Detailed Location:**  
NEST TREE IS AN OLIVE WITHIN AN OLD ORCHARD.

**Threats:**

**General:**  
2 ADULTS OBSERVED OCCUPYING NEST IN 1990.

**PLSS:** T08N, R06E, Sec. 31 (M)  
**UTM:** Zone-10 N4263008 E642871

**Accuracy:** 80 meters  
**Latitude/Longitude:** 38.50399 / -121.36149  
**Area (acres):** 0  
**Elevation (feet):** 45

**County Summary:**  
Sacramento  
Carmichael (3812153)

**Sources:**

JOH90F0009  
JOHNSON, D. - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 1990-04-22
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Elanus leucurus*

**Common Name:** white-tailed kite

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**General Habitat:**
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

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<tr>
<td>Last Survey Date:</td>
<td>1990-06-23</td>
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<tr>
<td>Owner/Manager:</td>
<td>DOD-MATHER AFB</td>
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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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**Location:**
SE CORNER OF MATHER LAKE, MATHER AIR FORCE BASE.

**Detailed Location:**
NEST IS LOCATED IN A TREE AT THE EDGE OF A FRESHWATER LAKE.

**Ecological:**

**Threats:**
MAIN THREAT IS THE UNCERTAIN FUTURE OF MATHER AFB; IT IS UNKNOWN WHETHER MOTHER LAKE WILL BE MAINTAINED.

**General:**
2 ADULTS AND 2 JUVENILES OBSERVED IN 1990.

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<td>Quad Summary:</td>
<td>Buffalo Creek (3812152), Carmichael (3812153)</td>
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**Sources:**

JOH90F0010 JOHNSON, D. - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 1990-06-23

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**Scientific Name:** *Elanus leucurus*  
**Common Name:** white-tailed kite

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G5  
- State: S3S4

**General Habitat:**  
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**  
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

**Last Date Observed:** 1988-03-13  
**Last Survey Date:** 1988-03-13  
**Owner/Manager:** SAC COUNTY  
**Presence:** Presumed Extant

**Location:**  
AMERICAN RIVER FLOODPLAIN, BEHIND RIO AMERICANO HIGH SCHOOL, SACRAMENTO.

**Detailed Location:**  
2 NESTS WERE BUILT, APPROXIMATELY 0.15 MILE APART - BOTH NESTS WERE ABANDONED.

**Ecological:**  
HABITAT CONSISTS OF RIPARIAN WOODLANDS, SCATTERED OAK TREES, AND GRASSLAND, MIXED WITH ISOLATED PONDS.

**Threats:**  
**General:**  
2 ADULTS OBSERVED NESTING, BUT NESTING WAS UNSUCCESSFUL.

**PLSS:** T08N, R06E, Sec. 05 (M)  
**UTM:** Zone-10 N4270816 E643478  
**Accuracy:** specific area  
**Area (acres):** 264

**Latitude/Longitude:** 38.57423 / -121.35292  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
DET88F0002 DETWILER, W. - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 1988-03-13
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 24815
EO Index: 6400
Key Quad: Carmichael (3812153)
Element Code: ABNKC06010
Occurrence Number: 26
Occurrence Last Updated: 1995-11-02

Scientific Name: *Elanus leucurus*
Common Name: white-tailed kite

Listing Status:
  Federal: None
  State: None
Rare Plant Rank:
  BLM_S-Sensitive
  CDFW_FP-Fully Protected
  IUCN_LC-Least Concern

CNDDDB Element Ranks:
  Global: G5
  State: S3S4

General Habitat:
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

Micro Habitat:
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

Last Date Observed: 1988-02-27
Last Survey Date: 1988-02-27
Owner/Manager: SAC COUNTY
Presence: Presumed Extant

Location:
SOUTH END OF GOETHE PARK, RANCHO CORDOVA.

Detailed Location:
NEST LOCATED ON THE EAST SIDE OF THE ENTRANCE ROAD TO THE PARK.

Ecological:

Threats:
General:
2 ADULTS OBSERVED NESTING IN 1988.

PLSS:
T09N, R06E, Sec. 33 (M)

UTM:
Zone-10 N4272710 E645974

Accuracy: 80 meters
Latitude/Longitude: 38.59088 / -121.32389

Area (acres): 0
Elevation (feet): 50

County Summary:
Sacramento
Carmichael (3812153)

Sources:

JOH88F0001 JOHNSTON, D.L. - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) AT GOETHE PARK. 1988-02-27
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 24814
Key Quad: Carmichael (3812153)
Occurrence Number: 27
EO Index: 6397
Element Code: ABNKC06010
Occurrence Last Updated: 1993-12-07

Scientific Name: Elanus leucurus
Common Name: white-tailed kite

Listing Status:
  Federal: None
  State: None

Rare Plant Rank:

CNDDDB Element Ranks:
  Global: G5
  State: S3S4

General Habitat:
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

Micro Habitat:
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

Last Date Observed: 1990-02-18
Last Survey Date: 1990-02-18
Owner/Manager: PVT
Presence: Presumed Extant

Location:
0.25 MILE SOUTH OF ELDER CREEK ROAD, 0.6 MILE EAST OF BRADSHAW ROAD, EAST OF SACRAMENTO.

Detailed Location:
NEST LOCATED IN A TREE LINE BETWEEN PASTURES AND AGRICULTURAL FIELDS.

Ecological:

Threats:
General:
2 ADULTS OBSERVED NESTING IN 1990.

PLSS: T08N, R06E, Sec. 33 (M)
UTM: Zone-10 N4263437 E646165
Accuracy: 80 meters
Latitude/Longitude: 38.50732 / -121.32363
Area (acres): 0
Elevation (feet): 70

County Summary:
Sacramento
Carmichael (3812153)

Sources:
JOH90F0012  JOHNSON, D. - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 1990-02-18
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 24807  
**Key Quad:** Elk Grove (3812143)  
**Occurrence Number:** 28

**EO Index:** 6353  
**Element Code:** ABNKC06010  
**Occurrence Last Updated:** 1994-02-04

---

**Scientific Name:** *Elanus leucurus*  
**Common Name:** white-tailed kite

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S3S4

---

**General Habitat:**  
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**  
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

---

**Last Date Observed:** 1990-06-03  
**Last Survey Date:** 1990-06-03  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant  
**Location:** SOUTH SIDE OF MCCOY AVENUE, 0.4 MILE EAST OF ELK GROVE-FLORIN ROAD, SOUTH OF SACRAMENTO.

**Detailed Location:**  
NEST TREE IS LOCATED ON RURAL RESIDENTIAL PROPERTY.

**Ecological:**  
NEST TREE IS LOCATED ON RURAL RESIDENTIAL PROPERTY.

**Threats:**  
**General:**  
2 ADULTS OBSERVED NESTING IN 1990.

---

**PLSS:** T07N, R06E, Sec. 06 (M)  
**UTM:** Zone-10 N4261089 E642574  
**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Accuracy:** 80 meters  
**Latitude/Longitude:** 38.48675 / -121.36528  
**Area (acres):** 0  
**Elevation (feet):** 50

---

**Sources:**

JOH90F0013  JOHNSON, D. - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 1990-06-03

---

Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch

Report Printed on Tuesday, September 15, 2015  
Information Expires 3/1/2016
### Scientific Name: *Elanus leucurus*

**Common Name:** white-tailed kite

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3S4

**General Habitat:**
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

**Occurrence Report**

**SACRAMENTO BAR, ON THE NORTH SIDE OF THE AMERICAN RIVER, NEAR THE END OF BANNISTER AVENUE, FAIR OAKS.**

**Detailed Location:**
HABITAT CONSISTS OF A DISTUBED RIPARIAN AREA CONTAINING GRAVEL DREDGE TAILINGS; VEGETATED BY LIVE OAK AND COTTONWOOD TREES.

**Threats:**
ADULT WAS OBSERVED SETTLING DOWN ON THE NEST IN 1990.

**PLSS:** T09N, R06E, Sec. 14 (M)
**UTM:** Zone-10 N4277014 E649379

**Accuracy:** 80 meters **Area (acres):** 0
**Latitude/Longitude:** 38.62909 / -121.28388 **Elevation (feet):** 90

**County Summary:** Sacramento

**Quad Summary:** Citrus Heights (3812163)

**Sources:**
JOH90F0014 JOHNSON, D. - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 1990-05-05

---

**Map Index Number:** 24831  
**EO Index:** 6464
**Key Quad:** Citrus Heights (3812163)  
**Element Code:** ABNKC06010
**Occurrence Number:** 32  
**Occurrence Last Updated:** 1995-11-02

**Scientific Name:** *Elanus leucurus*

**Common Name:** white-tailed kite

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3S4

**Occurrence Report**

**Sacramento County Summary:**

**PLSS:** T09N, R06E, Sec. 14 (M)  
**UTM:** Zone-10 N4277014 E649379

**Accuracy:** 80 meters **Area (acres):** 0
**Latitude/Longitude:** 38.62909 / -121.28388 **Elevation (feet):** 90

---

**General Habitat:**
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

**Occurrence Type:** Natural/Native occurrence
**Occurrence Rank:** Good
**Trend:** Unknown

**Location:**
SACRAMENTO BAR, ON THE NORTH SIDE OF THE AMERICAN RIVER, NEAR THE END OF BANNISTER AVENUE, FAIR OAKS.

**Detailed Location:**
HABITAT CONSISTS OF A DISTUBED RIPARIAN AREA CONTAINING GRAVEL DREDGE TAILINGS; VEGETATED BY LIVE OAK AND COTTONWOOD TREES.

**Threats:**
ADULT WAS OBSERVED SETTLING DOWN ON THE NEST IN 1990.

**PLSS:** T09N, R06E, Sec. 14 (M)  
**UTM:** Zone-10 N4277014 E649379

**Accuracy:** 80 meters **Area (acres):** 0
**Latitude/Longitude:** 38.62909 / -121.28388 **Elevation (feet):** 90

**County Summary:** Sacramento

**Quad Summary:** Citrus Heights (3812163)

**Sources:**
JOH90F0014 JOHNSON, D. - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 1990-05-05
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<td>General Habitat:</td>
<td>ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS &amp; RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.</td>
<td>Micro Habitat:</td>
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<td>Occurrence Rank:</td>
<td>Unknown</td>
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<td>DOD-MCCLELLAN AFB</td>
<td>Trend:</td>
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<td>Presence:</td>
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<td>Location:</td>
<td>ALONG DON JULIO CREEK, ABOUT 1.4 KM NE OF THE INTERSECTION OF MAIN AVENUE AND RALEY BOULEVARD, MCCLELLAN AIR FORCE BASE.</td>
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<td>Detailed Location:</td>
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<td>Ecological:</td>
<td>NEST IS IN BOXELDER ALONG DON JULIO CREEK. SURROUNDING AREA IS ANNUAL GRASSLAND.</td>
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<td>Threats:</td>
<td>THREATS INCLUDE MILITARY OPERATIONS AND DEVELOPMENT.</td>
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<td>General:</td>
<td>1 NEST OBSERVED FROM FEB-JUN 1995 DURING A FAIRY SHRIMP SURVEY; NESTING SUCCESS UNKNOWN.</td>
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<td>Sacramento</td>
<td>Quad Summary:</td>
<td>Rio Linda (3812164)</td>
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<td>Sources:</td>
<td>LAC95R0001 LACY, T. (WESCO-RMI) - 1995 VERNAL POOL CRUSTACEAN SURVEY RESULTS - MCCLELLAN AFB AND LINCOLN &amp; DAVIS COMMUNICATIONS FACILITIES; CONSERVATION PLAN INCLUDED. 1995-XX-XX</td>
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Occurrence Number: 66
EO Index: 51561
Element Code: ABNKC06010
Occurrence Last Updated: 2003-06-17

Scientific Name: *Elanus leucurus*
Common Name: white-tailed kite

Listing Status:
- Federal: None
- State: None

Rare Plant Rank:
- Other Lists: BLM_S-Sensitive
- CDFW_FP-Fully Protected
- IUCN_LC-Least Concern

CNDDB Element Ranks:
- Global: G5
- State: S3S4

General Habitat:
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

Micro Habitat:
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

Last Date Observed: 2002-06-06
Last Survey Date: 2002-06-06
Owner/Manager: SAC COUNTY FLOOD CONTROL
Presence: Presumed Extant

Location:
ALONG ROBLA CREEK, JUST UPSTREAM OF THE MAGPIE CREEK DIVERSION CHANNEL CONFLUENCE, SW OF RIO LINDA AIRPORT.

Detailed Location:
Ecological:
HABITAT CONSISTS OF A SMALL, REMNANT RIPARIAN PATCH ALONG THE HISTORIC ROBLA CREEK CORRIDOR.

Threats:
General:
THIS SITE WAS ALSO OCCUPIED IN 2001. NEST FAILED DURING THE NESTLING STAGE IN 2002, POSSIBLY DUE TO HEAVY RAIN AND WIND; THE PAIR BUILT SEVERAL REPLACEMENT NESTS WHICH NEVER REACHED INCUBATION STAGE.

PLSS: T09N, R05E, Sec. 04 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4281254 E635186
Latitude/Longitude: 38.66956 / -121.44605
Elevation (feet): 40

County Summary:
Sacramento
Rio Linda (3812164)

Sources:
KIN02F0008 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 2002-06-06
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 51562
EO Index: 51562
Key Quad: Rio Linda (3812164)
Element Code: ABNKC06010
Occurrence Number: 67
Occurrence Last Updated: 2003-06-17

Scientific Name: Elanus leucurus
Common Name: white-tailed kite

Listing Status: Federal: None
Rare Plant Rank: BLM_S-Sensitive
State: None
Other Lists: CDFW_FP-Fully Protected
CNDDDB Element Ranks: Global: G5
IUCN_LC-Least Concern
State: S3S4

General Habitat:
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

Micro Habitat:
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

Last Date Observed: 2002-07-01
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2002-07-01
Occurrence Rank: Excellent
Owner/Manager: PVT
Trend: Unknown
Presence: Presumed Extant

Location:
JUST WEST OF WHERE THE SACRAMENTO NORTH BIKE TRAIL CROSSES DRY CREEK SOUTH, RIO LINDA.

Detailed Location:
NEST SITE IS LOCATED 400 FEET WEST OF THE BIKE TRAIL CROSSING OF DRY CREEK SOUTH.

Ecological:
HABITAT CONSISTS OF SOME ISOLATED, SMALL VALLEY OAKS ALONG A FENCeline.

Threats:
General:
NEST OBSERVED ON 1 JUL 2002, DURING NEST-BUILDING STAGE; SITE REVISITED SEVERAL TIMES, BUT NO EVIDENCE OF NESTLINGS EVER OBSERVED.

PLSS: T10N, R05E, Sec. 32 (M)
Accuracy: 80 meters
Area (acres): 0
UTM: Zone-10 N4281791 E634866
Latitude/Longitude: 38.67445 / -121.44962
Elevation (feet): 40

County Summary:
Sacramento
Rio Linda (3812164)
Quad Summary:

Sources:
KIN02F0009 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 2002-07-01
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 51566

**EO Index:** 51566

**Key Quad:** Rio Linda (3812164)

**Occurrence Number:** 68

**Element Code:** ABNKC06010

**Occurrence Last Updated:** 2003-06-18

---

**Scientific Name:** *Elanus leucurus*

**Common Name:** white-tailed kite

**Listing Status:**

- Federal: None
- State: None

**CNDDB Element Ranks:**

- Global: G5
- State: S3S4

---

**General Habitat:**

ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**

OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

---

**Last Date Observed:** 2002-07-11

**Last Survey Date:** 2002-07-11

**Owner/Manager:** PVT

**Presence:** Presumed Extant

---

**Location:**

0.2 MILE EAST OF DRY CREEK ROAD, BETWEEN E STREET AND ROBLA CREEK, RIO LINDA.

---

**Detailed Location:**

NEST SITE IS LOCATED WITHIN A EUCALYPTUS GROVE AT A RESIDENTIAL SITE; SURROUNDED BY OPEN GRASSLAND.

---

**Ecological:**

NEST BUILDING OBSERVED ON 11 JUL 2002; SITE REVISITED SEVERAL TIMES, BUT NO EVIDENCE OF NESTLINGS OR FLEDGLINGS OBSERVED, SO NEST PRESUMED TO HAVE FAILED.

---

**PLSS:** T10N, R05E, Sec. 33 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4281907 E636031

**Latitude/Longitude:** 38.67532 / -121.43622

**Elevation (feet):** 45

---

**County Summary:**

Sacramento

Rio Linda (3812164)

---

**Sources:**

KIN02F0010 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 2002-07-11
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>Common Name:</td>
<td>white-tailed kite</td>
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**Listing Status:**

- **Federal:** None
- **State:** None

**CNDDDB Element Ranks:**

- **Global:** G5
- **State:** S3S4

**General Habitat:**

ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**

OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

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<td>PVT</td>
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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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**Location:**

NE OF THE INTERSECTION OF SOTNIP AND TUNIS, JUST WEST OF NEMDC, DEL PASO.

**Detailed Location:**

NEST TREE IS AN ORNAMENTAL TREE ON A VACANT LOT; SURROUNDED BY RESIDENTIAL TO THE NORTH, NEMDC TO THE EAST, AND VACANT LAND TO THE SOUTH AND WEST.

**Ecological:**

**Threats:**

GENERAL:

NEST BUILDING OBSERVED ON 25 JUN 2002; SITE REVISITED SEVERAL TIMES, BUT NO EVIDENCE OF NESTLINGS OR FLEDGLINGS OBSERVED, SO NEST PRESUMED TO HAVE FAILED.

**PLSS:** T09N, R05E, Sec. 06 (M)

**UTM:** Zone-10 N4279794 E632495

**Accuracy:** 80 meters

**Latitude/Longitude:** 38.65682 / -121.47726

**Area (acres):** 0

**Elevation (feet):** 25

**County Summary:** Sacramento

**Quad Summary:** Rio Linda (3812164)

**Sources:**

KIN02F0011 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 2002-06-25

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Information Expires 3/1/2016
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 51569
Key Quad: Rio Linda (3812164)
Occurrence Number: 70
EO Index: 51569
Element Code: ABNKC06010
Occurrence Last Updated: 2003-06-18

Scientific Name: Elanus leucurus
Common Name: white-tailed kite

Listing Status:
  Federal: None
  State: None

CNDDDB Element Ranks:
  Global: G5
  State: S3S4

General Habitat:
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

Micro Habitat:
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

Last Date Observed: 2002-06-25
Last Survey Date: 2002-06-25
Owner/Manager: PVT-UNION PACIFIC RR, RD 1000
Presence: Presumed Extant

Location:
JUST NE OF WHERE ROBLA CREEK CONVERGES WITH THE NEMDC, BETWEEN NEMDC AND THE WESTERN PACIFIC RAILROAD TRACKS, DEL PASO.

Detailed Location:

Ecological:
NEST TREE IS A VALLEY OAK SURROUNDED BY OPEN, NON-NATIVE GRASSLAND HABITAT.

Threats:
NESTING OBSERVED ON 25 JUN 2002; NESTING SUCCESSFUL WITH 2 YOUNG FLEDGED.

PLSS: T09N, R05E, Sec. 06 (M)
Accuracy: 80 meters

UTM: Zone-10 N4280199 E632618
Latitude/Longitude: 38.66045 / -121.47576
Elevation (feet): 30

County Summary:
Sacramento
Rio Linda (3812164)

Sources:
KIN02F0012  KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 2002-06-25
| **Map Index Number:** | 51570 |
| **Key Quad:** | Rio Linda (3812164) |
| **Occurrence Number:** | 71 |
| **Scientific Name:** | *Elanus leucurus* |
| **Common Name:** | white-tailed kite |
| **Listed Status:** | Federal: None  State: None |
| **CNDDDB Element Ranks:** | Global: G5  State: S3S4 |
| **General Habitat:** | Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. |
| **Micro Habitat:** | Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. |
| **Last Date Observed:** | 2002-06-25 |
| **Owner/Manager:** | PVT-RD 1000 |
| **Presence:** | Presumed Extant |
| **Location:** | Just south of where Dry Creek converges with Nemdc, between Nemdc and the western Pacific railroad tracks, Del Paso. |
| **Detailed Location:** | Ecological: NEST TREE IS A VALLEY OAK SURROUNDED BY OPEN, NON-NATIVE GRASSLAND HABITAT. |
| **Threats:** | NESTING OBSERVED ON 25 JUN 2002; NESTING SUCCESSFUL WITH 2 YOUNG FLEDGED. |
| **PLSS:** | T09N, R05E, Sec. 06 (M) |
| **UTM:** | Zone-10 N4280446 E632518 |
| **Accuracy:** | 80 meters |
| **Latitude/Longitude:** | 38.66269 / -121.47686 |
| **Elevation (feet):** | 30 |
| **Area (acres):** | 0 |
| **County Summary:** | Sacramento: Rio Linda (3812164) |
| **Sources:** | KIN02F0013 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ELANUS LEUCURUS (=CAERULEUS) (NEST SITE) 2002-06-25 |
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<td>Listing Status:</td>
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<td>Rare Plant Rank:</td>
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<td>State: S3S4</td>
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**General Habitat:**  
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**  
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

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<td>Owner/Manager:</td>
<td>PVT-RD 1000</td>
<td>Trend:</td>
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**Location:**  
JUST SE OF THE DRY CREEK CONVERGENCE WITH NEMDC, DEL PASO.

**Detailed Location:**

**Ecological:**  
NEST TREE IS A VALLEY OAK SURROUNDED BY OPEN, NON-NATIVE GRASSLAND HABITAT; NEARBY RIPARIAN IN NEMDC.

**Threats:**

**General:**  
NEST-BUILDING OBSERVED ON 25 JUN 2002; SITE REVISITED THROUGHOUT THE NESTING SEASON, BUT THERE WAS NO EVIDENCE OF NESTLINGS OR FLEDGLINGS (PRESUMABLY A FAILED NESTING ATTEMPT).

**PLSS:**  
T09N, R05E, Sec. 06 (M)  
Accuracy: 80 meters  
Area (acres): 0

**UTM:**  
Zone-10 N4280625 E632524  
Latitude/Longitude: 38.66430 / -121.47676  
Elevation (feet): 30

**County Summary:**  
Sacramento  
Rio Linda (3812164)

**Sources:**  
KIN02F0014  
KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR *ELANUS LEUCURUS (=CAERULEUS)* (NEST SITE) 2002-06-25
Map Index Number: 65932
EO Index: 66011

Key Quad: Sacramento East (3812154)
Element Code: ABNKC06010

Occurrence Number: 98
Occurrence Last Updated: 2006-08-30

Scientific Name: *Elanus leucurus*
Common Name: white-tailed kite

Listing Status: Federal: None
State: None

Rare Plant Rank: BLM_S-Sensitive
Other Lists: CDFW_FP-Fully Protected
IUCN_LC-Least Concern

CNDDDB Element Ranks: Global: G5
State: S3S4

General Habitat: ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

Micro Habitat: OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

Last Date Observed: 1974-02-XX
Last Survey Date: 1974-02-XX
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location: NORTH SIDE OF THE AMERICAN RIVER, ABOUT 0.3 MI SE OF HWY 160 OVERPASS OVER THE AMERICAN RIVER.
Detailed Location: NEST LOCATED IN COTTONWOOD.

Ecological: RIPARIAN HABITAT MAINLY OF FREMONT COTTONWOOD AND WILLOW (SALIX SPP.) THICKCETS WHICH LINE RIVER BANKS.

Threats: General:
2 YOUNG FLEDGED.

PLSS: T09N, R05E, Sec. 31 (M)
Area (acres): 0

UTM: Zone-10 N4272699 E633196
Latitude/Longitude: 38.59279 / -121.47055
Elevation (feet): 30

County Summary: Sacramento
Sacramento East (3812154)

Sources:
VIN74R0001 VINCENTY, J.A. - A STUDY OF FACTORS AFFECTING NESTING RAPTOR POPULATIONS IN URBAN AREAS, SACRAMENTO COUNTY, CALIFORNIA. (WMB ADM RPT., NO.74-5) 1974-08-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 65935

**EO Index:** 66014

**Key Quad:** Citrus Heights (3812163)

**Occurrence Number:** 101

**Occurrence Last Updated:** 2006-08-22

**Scientific Name:** *Elanus leucurus*

**Common Name:** white-tailed kite

**Listing Status:**

- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**

- **Global:** G5
- **State:** S3S4

**General Habitat:**
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

**Last Date Observed:** 1974-02-XX

**Last Survey Date:** 1974-02-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
JUST SOUTH OF FAIR OAKS, ABOUT 0.4 MI EAST OF SUNRISE BLVD, LOWER SUNRISE RECREATION AREA.

**Ecological:**
OAK WOODLAND & OAK GRASSLAND, TREES MAINLY QUERCUS DOUGLASII & QUERCUS WISLIZENI. SCATTERED PINUS SABINIANA & QUERCUS LOBATA ALSO. DOM. TREE IN DREDGER TRAILINGS IS POPULUS FREMONTII.

**Threats:**
NEST TREE WAS INTERIOR LIVE OAK. NESTING SUCCESS UNKNOWN.

**PLSS:** T09N, R06E, Sec. 24 (M)

**Accuracy:** 1/5 mile

**Area (acres):** 0

**UTM:** Zone-10 N4276627 E650310

**Latitude/Longitude:** 38.62544 / -121.27327

**Elevation (feet):** 100

**County Summary:**

Sacramento

Carmichael (3812153), Citrus Heights (3812163)

**Sources:**

VINCENTY, J.A. - A STUDY OF FACTORS AFFECTING NESTING RAPTOR POPULATIONS IN URBAN AREAS, SACRAMENTO COUNTY, CALIFORNIA. (WMB ADM RPT., NO.74-5) 1974-08-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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| EO Index:        | 66022 |
| Element Code:    | ABNKC06010 |
| Occurrence Last Updated: | 2006-08-31 |

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**General Habitat:**
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

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**Location:**
PARADISE BEACH ON THE AMERICAN RIVER AT THE END OF CARLSON DRIVE, SACRAMENTO.

**Detailed Location:**
UNKNOWN WHERE WITHIN THE PARADISE BEACH AREA THE BIRDS WERE NESTING SO THE ENTIRE AREA IS MAPPED.

**Ecological:**

**Threats:**

**General:**
1 PAIR OBSERVED NESTING FROM 30 APR TO 3 MAY 1988.

**PLSS:**
T08N, R05E, Sec. 03 (M)

**UTM:**
Zone-10 N4271522 E637182

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<td>Elevation (feet):</td>
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**County Summary:**
Sacramento

**Sacramento East (3812154)**

**Sources:**
AUD88U0001  AUDUBON SOCIETY - SEASON OBSERVATIONS, THE OBSERVER, SACRAMENTO AUDUBON SOCIETY. 1988-08-XX
### Occurrence Report
#### California Department of Fish and Wildlife
California Natural Diversity Database

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<th>Micro Habitat:</th>
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<td>Presence: Presumed Extant</td>
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**Location:**
ANCIL HOFFMAN COUNTY PARK (SAC CO DEPT OF REGIONAL PARKS), 184 METERS WEST OF RIVER MARKER "MILE 16" (TOPO).

**Detailed Location:**
APPROXIMATELY 145 METERS ENE OF BATHROOMS ON THE SOUTH END OF THE PICNIC PARKING LOT EAST OF THE GOLF COURSE PARKING LOT, NEAR WOODEN FORT-TYPE STRUCTURE.

**Ecological:**
HABITAT CONSIST OF OAK WOODLANDS & GROOMED LAWNS WITHIN URBAN PARK WITH A VARIETY OF HUMAN RECREATION ACTIVITIES WITHIN 200 M. NEST IN OAK TREE.

**Threats:**
HUMAN RECREATION MAY DISTURB BIRDS. HOWEVER, THIS HAS BEEN A HIGH USE PARK FOR MANY YEARS & PAIR MAY HAVE HABITUATED.

**General:**
PAIR OBSERVED COLLECTING NEST MATERIAL & BUILDING NEST ON 11 MAY 2008.

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<td>Quad Summary: Carmichael (3812153)</td>
<td>Elevation (feet): 75</td>
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**Sources:**
ACORD, B. & K. ROGERS (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR ELANUS LEUCURUS 2008-05-11
**Occurrence Report**

California Department of Fish and Wildlife  
California Natural Diversity Database

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<td>Occurrence Last Updated:</td>
<td>2010-03-11</td>
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**Scientific Name:** *Elanus leucurus*  
**Common Name:** white-tailed kite

**Listing Status:**  
- Federal: None
- State: None

**CNDDB Element Ranks:**  
- Global: G5
- State: S3S4

**General Habitat:**  
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**  
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

**Last Date Observed:** 2009-08-XX  
**Last Survey Date:** 2009-08-XX

**Owner/Manager:** SAC COUNTY-PARKS & REC  
**Presence:** Presumed Extant

**Location:**  
WITHIN THE AMERICAN RIVER PARKWAY, S OF TRIBUTE RD BETWEEN CAPITAL CITY FWY TO THE E & RAIL ROAD TO THE W, SACRAMENTO.

**Detailed Location:**  
NEST TREE ABOUT 300 FEET SOUTH OF THE PAVED BIKE TRAIL. MAPPED TO PROVIDED COORDINATES AND MAP.

**Ecological:**  
NEST WAS IN A DECIDUOUS OAK TREE AND WELL CONCEALED WHILE THE TREE HAD FOLIAGE. THE SITE WAS LOCATED IN AN OPEN GRASSLAND AREA (CNDDB ELDERBERRY SAVANNA OCC #2). ABOUT 17 ACRES N OF PAVED TRAIL IS BEING RESTORED WITH NATIVE PLANTS.

**Threats:**  
DISTURBANCES INCLUDE FREEWAY. NO THREATS.

**General:**  
2 ADULTS OBSERVED CONDUCTING AN INCUBATION EXCHANGE, & AN ADULT OBSERVED BRINGING FOOD TO NEST DURING THE BREEDING SEASON, 2009. IN AUGUST, A JUVENILE, PRESUMED FROM NEST, WAS OBS IN AREA. NEST CONFIRMED IN FALL WHEN TREE WAS DEFOLIATED.

**PLSS:**  
- T09N, R05E, Sec. 32 (M)

**UTM:**  
- Zone-10 N4272604 E635205

**County Summary:**  
Sacramento

**Accuracy:** 80 meters  
**Latitude/Longitude:** 38.59164 / -121.44751  
**Elevation (feet):** 30  
**Area (acres):** 0

**Sources:**  
ACO09F0010  
ACORD, B. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-CALIFORNIA NATURAL DIVERSITY DATABASE) - FIELD SURVEY FORM FOR ELANUS LEUCURUS 2009-08-XX
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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**EO Index:** 79250  
**Element Code:** ABNKC06010  
**Occurrence Last Updated:** 2010-03-11

**Scientific Name:** *Elanus leucurus*  
**Common Name:** white-tailed kite

**Listing Status:**  
- Federal: None  
- State: None

**CNNDDB Element Ranks:**  
- Global: G5  
- State: S3S4

**General Habitat:**  
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

**Micro Habitat:**  
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

**Last Date Observed:** 2009-08-15  
**Last Survey Date:** 2009-08-15  
**Owner/Manager:** SAC COUNTY-PARKS & REC  
**Presence:** Presumed Extant  
**Location:** ABOUT 0.4 MILES NNE OF ROSSMOOR DR AT AMBASSADOR DR, ROSSMOOR BAR, AMERICAN RIVER PARKWAY, RANCHO CORDOVA.

**Detailed Location:**  
ABOUT 300 FEET EAST OF THE PARK ENTRANCE ROAD (ROSSMOOR DR), AND JUST SOUTH OF THE PILES OF RIVER ROCK. MAPPED TO PROVIDED COORDINATES AND MAP.

**Ecological:**  
NEST WAS LOCATED IN AN OAK TREE THAT WAS BORDERED BY OPEN GRASSY AREAS TO THE SOUTH AND PILES OF RIVER ROCK TO THE NORTH. DURING THE WINTER OF 2009-2010, THE COUNTY PARKS FENCED-OFF ABOUT 75 ACRES WEST OF NEST FOR NATIVE PLANT RESTORATION.

**Threats:**  
NO THREATS. VISIBLE DISTURBANCE INCLUDE HUGE PILES OF RIVER ROCK FROM HISTORIC GOLD MINING THAT DEGRADE HABITAT.

**General:**  
ADULT PAIR OBSERVED BEFORE, DURING, & AFTER THE 2009 BREEDING SEASON. 2 ADULTS AND 2 CHICKS OBSERVED ON 15 AUG 2009. CHICKS SUCCESSFULLY FLEDGED.

**PLSS:** T09N, R06E, Sec. 23 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4275712 E648278  
**Latitude/Longitude:** 38.61755 / -121.29679  
**Elevation (feet):** 75

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
ACO09F0011  
ACORD, B. & K. ROGERS (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-CALIFORNIA NATURAL DIVERSITY DATABASE) - FIELD SURVEY FORM FOR ELANUS LEUCURUS 2009-08-15
**Scientific Name:** *Elanus leucurus*  
**Common Name:** white-tailed kite

**Map Index Number:** 78326  
**EO Index:** 79253  
**Element Code:** ABNKC06010  
**Occurrence Last Updated:** 2010-03-11

**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 144

**Last Date Observed:** 2009-08-15  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2009-08-15  
**Occurrence Rank:** Good

**Owner/Manager:** PVT, SAC COUNTY-PARKS & REC  
**Presence:** Presumed Extant

**Location:**  
AT THE SOUTHWEST CORNER OF AMBASSADOR DR AT RIVER VISTA WAY, RANCHO CORDOVA.

**Detailed Location:**  
NEST IN REDWOOD TREE IN BACKYARD OF HOUSE ON CORNER. MAPPED TO PROVIDED COORDINATES AND MAP.

**Ecological:**  
NEST WAS IN A REDWOOD TREE IN YARD OF PVT RESIDENCE IN TRACK HOME DEVELOPMENT IMMEDIATELY ADJ TO THE AM RIV PARKWAY. THE ADULT PAIR FREQUENTLY PERCHED & ATE IN TREE ABOUT 57 M SSW OF NEST TREE, & FORAGED IN RUDERAL GRASSLANDS TO N & W.

**Threats:**  
NO THREATS. DISTURBANCES INCLUDE INVASIVE PLANTS (YELLOW STARThISTLE) DEGRADING HABITAT IN FORAGING FIELDS.

**General:**  
ADULT PAIR OBSERVED BEFORE, DURING, & AFTER THE 2009 BREEDING SEASON. THE NEST WAS BLOWN OUT OF TREE EARLIER, BUT OBSERVED REBUILDING ON 20 JUN. ADULT ON NEST INCUBATING ON 25 JUL; LATER CHICK FEEDING OBS. NEST ABANDONED; PRESUMED FAILED.

**PLSS:** T09N, R06E, Sec. 27 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4274550 E647665  
**Latitude/Longitude:** 38.60718 / -121.30408  
**Elevation (feet):** 75

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
ACO09F0012  
ACORD, B. & K. ROGERS (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-CALIFORNIA NATURAL DIVERSITY DATABASE) - FIELD SURVEY FORM FOR ELANUS LEUCURUS 2009-08-15
**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

| Map Index Number: | 78441 | EO Index: | 79362 |
| Key Quad: | Florin (3812144) | Element Code: | ABNKC06010 |
| Occurrence Number: | 151 | Occurrence Last Updated: | 2010-03-25 |

### Scientific Name: **Elanus leucurus**  
**Common Name:** white-tailed kite

### Listing Status:  
**Federal:** None  
**State:** None

### CNNDB Element Ranks:  
**Global:** G5  
**State:** S3S4

### General Habitat:  
ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.

### Micro Habitat:  
OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

### Last Date Observed: | 2008-04-23 | Occurrence Type: | Natural/Native occurrence |
### Last Survey Date: | 2008-04-23 | Occurrence Rank: | Fair |
### Owner/Manager: | PVT, SRCSD-BUFFERLANDS | Trend: | Unknown |
### Presence: | Presumed Extant |  

### 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.

### Threats:  
**General:**  

### PLSS:  
**T07N, R05E, Sec. 17 (M)**  
**Accuracy:** 80 meters  
**Area (acres):** 0

### UTM:  
**Zone-10 N4258538 E635045**  
**Latitude/Longitude:** 38.46494 / -121.45206  
**Elevation (feet):** 12

### County Summary:  
Sacramento  
Florin (3812144)

### Sources:  
STR08F0004 STRINGER, S. & J. ARSENIJEVIC (HDR, INC.) - FIELD SURVEY FORM FOR ELANUS LEUCURUS 2008-04-23
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11618
EO Index: 27345
Key Quad: Carmichael (3812153)
Element Code: ABNKC12040
Occurrence Number: 33
Occurrence Last Updated: 1995-11-02

Scientific Name: Accipiter cooperii
Common Name: Cooper's hawk

Listing Status:
Federal: None
State: None

CNDDB Element Ranks:
Global: G5
State: S4

General Habitat:
WOODLAND, CHIEFLY OF OPEN, INTERRUPTED OR MARGINAL TYPE.

Micro Habitat:
NEST SITES MAINLY IN RIPARIAN GROWTHS OF DECIDUOUS TREES, AS IN CANYON BOTTOMS ON RIVER FLOOD-PLAINS; ALSO, LIVE OAKS.

Last Date Observed: 1988-04-23
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1988-04-23
Occurrence Rank: Unknown
Owner/Manager: SAC COUNTY
Trend: Decreasing
Presence: Presumed Extant

Location:
E SIDE OF GOETHE PARK IN ARP, RANCHO CORDOVA.

Detailed Location:

Ecological:

Threats:

General:
FEMALE OBSERVED ON NEST WITH MALE IN CLOSE PROXIMITY. NEST LATER VACATED DUE TO MAN-CAUSED WILDFIRE.

PLSS: T09N, R06E, Sec. 28 (M)
Accuracy: 1/5 mile
Area (acres): 0

UTM: Zone-10 N4273497 E646036
Latitude/Longitude: 38.59796 / -121.32301
Elevation (feet): 65

County Summary:
Quad Summary:
Sacramento: Carmichael (3812153)

Sources:
JOH88F0002 JOHNSON, D.L. - FIELD SURVEY FORM FOR ACCIPITER COOPERII AT GOETHE PARK 1988-04-23
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 33435
EO Index: 29285
Key Quad: Sacramento East (3812154)
Element Code: ABNKC12040
Occurrence Number: 61
Occurrence Last Updated: 1996-09-04

Scientific Name: Accipiter cooperii
Common Name: Cooper's hawk

Listing Status:
  Federal: None
  State: None

CNDDB Element Ranks:
  Global: G5
  State: S4

General Habitat:
WOODLAND, CHIEFLY OF OPEN, INTERRUPTED OR MARGINAL TYPE.

Micro Habitat:
NEST SITES MAINLY IN RIPARIAN GROWTHS OF DECIDUOUS TREES,
AS IN CANYON BOTTOMS ON RIVER FLOOD-PLAINS; ALSO, LIVE
OAKS.

Last Date Observed: 1996-07-17
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1996-07-17
Occurrence Rank: Fair
Owner/Manager: SAC COUNTY-PARKS & REC
Trend: Unknown
Presence: Presumed Extant

Location:
NATOMAS EAST MAIN DRAINAGE CANAL, SOUTH OF EAST LEVEE ROAD AND 0.2 MILE EAST OF NORTHGATE BLVD, SACRAMENTO.

Detailed Location:
Ecological:
NEST TREE IS A VALLEY OAK; NEST IS 1/3 OF THE WAY DOWN FROM THE CANOPY TOP. HABITAT CONSISTS OF VALLEY OAK/COTTONWOOD
RIPARIAN, INCLUDING AN UNDERSTORY OF GRAPES, WILLOWS, BUTTONWILLOW, AND BLACKBERRY; SURROUNDED BY URBAN
DEVELOPMENT.

Threats:
MAIN THREAT IS HUMAN DISTURBANCE FROM TRANSIENTS/HOMELESS PEOPLE THAT USE THE AREA.

General:
1 ADULT AND 3 YOUNG NEAR FLEDGING ("BRANCHERS") OBSERVED ON 17 JULY 1996.

PLSS: T09N, R05E, Sec. 01 (M)
Accuracy: 80 meters
Area (acres): 0
UTM: Zone-10 N4273995 E633000
Latitude/Longitude: 38.60450 / -121.47256
Elevation (feet): 25

County Summary:
Sacramento
Quad Summary:
Sacramento East (3812154)

Sources:
WAL96F0001  WALKER, R. (EIP ASSOCIATES) - FIELD SURVEY FORM FOR ACCIPITER COOPERII (NEST SITE) 1996-07-17
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 36011  
**Key Quad:** Elk Grove (3812143)  
**Occurrence Number:** 66  
**EO Index:** 31009  
**Element Code:** ABNKC12040  
**Occurrence Last Updated:** 1997-07-07

**Scientific Name:** *Accipiter cooperii*  
**Common Name:** Cooper's hawk

**Listing Status:**
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G5  
- **State:** S4

**General Habitat:**
WOODLAND, CHIEFLY OF OPEN, INTERRUPTED OR MARGINAL TYPE.

**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Good  
**Trend:** Unknown

**Last Date Observed:** 1997-05-28  
**Last Survey Date:** 1997-05-28  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**
SW OF THE INTERSECTION OF CARMENCITA ROAD AND LAGUNA CREEK, 4 MILES NNE OF ELK GROVE.

**Detailed Location:**
NEST TREE IS LOCATED APPROXIMATELY 50 FEET WEST OF CARMENCITA ROAD.

**Ecological:**
NEST TREE IS LOCATED IN A BAND OF VALLEY OAK WOODLAND ADJACENT TO LAGUNA CREEK, WITH AN UNDERSTORY OF ELYTRIGIA AND ANNUAL GRASSES. ADJACENT RIPARIAN WOODLAND FORMS A COMPLETE CANOPY, EXTENDING TO ABOUT 100 FEET FROM THE CHANNEL EDGE.

**Threats:**
**General:**  
2 ADULTS AND AT LEAST 1 JUVENILE OBSERVED AT NEST ON 28 MAY 1997.

**PLSS:** T07N, R06E, Sec. 16 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**UTM:** Zone-10 N4258575 E645661  
**Latitude/Longitude:** 38.46360 / -121.33042  
**Elevation (feet):** 65  
**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**
CUR97F0001 - CURRETTLE, J. & R. WALKER - FIELD SURVEY FORM FOR ACCIPITER COOPERII (NEST SITE) 1997-05-28
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Accipiter cooperii*

**Common Name:** Cooper's hawk

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S4

**General Habitat:**
WOODLAND, CHIEFLY OF OPEN, INTERRUPTED OR MARGINAL TYPE.

**Micro Habitat:**
NEST SITES MAINLY IN RIPARIAN GROWTHS OF DECIDUOUS TREES, AS IN CANYON BOTTOMS ON RIVER FLOOD-PLAINS; ALSO, LIVE OAKS.

**Last Date Observed:** 2005-08-XX

**Owner/Manager:** SRCSD-BUFFERLANDS

**Presence:** Presumed Extant

**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.

**Threats:**
POSSIBLE THREATS FROM ADJACENT TRAFFIC AND NEARBY CONSTRUCTION.

**General:**
ACTIVE NEST PRESENT ON 15 JUN 2005; 2 JUVENILES WERE OBSERVED AT THE SITE INTO EARLY AUG 2005 (2 FLEDGED).

**PLSS:** T07N, R05E, Sec. 21 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4255810 E635660

**Latitude/Longitude:** 38.44027 / -121.44555

**Elevation (feet):** 20

**County Summary:**
Sacramento

Florin (3812144)

**Sources:**
CON05F0001 CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR ACCIPITER COOPERII (NEST SITE) 2005-06-15
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<th><strong>Common Name:</strong></th>
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<tr>
<td><strong>Micro Habitat:</strong></td>
<td>NEST SITES MAINLY IN RIPARIAN GROWTHS OF DECIDUOUS TREES, AS IN CANYON BOTTOMS ON RIVER FLOOD-PLAINS; ALSO, LIVE OAKS.</td>
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<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
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**Location:**
VICINITY OF 21ST STREET AND H STREET, SACRAMENTO.

**Detailed Location:**

**Ecological:**

**Threats:**
THREATENED BY TREE TRIMMING AND NEST TREE REMOVAL DUE TO DUTCH ELM DISEASE.

**General:**
2007: PAIR NESTING IN AREA FOR LAST SEVERAL YRS. PAIR NESTED SUCCESSFULLY IN 2006, FLEDGING 2. FEMALE WAS OBS ADDING TO A WELL-DEVELOPED NEST ON 2 MAR 2007. 2008: NEST 1ST OBS ON 8 APR DURING COURTSHIP. PAIR OBS WITH 3 CHICKS ON 31 MAY.

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<td>23</td>
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**County Summary:**
Sacramento
Sacramento East (3812154)

**Sources:**
BEZ08U0001  BEZDECHECK, V. - EMAIL TO SACRAMENTO_BIRDS@YAHOOGROUPS.COM REGARDING NESTING COHA. 2008-05-31
KIN07F0001  KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR ACCIPITER COOPERII (NEST SITE) 2007-03-02
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 11220  
**Key Quad:** Sacramento West (3812155)  
**Occurrence Number:** 12  
**EO Index:** 7542  
**Element Code:** ABNK19070  
**Occurrence Last Updated:** 2013-04-05

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1994-08-11  
**Last Survey Date:** 1994-08-11  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
SACRAMENTO RIVER, RM-54.20(L), ON THE SOUTH EDGE OF CHICORY BEND, 0.3 MILES WEST OF I-5 AT SEAMAS AVE, SACRAMENTO.

**Detailed Location:**  
TERRITORY #SA009 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE.

**Ecological:**  
NEST TREES WERE COTTONWOODS IN DENSE COTTONWOOD-DOMINATED RIPARIAN STRIP ALONG RIVERBANK. NEAREST FORAGING HABITAT CONSISTED OF WHEAT FIELDS AND FALLOW FIELDS ON THE WEST SIDE OF THE RIVER.

**Threats:**  
DEVELOPMENT IS ENCROACHING ON FORAGING HABITAT ACROSS THE RIVER FROM SITE.

**General:**  

**PLSS:**  
T08N, R04E, Sec. 22 (M)  
**Accuracy:** 1/10 mile  
**Area (acres):** 0

**UTM:**  
Zone-10 N4265174 E628405  
**Latitude/Longitude:** 38.52570 / -121.52693  
**Elevation (feet):** 10

**County Summary:**  
Sacramento, Yolo  
Sacramento West (3812155)

**Sources:**

- DFG84U0003  
  CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX

- DFG92U0001  

- DFG94U0003  

- LEV90F0006  
  LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX

- LEV91F0005  
  LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX

- MAI90F0001  
  MAIER, L. - FIELD SURVEY FORM FOR 12 BUTEO SWAINSONI NEST SITES ALONG THE SACRAMENTO RIVER. 1990-XX-XX

- MAI90F0008  
  MAIER, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX

- MOR93F0010  
  MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 11221  
**EO Index:** 7546  
**Element Code:** ABNKC19070  
**Occurrence Last Updated:** 2013-01-23

**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1993-07-15  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Stable

**Presence:** Presumed Extant  
**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.

**Threats:**

**General:**  

**PLSS:** T07N, R04E, Sec. 10 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4259361 E629036  
**Latitude/Longitude:** 38.47324 / -121.52077  
**Elevation (feet):** 10

**County Summary:**  
Sacramento, Yolo  
Clarksburg (3812145)

**Sources:**

- DFG84U0003: CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
- EST88F0042: ESTEP, J. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1988-XX-XX
- LEV90F0011: LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-08-XX
- MAI90F0001: MAIER, L. - FIELD SURVEY FORM FOR 12 BUTEO SWAINSONI NEST SITES ALONG THE SACRAMENTO RIVER. 1990-XX-XX
- MAI90F0009: MAIER, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-05-XX
- MOR93F0007: MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
## Occurrence Report

California Department of Fish and Wildlife  
California Natural Diversity Database

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### Scientific Name: Buteo swainsoni

### Common Name: Swainson's hawk

### Listing Status:

- **Federal:** None  
- **State:** Threatened

### CNDDB Element Ranks:

- **Global:** G5  
- **State:** S3

### General Habitat:

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat:

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed:

1994-XX-XX

### Last Survey Date:

1994-XX-XX

### Owner/Manager:

PVT

### Presence:

Presumed Extant

### Location:

DEER CREEK, AT THE INTERSECTION OF WILTON ROAD, 0.5 MILE NW OF COSUMNES RIVER.

### Detailed Location:

MAPPED TO PROVIDED MAP AND COORDINATES. CDFW SWAINSON'S HAWK DATABASE TERRITORY #SA013.

### Ecological:

RIPARIAN AREA SURROUNDED BY AGRICULTURAL CROPLAND AND GRAZING PASTURES.

### Threats:

POSSIBLE THREAT FROM SURROUNDING DEVELOPMENT OF SMALL RANCHETTES.

### General:


### PLSS:

- **T07N, R06E, Sec. 35 (M)**  
- **Zone-10 N4253836 E649572**  
- **Latitude/Longitude:** 38.42027 / -121.28662  
- **PLSS:**  
- **Area (acres):** 0

### UTM:

- **Accuracy:** 80 meters  
- **Latitude/Longitude:** 38.42027 / -121.28662  
- **Elevation (feet):** 60

### County Summary:

Sacramento  
Elk Grove (3812143)

### Sources:

- DFG84U0003  
  CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX  

- DFG94U0003  

- ROS94F0001  
  ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1994-XX-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 11038  
**EO Index:** 27935  
**Key Quad:** Taylor Monument (3812165)  
**Element Code:** ABNKC19070  
**Occurrence Number:** 132  
**Occurrence Last Updated:** 2013-03-22

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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**Last Date Observed:** 2003-07-11  
**Last Survey Date:** 2003-07-11  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
SACRAMENTO RIVER, FROM R74.8 TO RM75.6, ABOUT 0.75 MI N OF ELVERTA ROAD AT GARDEN HWY, NW OF SACRAMENTO.

**Detailed Location:**  
3 NESTING SITES, FROM S TO N: 1) TERRITORY #SA091 & PART OF SA014 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE; ACTIVE NESTS DETECTED 1983-1993, 2) CDFW NEST RECORD FROM 2003, 3) 1991/1992 NESTS RECORDED AT #SA014 IN CDFW DATABASE.

**Ecological:**  
NESTS WERE IN COTTONWOODS WITHIN A DENSE RIPARIAN STRIP; SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURE (TOMATOES, WHEAT, RICE, WALNUTS, ROW CROPS IN 1991).

**Threats:**


**PLSS:**  
T10N, R03E, Sec. 12 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 92

**UTM:**  
Zone-10 N4287612 E621400  
**Latitude/Longitude:** 38.72884 / -121.60335  
**Elevation (feet):** 20

**County Summary:**  
Sacramento, Sutter, Yolo  
Taylor Monument (3812165)

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**Sources:**

- BELL84F0005  
  BELL, B. - SA FIELD SURVEY FORM FOR BUTEO SWAINSONI. 1984-XX-XX
- DFG05U0001  
- DFG84U0003  
  CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
- DFG92U0001  
- DFG94U0003  
- LEV91F0023  
  LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- MOR93F0022  
  MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15

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**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1993-XX-XX  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
SACRAMENTO RIVER, RM73 - 73.4, IN THE VICINITY OF ELKHORN PUMP STATION, NW OF THE SACRAMENTO INTERNATIONAL AIRPORT.

**Detailed Location:**  
TERRITORIES #SA015 (PART-SEE ALSO EO#513), SA090, & SA029/YO173 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE.

**Ecological:**  
1981-1991: PAIR ALTERNATED BETWEEN 2 NEST SITES ON OPPOSITE SIDES OF THE RIVER AT RM 73.1L & 73.4R; NESTS IN COTTONWOODS, SURROUNDED BY AGRICULTURE (WALNUTS, ALFALFA, TOMATOES, PEARS).

**Threats:**  
THREATENED BY HIGH DISTURBANCE FACTOR, INCLUDING HEAVY TRUCK TRAFFIC, RECREATIONAL ACTIVITY, AND BOATING.

**General:**  

**PLSS:** T10N, R03E, Sec. 23 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4285148 E620196  
**Latitude/Longitude:** 38.70681 / -121.61763  
**Elevation (feet):** 25

**County Summary:** Sacramento, Yolo  
**Quad Summary:** Taylor Monument (3812165)

**Sources:**  
DFG84U0003 - CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX  
LEV91F0022 - LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
## Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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### Scientific Name
*Buteo swainsoni*

### Common Name
Swainson's hawk

### Listing Status
- **Federal:** None
- **State:** Threatened

### CNDDDB Element Ranks
- **Global:** G5
- **State:** S3

### General Habitat
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed
1993-07-15

### Last Survey Date
1993-07-15

### Owner/Manager
PVT

### Presence
Presumed Extant

### Location
SACRAMENTO RIVER, RM 61.5(R), JUST NORTH OF GOLDEN STATE MIDDLE SCHOOL & RIVERBANK RD, WEST SACRAMENTO.

### Detailed Location
TERRITORY #YO043 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO PROVIDED MAP AND COORDINATES.

### Ecological
NEST TREE IS A MEDIUM-SIZED COTTONWOOD, LOCATED 30 FEET FROM THE RIVER; SURROUNDING FORAGING HABITAT CONSISTED OF GRASSY/WEEDY FIELDS.

### Threats
#### General:

#### PLSS:
- **T09N, R04E, Sec. 27 (M)**

#### Accuracy:
- **Area (acres):** 0

#### UTM:
- **Zone-10 N4273810 E627938**

#### Latitude/Longitude:
- 38.60358 / -121.53071

#### Elevation (feet):
- 25

### Sources:
- CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
- EIP ASSOCIATES & SACRAMENTO AREA FLOOD CONTROL AGENCY - EXCERPT FROM DRAFT SWAINSON'S HAWK AND GIANT GARTER SNAKE HABITAT CONSERVATION PLAN. 1992-XX-XX
- LEV90F0008 LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
- LEV91F0007 LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
- WIL90F0012 WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-04-26
- WIL90F0013 WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-04-26
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

| Map Index Number: | 10976  
|-------------------|--------  
| Key Quad: Grays Bend (3812166)  
| Occurrence Number: | 152  
| Scientific Name: | Buteo swainsoni  
| Listing Status: Federal | None  
| State | Threatened  
| CNDDB Element Ranks: Global | G5  
| State | S3  
| General Habitat: BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.  
| Micro Habitat: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.  
| Last Date Observed: | 1994-07-21  
| Last Survey Date: | 1994-07-21  
| Owner/Manager: | PVT  
| Presence: Presumed Extant  
| Location: SACRAMENTO RIVER FROM RM72.1 TO RM72.6, N OF GARDEN HWY AT W ELKHORN BLVD & 2 MI W OF SACRAMENTO INTERNATIONAL AIRPORT.  
| Detailed Location: MAPPED TO VICINITY OF TERRITORIES #SA089 AND YO/YO172 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE; EXACT NEST TREE LOCATIONS NOT KNOWN, GIVEN LOCATIONS RM72.1(L) AND RM72.5-72.6(R), RESPECTIVELY.  
| PLSS: T10N, R03E, Sec. 27 (M)  
| UTM: Zone-10 N4283776 E618994  
| County Summary: Sacramento, Yolo  
| Sources:  
| DFG84U0003 CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON’S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX  
| LEV91F0028 LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX  
| LEV91F0029 LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX  

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### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

| Map Index Number: | 11033 |
| Key Quad: | Taylor Monument (3812165) |
| Occurrence Number: | 155 |
| EO Index: | 27142 |
| Element Code: | ABNKC19070 |
| Occurrence Last Updated: | 2013-12-13 |

### Scientific Name

**Buteo swainsoni**

### Common Name

Swainson's hawk

### Listing Status

- **Federal:** None  
- **State:** Threatened

### CNDDB Element Ranks

- **Global:** G5  
- **State:** S3

### General Habitat

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed

2007-XX-XX

### Last Survey Date

2007-XX-XX

### Owner/Manager

PVT

### Presence

Presumed Extant

### Location

ALONG SACRAMENTO RIVER, ABOUT 0.6 MILES EAST OF CO RD 124 AT RD 122 AND 1.6 MILES SSE OF THE I-5 BRIDGE.

### Detailed Location

VICINITY OF TERRITORIES YO168 & SA030 (PART- SEE ALSO EO#2167) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE, AT RM68.7-68.9R. MAPPED TO 1984 DETECTION LOCATION (E SIDE RIVER) & SITES YO-106 & YO-107 FROM ESTEP'S 2008 REPORT (W SIDE).

### Ecological

NESTS IN RIPARIAN HABITAT. 2007 NESTS IN RIPARIAN COTTONWOODS SURROUNDED BY IRRIGATED CROPLAND.

### Threats


### General


### PLSS

- **T09N, R03E, Sec. 12 (M)**

### UTM

- **Zone-10 N4279533 E621299**

### County Summary

Sacramento, Yolo

Taylor Monument (3812165)

### Sources

- **BEL84F0004**  
  BELL, B. - SA FIELD SURVEY FORM FOR BUTEO SWAINSONI. 1984-XX-XX

- **DFG84U0003**  
  CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX

- **DFG92U0001**  

- **DFG94U0003**  

- **EST08R0001**  
  ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX

- **MOR93F0018**  
  MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15

- **WIL90F0001**  
  WILKINSON, C. (U.S. FISH AND WILDLIFE SERVICE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-04-26
Buteo swainsoni

Last Date Observed: 2003-05-15

Location:
SOUTH SIDE OF HOOD FRANKLIN RD, JUST WEST OF I-5 OFFRAMP, ABOUT 1.5 MILES W OF FRANKLIN.

Detailed Location:

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.

Threats:
General:

PLSS: T06N, R04E, Sec. 13 (M)

Accuracy: 80 meters

Area (acres): 0

County Summary:
Sacramento

Brucville (3812134), Florin (3812144)

Sources:

DFG05U0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - ACCESS DATABASE & EXCEL TABLE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004, 2005-XX-XX

DFG84U0003 CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX


SCH92F0060 SCHNEIDER ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1992-07-06
**Occurrence Report**

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1994-XX-XX  
**Last Survey Date:** 1994-XX-XX  
**Owner/Manager:** TNC-COSUMNES RIVER PRESERVE  
**Presence:** Presumed Extant

**Location:**  
COSUMNES RIVER, RM 13.4(R), 2 MILES EAST OF THE INTERSECTION OF GRANT LINE ROAD & HWY 99, COSUMNES RIVER PRESERVE.

**Detailed Location:**  
MAPPED TO PROVIDED MAP AND COORDINATES. CDFW SWAINSON'S HAWK DATABASE TERRITORY #SA025.

**Ecological:**  
1987 NEST IN COTTONWOOD. RIPARIAN AREA SURROUNDED BY AGRICULTURAL CROPLAND AND GRAZING PASTURES.

**Threats:**  
1 ADULT OBSERVED DIVING ON TURKEY VULTURE, BUT NO NEST FOUND IN 1982. NO SWHA OR NEST OBS IN 1984. 1 ADULT OBS IN 1985 & 1986. NEST WITH PAIR & 1 YOUNG OBS IN 1987. ACTIVE NEST OBS DURING A SUMMER 1994 SURVEY OF COSUMNES RIVER AREA.

**PLSS:**  
T06N, R06E, Sec. 16 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:**  
Zone-10 N4249300 E646923  
**Latitude/Longitude:** 38.37985 / -121.31790  
**Elevation (feet):** 45

**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Sources:**
- DFG84U0003: CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
- ROS94F0001: ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1994-XX-XX
Map Index Number: 11655  
EO Index: 2589  

Key Quad: Elk Grove (3812143)  
Occurrence Number: 184  
Occurrence Last Updated: 1999-10-07  

Scientific Name: *Buteo swainsoni*  
Common Name: Swainson's hawk  

Listing Status:  
Federal: None  
State: Threatened  

CNDDDB Element Ranks:  
Global: G5  
State: S3  

General Habitat:  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.  

Micro Habitat:  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.  

Last Date Observed: 1995-06-13  
Last Survey Date: 1995-06-13  
Owner/Manager: PVT  

Presence: Presumed Extant  

Location: NORTH BANK OF COSUMNES RIVER, AT RM-14.9, ESE OF ELK GROVE.  

Detailed Location: LOCATED ~0.25 MILE UPSTREAM FROM DFG COSUMNES RIVER CONSERVATION EASEMENT.  

Ecological:  
NEST TREE IS A VALLEY OAK; HABITAT CONSISTS OF RIPARIAN SURROUNDED BY ROW CROPS.  

Threats:  
General:  
DFG SWHA #SA038. 1 DARK, 1 MEDIUM PHASE OBSERVED SOARING IN 1984; NO NEST FOUND. 2 ADULTS/3 JUVENILES OBSERVED AT THE NEST IN 1987. 2 CHICKS OBSERVED IN THE NEST ON 13 JUNE 1995.  

PLSS:  
T06N, R06E, Sec. 10 (M)  
UTM: Zone-10 N4249698 E647701  

Accuracy: 80 meters  
Latitude/Longitude: 38.38330 / -121.30892  
Area (acres): 0  
Elevation (feet): 60  

County Summary:  
Sacramento  
Elk Grove (3812143)  

Sources:  
DGF84U0003  
CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX  
DGF94U0003  
ROSS95F0002  
ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1995-06-13
# Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

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<td>State: Threatened</td>
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| CNDDDB Element Ranks: | Global: G5  
|                  | State: S3 |

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1984-05-22  
**Last Survey Date:** 1985-05-24  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant  
**Location:** 0.25 MILE SE OF THE INTERSECTION OF DAVIS AND WALMORT ROADS.

**Detailed Location:**  
HABITAT CONSISTS OF RIPARIAN SURROUNDED BY AGRICULTURAL FIELDS.

**Ecological:**  
HABITAT CONSISTS OF RIPARIAN SURROUNDED BY AGRICULTURAL FIELDS.

**Threats:**  
**General:**  
DFG SWHA #SA036. 1 LIGHT AND 1 DARK PHASE OBSERVED SOARING; NO NEST FOUND, BUT NESTING PRESUMED. SITE CHECKED ON 24 MAY 1985, BUT NO NEST AND NO BIRDS WERE OBSERVED.

**PLSS:** T06N, R07E, Sec. 18 (M)  
**UTM:** Zone-10 N4248971 E652138

**County Summary:** Sacramento  
**Quad Summary:** Galt (3812133), Elk Grove (3812143)

**Accuracy:** 1/5 mile  
**Area (acres):** 0  
**Latitude/Longitude:** 38.37601 / -121.25829  
**Elevation (feet):** 70

**Sources:**  
DFG84U0003 CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX

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<th><strong>Common Name:</strong></th>
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<td>USFWS_BCC-Birds of Conservation Concern</td>
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<th><strong>General Habitat:</strong></th>
<th>BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, &amp; AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.</th>
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<tr>
<td><strong>Micro Habitat:</strong></td>
<td>REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.</td>
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<tr>
<th><strong>Location:</strong></th>
<th>BABEL SLOUGH, FROM CONFLUENCE WITH SACAMENTO RIVER SW ABOUT 0.9 MILES.</th>
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<tbody>
<tr>
<td><strong>Detailed Location:</strong></td>
<td>1984-94: 3 TERRITORIES FROM CDFW DATABASE OF SWHA OBSERVATIONS: #YO061 AT RM49.5; #YO200 AT RM49.6, &amp; YO201 (SEE ALSO OCC#633), AT RM49.8. 2005 OBS ON S SIDE BABEL SLOUGH.</td>
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<tr>
<td><strong>Ecological:</strong></td>
<td>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.</td>
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<tr>
<td><strong>Threats:</strong></td>
<td>POSSIBLE DISTURBANCE FROM RECREATION AT NEARBY MARINA ON RIVER. POTENTIAL HOUSING DEVELOPMENT (2006).</td>
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<td>DFG84U0003  CALIFORNIA DEPARTMENT OF FISH &amp; GAME - SWAINSON’S HAWK NEST RECORDS FROM DFG NONGAME BIRDS &amp; MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX</td>
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<td>EST08R0001  ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON’S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX</td>
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<td>EST88F0043  ESTEP, J. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1988-XX-XX</td>
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<td>HAR91F0013  HARRISON, P. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1991-08-20</td>
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<td>LEV90F0013  LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX</td>
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<td>LEV90F0014  LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-08-XX</td>
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<td>LEV91F0011  LEVY, C. &amp; C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX</td>
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<td>LEV91F0012  LEVY, C. &amp; C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX</td>
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<td>LEV91F0013  LEVY, C. &amp; C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX</td>
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<td>RES05F0043  RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-08-18</td>
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<td>RES05F0044  RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-08-18</td>
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<td>RES05F0122  RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-08-18</td>
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<td>TWE06F0002  TWEEDY, C. &amp; P. STONE (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2006-06-15</td>
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<td><strong>Listing Status:</strong></td>
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<td><strong>General Habitat:</strong></td>
<td>BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, &amp; AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.</td>
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<tr>
<td><strong>Micro Habitat:</strong></td>
<td>REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.</td>
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<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
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<td><strong>Location:</strong></td>
<td>EAST SIDE OF SACRAMENTO RIVER, ABOUT 0.8 MI SW OF I-5 AT MORRISON CREEK &amp; 1.7 MI NNE OF SCRIBNER RD AT HWY 160.</td>
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<td><strong>Detailed Location:</strong></td>
<td>TERRITORY #SA023 FROM CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS. MAPPED TO COORDINATES FROM CDFW NEST RECORDS DATABASE, 2000-2004.</td>
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<tr>
<td><strong>Ecological:</strong></td>
<td>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.</td>
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<td><strong>Threats:</strong></td>
<td>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.</td>
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**Sources:**

- DFG84U00003 CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk  
**Listing Status:**  
- Federal: None  
- State: Threatened  
**CNDDB Element Ranks:**  
- Global: G5  
- State: S3  
**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.  
**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.  

**Last Date Observed:** 2009-07-XX  
**Last Survey Date:** 2009-07-XX  
**Owner/Manager:** SRCSD-BUFFERLANDS  
**Presence:** Presumed Extant  
**Location:** BETWEEN DWIGHT RD & SIMS RD ON EAST SIDE OF RAILROAD TRACKS, SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS.  
**Detailed Location:**  
**Ecological:**  
1979: SURROUNDING HABITAT WAS AGRICULTURAL LAND. 2009: NEST IN GOODDING'S WILLOW.  
**Threats:**  
**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.  
**PLSS:** T07N, R05E, Sec. 29 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**UTM:** Zone-10 N4255323 E634663  
**Latitude/Longitude:** 38.43603 / -121.45706  
**Elevation (feet):** 20  
**Counties:** Sacramento  
**Quad Summary:** Florin (3812144)  

**Sources:**  
CON09U00001 CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNS, AND A GREAT GRAY OWL 2009-08-07  
DFG84U0003 CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX  
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11652
EO Index: 27109
Key Quad: Elk Grove (3812143)
Element Code: ABNKC19070
Occurrence Number: 190
Occurrence Last Updated: 2013-04-12

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

Rare Plant Rank: BLM_S-Sensitive
Other Lists: IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

CNDDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 1987-XX-XX
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1987-XX-XX
Occurrence Rank: Unknown

Owner/Manager: PVT
Trend: Unknown

Presence: Presumed Extant

Location:
ALONG DEER CREEK, ABOUT 0.5 MILES SW OF THE WILTON ROAD CROSSING AND 0.9 MILES SE OF GRANT LINE RD AT BOND RD.

Detailed Location:
TERRITORY #SA024 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE.

Ecological:
NEST TREE WAS AN OAK SURROUNDED BY RIPARIAN HABITAT, AGRICULTURAL FIELDS, AND PASTURE.

Threats:
General:
2 SWAINSON'S HAWKS OBSERVED IN 1982, NO NEST FOUND. 1 ADULT OBSERVED ON NEST IN 1984. 1 ADULT OBSERVED IN 1985. NESTING PAIR OBSERVED IN 1986, SUCCESS UNKNOWN. NESTING PAIR WITH 1 YOUNG OBSERVED IN 1987.

PLSS: T07N, R06E, Sec. 35 (M)
Accuracy: 1/5 mile
Area (acres): 0

UTM: Zone-10 N4253259 E648905
Latitude/Longitude: 38.41518 / -121.29438
Elevation (feet): 60

County Summary:
Sacramento
Elk Grove (3812143)

Sources:
DFG84U0003 CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1979-06-29  
**Last Survey Date:** 2000-07-30

**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
EAST OF GRANT LINE ROAD, ABOUT 1 MILE SSW OF THE GRANT LINE AT EAGLES NEST/SLOUGHHOUSE RD INTERSECTION, ELK GROVE.

**Detailed Location:**  
TERRITORY SA002 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. LOCATED ABOUT HALF-WAY BETWEEN CALVINE ROAD AND SLOUGHHOUSE ROAD.

**Ecological:**  
1979 NEST IN OAK; SURROUNDING HABITAT INCLUDED OAKS AND AGRICULTURE. SITE APPEARS TO BE SURROUNDED BY VINEYARDS IN 2012 AERIAL (PROBABLY SINCE 1998), POSSIBLY REDUCING IMMEDIATE FORAGING HABITAT.

**Threats:**  

**PLSS:** T07N, R07E, Sec. 18 (M)  
**Accuracy:** 1/5 mile

**UTM:** Zone-10 N4258031 E651822  
**Latitude/Longitude:** 38.45768 / -121.25995

**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Sources:**  
- DFG84U0003 - CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
- ROS00F0004 - ROSCOE, T. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2000-07-30
### Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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<td>Element Code: ABNK19070</td>
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<td>Occurrence Last Updated: 2012-12-21</td>
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**Scientific Name:** Buteo swainsoni

**Common Name:** Swainson's hawk

**Listing Status:**
- Federal: None
- State: Threatened

**CNDDB Element Ranks:**
- Global: G5
- State: S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1988-XX-XX

**Last Survey Date:** 1994-06-14

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
ALONG THE SACRAMENTO RIVER AT GARCIA BEND, RM 50.7R.

**Detailed Location:**
MAPPED TO TRS, UTMS, & STATED LOCATION FOR TERRITORY #SA033 IN CDFW DATABASE OF 1979-1994 SWAINSON'S HAWK OBSERVATIONS AT "SACRAMENTO RIVER RM 50.7R - GARCIA BEND."

**Ecological:**
NEST(S) IN COTTONWOODS. SURROUNDING HABITAT INCLUDED RIPARIAN, SPARSE RIPARIAN, RESIDENTIAL, & AGRICULTURAL.

**Threats:**

**PLSS:** T08N, R04E, Sec. 32 (M)  

**Accuracy:** 1/5 mile  

**Area (acres):** 0

**UTM:** Zone-10 N4261794 E625634  

**Latitude/Longitude:** 38.49565 / -121.55932  

**Elevation (feet):** 5

**County Summary:**
Sacramento, Yolo  
Clarksburg (3812145)

**Sources:**
- DFG84U0003  
  CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
- DFG92U0001  
- DFG94U0003  
Map Index Number: 11099
EO Index: 7536

Key Quad: Taylor Monument (3812165)
Element Code: ABNKC19070

Occurrence Number: 194
Occurrence Last Updated: 2013-03-25

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 1994-07-21

Occurrence Type: Natural/Native occurrence

Occurrence Last Updated: 2013-03-25

Occurrence Rank: Good
Trend: Stable

Location:
SACRAMENTO RIVER, RM-66.80(L), JUST WEST OF POWERLINE ROAD INTERSECTION WITH GARDEN HIGHWAY, SACRAMENTO.

Detailed Location:
TERRITORY #SA031 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE.

Ecological:
1991 NEST IN TALL COTTONWOOD 20 FEET FROM THE RIVER, WITHIN RIPARIAN HABITAT; SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURE (WHEAT, TOMATOES, CORN, ORCHARDS). 1994 NEST IN COTTONWOOD.

Threats:

General:

PLSS: T09N, R04E, Sec. 07 (M)
Accuracy: 1/10 mile
Area (acres): 0

UTM: Zone-10 N4278826 E623723
Latitude/Longitude: 38.64936 / -121.57821
Elevation (feet): 20

County Summary:
Sacramento, Yolo
Taylor Monument (3812165)

Sources:
DFG84U0003 CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
LEV91F0017 LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
MOR93F0017 MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
WIL90F0002 WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-04-20
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 11145  
**Key Quad:** Taylor Monument (3812165)  
**Occurrence Number:** 195

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

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**Listing Status:**  
**Federal:** None  
**State:** Threatened

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**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S3

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**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

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**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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**Last Date Observed:** 1993-07-15  
**Last Survey Date:** 1993-07-15

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**Owner/Manager:** PVT  
**Presence:** Presumed Extant

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**Location:**  
EAST SIDE OF THE SACRAMENTO RIVER FROM RM65.05 TO RM65.3, AROUND GARDEN HIGHWAY AT RADIO ROAD, SACRAMENTO.

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**Detailed Location:**  
VICINITY OF TERRITORY #SA046 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. NEST TREES WERE ALONG RIVER, EXCEPT FOR 1 NEST IN 1992, WHICH WAS IN FIELDS TO THE EAST.

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**Ecological:**  
RIVERSIDE NESTS MOSTLY IN COTTONWOODS (USED OAK IN 1990) IN DENSE RIPARIAN STRIP; NEAR RESIDENCES, SURROUNDED BY AGRICULTURE (SUGAR BEETS, WHEAT, TOMATOES IN 1990). EAST NEST IN 1992 WAS IN A GROUP OF OAKS SURROUNDED BY AGRICULTURAL FIELDS.

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**Threats:**  
MAIN THREAT IS HUMAN DISTURBANCE; POTENTIAL THREAT FROM THE SACRAMENTO URBAN AREA LEVEE RECONSTRUCTION PROJECT (1990).

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**General:**  

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**PLSS:** T09N, R04E, Sec. 16 (M)  
**UTM:** Zone-10 N4277007 E625582

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**County Summary:**  
Sacramento, Yolo

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**Sources:**  
DFG84U0003 - CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX  
LEV90F0003 - LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-08-XX  
LEV91F0014 - LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX  
MOR93F0015 - MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15  
SOG89F0007 - SOGGE, M.K. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1989-06-28  
WIL90F0003 - WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-05-09
Map Index Number: 11150
Key Quad: Sacramento West (3812155)
Occurrence Number: 196

Scientific Name: *Buteo swainsoni*
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

Scientific Name: *Buteo swainsoni*
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDDB Element Ranks: Global: G5
State: S3

Locality: BOTH SIDES OF THE SACRAMENTO RIVER, RM63.3 - 63.5, AROUND THE CO RD 126/OLD RIVER RD JUNCTION, WEST OF SACRAMENTO.

Ecological:

Threats:
2000 SURVEYORS NOTED THREAT FROM ENCROACHMENT BY RESIDENTIAL DEVELOPMENT ALONG RIVERBANK.

General:

PLSS:
T09N, R04E, Sec. 29 (M)

UTM:
Zone-10 N4274347 E625301

Accuracy: specific area
Area (acres): 10
Latitude/Longitude: 38.60879 / -121.56088
Elevation (feet): 20

County Summary:
Sacramento, Yolo

Location:
VICINITY OF TERRITORY #SA032 FROM CDFW SWHA DATABASE (AT RM63.6). E SIDE OF RIVER: TERRITORY "SA" (AT RM-63.3). WEST SIDE OF RIVER: MAPPED TO SITE YO-77 FROM ESTEP'S 2008 REPORT.

Detailed Location:
VICINITY OF TERRITORY #SA032 FROM CDFW SWHA DATABASE (AT RM63.6). E SIDE OF RIVER: TERRITORY "SA" (AT RM-63.3). WEST SIDE OF RIVER: MAPPED TO SITE YO-77 FROM ESTEP'S 2008 REPORT.

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAINIELDS SUPPORTING RODENT POPULATIONS.

Occurrence Type: Natural/Native occurrence
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Unknown
Trend: Unknown

Occurrence Last Updated: 2013-06-14

Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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| Scientific Name: | Buteo swainsoni |  
| Common Name:     | Swainson's hawk |  
| Listing Status:  |  
| Federal:         | None |  
| State:           | Threatened |  
| Rare Plant Rank: |  
| Other Lists:     | BLM_S-Sensitive | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern |  

| CNDDDB Element Ranks: |  
| Global:               | G5 |  
| State:                | S3 |  

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

| Last Date Observed: | 1994-XX-XX |  
| Last Survey Date:  | 1994-XX-XX |  
| Owner/Manager:     | PVT |  
| Presence:          | Presumed Extant |  
| Location:          | SACRAMENTO RIVER, RM-70.1, 0.25 MILES SOUTH OF I-5, ALONG GARDEN HIGHWAY. |  
| Detailed Location: | TERRITORIES YO055 & "YO" (NO # ASSIGNED TO 1994 DETECTION) FROM CDFW DATABASE. |  
| Ecological:        | NEST TREE WAS A COTTONWOOD SURROUNDED BY GOOD RIPARIAN VEGETATION. |  
| Threats:           |  

| PLSS:       | T09N, R03E, Sec. 02 (M) | Accuracy: | 1/10 mile |  
| UTM:        | Zone-10 N4281003 E620121 | Latitude/Longitude: | 38.66947 / -121.61921 |  
| County Summary: | Sacramento | Quad Summary: | Taylor Monument (3812165) |  

| Sources:     |  
| DFG84U0003   | CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX |  

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Information Expires 3/1/2016
**Map Index Number:** 11233  
**Key Quad:** Clarksburg (3812145)  
**Occurrence Number:** 212  
**EO Index:** 27089  
**Element Code:** ABNKC19070  
**Occurrence Last Updated:** 2013-02-25

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-05-19  
**Last Survey Date:** 2009-05-19

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
CANAL FOLLOWING RR TRACKS ON E SIDE OF THE SACRAMENTO RIVER, ABOUT 0.9 MILES 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:**  

**Threats:**  
**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.

**PLSS:** T06N, R04E, Sec. 02 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 87

**UTM:** Zone-10 N4250963 E630281  
**Latitude/Longitude:** 38.39741 / -121.50806  
**Elevation (feet):** 10

**County Summary:** Sacramento  
Florin (3812144), Clarksburg (3812145)

**Sources:**
- **DFG84U0003** CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
- **DWR11D0001** CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11192
Key Quad: Clarksburg (3812145)
Occurrence Number: 218
Scientific Name: Buteo swainsoni
Common Name: Swainson’s hawk
Listing Status: Federal: None
State: Threatened
CNDDB Element Ranks: Global: G5
State: S3
General Habitat: BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.
Micro Habitat: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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 MILES 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.

Threats:

PLSS: T07N, R04E, Sec. 27 (M)
Accuracy: nonspecific area
Area (acres): 162
UTM: Zone-10 N 4255158 E 628277
Latitude/Longitude: 38.43549 / -121.53024
Elevation (feet): 10
County Summary: Clarksburg (3812145)

Sources:
DFG84U0003 CALIFORNIA DEPARTMENT OF FISH & GAME - SWAINSON'S HAWK NEST RECORDS FROM DFG NONGAME BIRDS & MAMMALS SECTION (WILDLIFE BRANCH); MISSING. 1984-10-XX
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
EST88F0041 ESTEP, J. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1988-XX-XX
### Scientific Name: Buteo swainsoni
### Common Name: Swainson's hawk

#### Listing Status:
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#### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

#### Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed: 1992-07-10
### Last Survey Date: 1992-07-10
### Presence: Presumed Extant

### Location:
ALONG DEER CREEK, ABOUT 1 MILE SE OF GRANT LINE ROAD AT ELK GROVE BLVD, SE OF ELK GROVE.

### Detailed Location:
TERRITORY #SA037 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. 1992 DETECTIONS IN VICINITY; UNKNOWN IF NEST(S) FOUND.

### Ecological:
SURROUNDING HABITAT WAS RIPARIAN, AGRICULTURAL FIELDS, PASTURE, GRASSLAND, AND URBAN DEVELOPMENT.

### Threats:
2 DARK PHASE ADULTS OBSERVED, BUT NO NEST FOUND IN 1984. 1 ADULT OBSERVED IN 1985. NO NESTS OR HAWKS SEEN IN 1986. 2 ADULTS & 1 JUVENILE OBSERVED AT NEST IN 1987. 2 DETECTIONS OF BREEDING PAIRS IN 1992; NEST OUTCOME UNKNOWN.

### PLSS: T06N, R06E, Sec. 03 (M)
### UTM: Zone-10 N4251257 E647364
### Presence: Presumed Extant

### Owner/Manager: PVT

### Trend: Unknown

### Presence: Presumed Extant

### Location:
ALONG DEER CREEK, ABOUT 1 MILE SE OF GRANT LINE ROAD AT ELK GROVE BLVD, SE OF ELK GROVE.

### Detailed Location:
TERRITORY #SA037 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. 1992 DETECTIONS IN VICINITY; UNKNOWN IF NEST(S) FOUND.

### Ecological:
SURROUNDING HABITAT WAS RIPARIAN, AGRICULTURAL FIELDS, PASTURE, GRASSLAND, AND URBAN DEVELOPMENT.

### Threats:
2 DARK PHASE ADULTS OBSERVED, BUT NO NEST FOUND IN 1984. 1 ADULT OBSERVED IN 1985. NO NESTS OR HAWKS SEEN IN 1986. 2 ADULTS & 1 JUVENILE OBSERVED AT NEST IN 1987. 2 DETECTIONS OF BREEDING PAIRS IN 1992; NEST OUTCOME UNKNOWN.

### PLSS: T06N, R06E, Sec. 03 (M)
### UTM: Zone-10 N4251257 E647364
### Presence: Presumed Extant

### Owner/Manager: PVT

### Trend: Unknown

### Presence: Presumed Extant

### Location:
ALONG DEER CREEK, ABOUT 1 MILE SE OF GRANT LINE ROAD AT ELK GROVE BLVD, SE OF ELK GROVE.

### Detailed Location:
TERRITORY #SA037 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. 1992 DETECTIONS IN VICINITY; UNKNOWN IF NEST(S) FOUND.

### Ecological:
SURROUNDING HABITAT WAS RIPARIAN, AGRICULTURAL FIELDS, PASTURE, GRASSLAND, AND URBAN DEVELOPMENT.

### Threats:
2 DARK PHASE ADULTS OBSERVED, BUT NO NEST FOUND IN 1984. 1 ADULT OBSERVED IN 1985. NO NESTS OR HAWKS SEEN IN 1986. 2 ADULTS & 1 JUVENILE OBSERVED AT NEST IN 1987. 2 DETECTIONS OF BREEDING PAIRS IN 1992; NEST OUTCOME UNKNOWN.
### Scientific Name: Buteo swainsoni

#### Listing Status:
- Federal: None
- State: Threatened

#### CNNDB Element Ranks:
- Global: G5
- State: S3

#### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

#### Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

#### Last Date Observed:
1992-XX-XX

#### Last Survey Date:
1992-XX-XX

#### Owner/Manager:
SAC COUNTY

#### Presence:
Presumed Extant

#### Location:
DISCOVERY PARK, ON THE SACRAMENTO RIVER AT RM-60.5(L), SACRAMENTO.

#### Detailed Location:
VICINITY OF TERRITORIES #SA016 (PART- SEE ALSO EO #635), “SA” (NO # ASSIGNED), AND YO215 FROM CDFW SWAINSON’S HAWK OBSERVATIONS DATABASE.

#### Ecological:
NEST TREES WERE COTTONWOODS. 1991 NEST IN A MEDIUM-SIZED COTTONWOOD, 40 FEET FROM THE RIVER; SURROUNDING FORAGING HABITAT CONSISTED OF GRASSY, WEEDY FIELDS (NO CROPS).

#### Threats:
POSSIBLE THREAT FROM DISTURBANCE ACROSS THE RIVER FROM MAJOR LAND DEVELOPMENT/CONSTRUCTION.

#### General:

#### PLSS:
T09N, R04E, Sec. 26 (M)

#### UTM:
Zone-10 N4273726 E629627

#### County Summary:
Sacramento

#### Quad Summary:
Sacramento West (3812155)

#### Sources:
- EIP92R0001: EIP ASSOCIATES & SACRAMENTO AREA FLOOD CONTROL AGENCY - EXCERPT FROM DRAFT SWAINSON'S HAWK AND GIANT GARTER SNAKE HABITAT CONSERVATION PLAN. 1992-XX-XX
- LEV90F0007: LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
- LEV91F0006: LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- VIN74R0001: VINCENITY, J.A. - A STUDY OF FACTORS AFFECTING NESTING RAPTOR POPULATIONS IN URBAN AREAS, SACRAMENTO COUNTY, CALIFORNIA. (WMB ADM RPT., NO.74-5) 1974-08-XX
- WIL90F0011: WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-05-17
## Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<td>1992-04-22</td>
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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1990-07-02  
**Last Survey Date:** 1990-07-02

**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**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.

**Threats:**  
THREATENED BY PROPOSED DEVELOPMENT.

**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.

**PLSS:** T07N, R05E, Sec. 35 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4252860 E639779  
**Latitude/Longitude:** 38.41306 / -121.39896  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
HAR90F0002  
HARVEY, D. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-07-02
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

**Map Index Number:** 21061  
**EO Index:** 7565  
**Element Code:** ABNKC19070  
**Occurrence Last Updated:** 2013-03-25

**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Key Quad:** Taylor Monument (3812165)  
**Occurrence Number:** 320

**Listed Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-XX-XX  
**Occurrence Rank:** Good

**Owner/Manager:** SAC COUNTY  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
SACRAMENTO RIVER, RM68.45(L), ABOUT 1.4 MILES WEST OF POWERLINE RD ALONG GARDEN HWY & ACROSS RIVER, NW OF SACRAMENTO.

**Detailed Location:**  
VICINITY OF TERRITORIES YO214 & SA068 FROM CDFW DATABASE. MOST DETECTIONS ON W SIDE OF RIVER. MAPPED TO SITE YO-105 FROM ESTEP'S 2007 REPORT (W SIDE POLYGON) AND 1990 DETECTION LOCATION FROM FIELD SURVEY FORM (E SIDE POLYGON).

**Ecological:**  

**Threats:**  
POTENTIALLY THREATENED BY THE SACRAMENTO AREA LEVEE RECONSTRUCTION PROJECT (1990).

**General:**  
2 NESTS IN 1990, ON BOTH SIDES OF RIVER; OUTCOMES UNKNOWN. PAIR HATCHED 2 CHICKS THAT DIED BEFORE FLEDGING IN 1991. ACTIVE NEST PRODUCED 0 YOUNG.1992. INACTIVE, 1993. NEST WITH 2 YOUNG OBSERVED DURING 2007 SURVEY; FLEDGING SUCCESS UNKNOWN.

**PLSS:** T09N, R03E, Sec. 12 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 22

**UTM:** Zone-10 N4278729 E621804  
**Latitude/Longitude:** 38.64875 / -121.60027  
**Elevation (feet):** 20

**County Summary:**  
Sacramento, Yolo  
Taylor Monument (3812165)

**SOURCES:**  
- EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX  
- LEV91F0018 LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX  
- WIL90F0004 WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-05-25
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 21062

**Key Quad:** Taylor Monument (3812165)

**Occurrence Number:** 321

**EO Index:** 7534

**Element Code:** ABNKC19070

**Occurrence Last Updated:** 2013-03-26

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<th>Scientific Name</th>
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<td>Buteo swainsoni</td>
<td>Swainson's hawk</td>
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</table>

**Listing Status:**

- Federal: None
- State: Threatened

**CNDDB Element Ranks:**

- Global: G5
- State: S3

**General Habitat:**

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2002-04-19

**Last Survey Date:** 2002-04-19

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**

SACRAMENTO RIVER, RM66.2(L), ABOUT 0.6 MILES SE OF GARDEN HWY AT POWER LINE RD AND 1 MILE NW OF KCRA RADIO/TV TOWERS.

**Detailed Location:**

TERRITORY #SA067 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. 1990 DETECTION WAS ON WEST SIDE OF RIVER. MAPPED TO COORDINATES FROM CDFW NEST RECORDS, 2000-2004.

**Ecological:**

1991 NEST TREE WAS A TALL COTTONWOOD WITHIN COTTONWOOD RIPARIAN HABITAT; SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURE (TOMATOES, WHEAT) AND FALLOW FIELDS.

**Threats:**

2 ADULTS OBSERVED SOARING IN 1990; PRESUMED NESTING. 3 HATCHLINGS PRODUCED IN 1991; DIED PRIOR TO FLEDGING. 2 ADULTS OBS AT NEST WITH 3 JUVENILES IN 1993. 2 FLEDGED IN 1994. ACTIVE NEST OBS ON 19 APR 2002, BUT NO SWHA SEEN AFTER 17 JUN.

**PLSS:**

T09N, R04E, Sec. 08 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4278509 E624730

**Latitude/Longitude:** 38.64636 / -121.56670

**Elevation (feet):** 20

**County Summary:**

Sacramento, Yolo

Taylor Monument (3812165)

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**Sources:**

- LEV91F0016 LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- MOR93F0016 MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
- WIL90F0005 WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-05-18
Map Index Number: 21063
Key Quad: Taylor Monument (3812165)
Occurrence Number: 322

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
  - Federal: None
  - State: Threatened

CNDDDB Element Ranks:
  - Global: G5
  - State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2007-XX-XX
Last Survey Date: 2007-XX-XX
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
SACRAMENTO RIVER, RM-65.8, ABOUT 2 MILES WSW OF THE DEL PASO ROAD INTERSECTION WITH I-5, SACRAMENTO.

Detailed Location:
3 NEST SITES. S SITE: TERRITORY #YO167 FROM CDFW DATABASE. NE SITE: MAPPED TO 1992 MAP. NW SITE: MAPPED TO COORDINATES GIVEN FOR SITE YO-104 IN ESTEP’S 2008 REPORT.

Ecological:
S SITE: NESTS IN TALL TO MEDIUM-SIZED OAKS 200-300’ FEET FROM THE RIVER, IN RIPARIAN HABITAT SURROUNDED BY AGRICULTURE (ROTATION OF 24 CROP TYPES). NE: NEST IN FREMONT COTTONWOOD. NW: NEST IN COTTONWOOD SURROUNDED BY IRRIGATED CROPS.

Threats:
1990 SURVEYOR CITED DISTURBANCE FROM VEHICLES & NEARBY RESIDENCES, SACRAMENTO URBAN AREA LEVEE RECONSTRUCTION PROJECT.

General:

PLSS:
- T09N, R04E, Sec. 08 (M)

UTM:
- Zone-10 N4278044 E624792

Accuracy: nonspecific area
Area (acres): 40
Latitude/Longitude: 38.64216 / -121.56607
Elevation (feet): 20

County Summary:
Sacramento, Yolo

Taylor Monument (3812165)

Sources:
- EST08R0001: ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON’S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
- LEV90F0016: LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-08-XX
- LEV91F0015: LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- WIL90F0006: WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-04-30
Map Index Number: 21064
EO Index: 7533
Key Quad: Taylor Monument (3812165)
Element Code: ABNKC19070
Occurrence Number: 323
Occurrence Last Updated: 2013-06-11

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Occurrence Type: Natural/Native occurrence
Occurrence Rank: Good
Trend: Unknown

Location:
SACRAMENTO RIVER, RM 69.8 TO 69.4, ABOUT 1 MI SE OF THE I-5 BRIDGE & 1.4 MILES SW OF I-5 AT AIRPORT BLVD, NEAR KIESEL.

Detailed Location:

Ecological:

Threats:
POTENTIALLY THREATENED BY THE SACRAMENTO URBAN AREA LEVEE PROJECT (1990). DISTURBANCE FROM BOATS, CARS.

PLSS: T09N, R03E, Sec. 02 (M)
Accuracy: nonspecific area
Area (acres): 56

UTM: Zone-10 N4280255 E620565
Latitude/Longitude: 38.66267 / -121.61424
Elevation (feet): 20

Sacramento, Yolo

Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch
Report Printed on Tuesday, September 15, 2015
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Information Expires 3/1/2016
### Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

#### Sources:

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<tr>
<td>ACO10F0001</td>
<td>ACORD, B. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-CALIFORNIA NATURAL DIVERSITY DATABASE) - FIELD SURVEY FORM FOR ARDEA HERODIAS &amp; ARDEA ALBA 2010-05-02</td>
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<td>EST08R0001</td>
<td>ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX</td>
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<td>LEV91F0019</td>
<td>LEVY, C. &amp; C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX</td>
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<td>LEV91F0020</td>
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<td>MOR93F0019</td>
<td>MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15</td>
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<td>MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15</td>
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<td>WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-05-18</td>
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<td>WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-04-30</td>
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**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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| EO Index: | 9026 |
| Element Code: | ABNKC19070 |
| Occurrence Last Updated: | 2013-03-26 |

| Scientific Name: | Buteo swainsoni |
| Common Name: | Swainson's hawk |

| Listing Status: | Federal: None  |
|                | State: Threatened |

| CNDDDB Element Ranks: | Global: G5  |
|                       | State: S3  |

| Rare Plant Rank: | BLM_S-Sensitive  |
| Other Lists: | IUCN_LC-Least Concern  |
|                | USFWS_BCC-Birds of Conservation Concern |

### General Habitat:

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat:

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

| Last Date Observed: | 1992-XX-XX |
| Last Survey Date: | 1993-XX-XX |
| Owner/Manager: | UNKNOWN |
| Presence: | Presumed Extant |

**Location:**

SACRAMENTO RIVER, RM-64.5(L), 0.3 MI S OF SAN JUAN RD ALONG GARDEN HIGHWAY, 2.5 MILES W OF THE I-5/I-80 JUNCTION.

**Detailed Location:**

TERRITORY #SA066 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE.

**Ecological:**


**Threats:**


**General:**


| PLSS: | T09N, R04E, Sec. 20 (M) |
| UTM: | Zone-10 N4275884 E625269 |
| Accuracy: | 1/10 mile |
| Area (acres): | 0 |
| Latitude/Longitude: | 38.62264 / -121.56097 |
| Elevation (feet): | 30 |

**County Summary:**

Sacramento, Yolo  
Sacramento West (3812155)

**Sources:**

- DFG92U0001  
- DFG94U0003  
- LEV90F0009  
  LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
- LEV91F0008  
  LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- WIL90F0002  
  WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-04-20
- WIL90F0010  
  WILKINSON, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-04-19
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 23631
**EO Index:** 23766
**Key Quad:** Taylor Monument (3812165)
**Element Code:** ABNKC19070
**Occurrence Number:** 392
**Occurrence Last Updated:** 1999-10-26

**Scientific Name:** Buteo swainsoni
**Common Name:** Swainson's hawk

**Listing Status:**
- Federal: None
- State: Threatened

**CNDDDB Element Ranks:**
- Global: G5
- State: S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Last Date Observed:** 1994-06-12

**Location:** NORTH END OF FISHERMANS LAKE, WHERE IT INTERSECTS DEL PASO ROAD, 1 MILE WEST OF EL CENTRO ROAD, NORTH OF SACRAMENTO.

**Detailed Location:**
TERRITORY #SA092 FROM CDFW DATABASE. NEST WAS LOCATED ON THE EAST SIDE OF FISHERMANS LAKE, 50 YARDS FROM DEL PASO ROAD, IN A 45-FT COTTONWOOD. SEVERAL ALTERNATE NESTS LOCATED IN THE AREA.

**Ecological:**
NEST TREE WAS A COTTONWOOD. HABITAT CONSISTED OF COTTONWOOD RIPARIAN FOREST, ADJACENT TO A DRAINAGE CANAL, SURROUNDED BY AGRICULTURAL FIELDS. THIS SITE ALSO SUPPORTED GIANT GARTER SNAKE.

**Threats:**
2 ADULTS OBSERVED WITH 3 NESTLINGS IN 1993; WHICH WAS THEIR FOURTH CONSECUTIVE YEAR OF NESTING AT THIS SITE. 1 YOUNG FLEDGED IN 1994.

**PLSS:** T09N, R04E, Sec. 09 (M)
**Accuracy:** 80 meters
**Area (acres):** 0

**UTM:** Zone-10 N4279319 E625584
**Latitude/Longitude:** 38.65354 / -121.55674
**Elevation (feet):** 15

**Sources:**
- RAI92F0001 RAINIE, R. & E. RAINIE - FIELD SURVEY FORM FOR Buteo swainsoni (NEST SITE) 1992-06-26
- YOR93F0005 YORK, R. & D. ANDERSON (CALIFORNIA ENERGY COMMISSION) - FIELD SURVEY FORM FOR Buteo swainsoni (NEST SITE) WITH INCIDENTAL SIGHTING OF GIANT GARTER SNAKE. 1993-06-02
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

| Map Index Number: | 21418 |
| Key Quad: | Taylor Monument (3812165) |
| Occurrence Number: | 393 |
| EO Index: | 19481 |
| Element Code: | ABNKC19070 |
| Occurrence Last Updated: | 1992-06-29 |

**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1992-06-XX

**Location:**
SOUTH END OF FISHERMANS LAKE, 1 MILE SW OF THE INTERSECTION OF EL CENTRO ROAD & DEL PASO ROAD, 7 MI NORTH OF SACRAMENTO.

**Detailed Location:**
NEST WAS LOCATED IN A 35-FT COTTONWOOD, ON THE EAST SIDE OF FISHERMANS LAKE.

**Ecological:**
NEST TREE WAS A *POPULUS FREMONTII*, ADJACENT TO A DRAINAGE CANAL; SURROUNDING HABITAT WAS AGRICULTURE.

**Threats:**
TWO ADULTS OBSERVED IN 1992; FIRST YEAR OF NESTING AT THIS LOCATION.

**Definitive Location:**
NEST WAS LOCATED IN A 35-FT COTTONWOOD, ON THE EAST SIDE OF FISHERMANS LAKE.

**Other Lists:**
- BLM_S-Sensitive
- IUCN_LC-Least Concern
- USFWS_BCC-Birds of Conservation Concern

**PLSS:**
- **T09N, R04E, Sec. 09 (M)**
  - **Accuracy:** 80 meters
  - **Area (acres):** 0

**UTM:**
- **Zone-10 N4278205 E625997**
  - **Latitude/Longitude:** 38.64345 / -121.55220
  - **Elevation (feet):** 15

**County Summary:**
Sacramento

**Quad Summary:**
Taylor Monument (3812165)

**Sources:**
RAI92F0002 RAINÉ, R. & E. RAINÉ - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1992-06-XX
### Occurrence Report

**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

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<th>Federal: None</th>
<th>State: Threatened</th>
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<td>Global: G5</td>
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</table>

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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<tr>
<th>Last Date Observed:</th>
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<tr>
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<td>1992-07-16</td>
</tr>
<tr>
<td>Owner/Manager:</td>
<td>PVT-BEACH LAKE PROPERTIES</td>
</tr>
<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
</tr>
<tr>
<td>Location:</td>
<td>EAST BANK OF SACRAMENTO RIVER, 1 MILE SOUTH OF FREEPORT.</td>
</tr>
<tr>
<td>Detailed Location:</td>
<td>NEST TREE IS LOCATED ON THE EAST SIDE OF THE LEVEE IN AN ISOLATED STAND OF TREES ALONG THE ACCESS ROAD TO BEACH LAKE.</td>
</tr>
<tr>
<td>Ecological:</td>
<td>NEST TREE IS A VALLEY OAK (QUERCUS LOBATA); ADJACENT AGRICULTURAL FIELDS INCLUDE SAFFLOWER AND ALFALFA.</td>
</tr>
<tr>
<td>Threats:</td>
<td>POSSIBLE THREAT FROM INCREASED FOOT TRAFFIC/HUMAN DISTURBANCE IF PROPOSED NATURE CENTER IS BUILT.</td>
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<tr>
<td>General:</td>
<td>DFG SWHA #SA044. 1 ADULT/1 JUVENILE OBSERVED ON NEST ON 16 JUL 1992; 2 ADULTS PRESENT ON 20 JUL 1992.</td>
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<td>Elevation (feet):</td>
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<td>County Summary:</td>
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</tr>
<tr>
<td>Quad Summary:</td>
<td>Florin (3812144)</td>
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</table>

**Sources:**
- DFG94U0003  
- NOS92F0002  
  NOSAL, T. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1992-07-16
# Occurrence Report
## California Department of Fish and Wildlife
### California Natural Diversity Database

<table>
<thead>
<tr>
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<th>Buteo swainsoni</th>
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<tr>
<td>Common Name:</td>
<td>Swainson's hawk</td>
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<tr>
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<th>Scientific Name:</th>
<th>Buteo swainsoni</th>
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<tr>
<td>Common Name:</td>
<td>Swainson's hawk</td>
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<table>
<thead>
<tr>
<th>General Habitat:</th>
<th>BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, &amp; AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.</th>
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<tbody>
<tr>
<td>Micro Habitat:</td>
<td>REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.</td>
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<td>Last Survey Date:</td>
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<tr>
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<td>Presence:</td>
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<tr>
<td>Location:</td>
<td>SOUTH FORK PUTAH CREEK, FROM COUNTY RD 106A CROSSING TO ABOUT 0.7 MILES NE OF EAST END OF RD 34A; ESE OF DAVIS.</td>
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| Ecological: | MANY NEST TREES IN THIS AREA. NESTS WERE FOUND IN COTTONWOODS (AND ONE WILLOW) WITHIN A RIPARIAN CORRIDOR SURROUNDED BY ROW CROPS. |

| Threats: | 2 ACTIVE NESTS IN 1988. 1 ACTIVE NEST, 1993. 3 ACTIVE NESTS/5 YOUNG(Y) IN ‘94. 5 NESTS/5Y, 2002. 5 NESTS/7Y & 1 ABANDONED NEST OBS ‘03. 9 ACTIVE NESTS/6 PRODUCTIVE/10Y, ’04. 5 NESTS/5Y, ’07. SWHA PERCHED NEAR NEST 27 APR ‘09. |

| PLSS: | T08N, R03E, Sec. 27 (M) |
| UTM:  | Zone-10 N4263824 E618924 |
| Accuracy: | specific area |
| Area (acres): | 94 |
| Latitude/Longitude: | 38.51486 / -121.63590 |
| Elevation (feet): | 20 |
| County Summary: | Quadrant Summary: |
| Yolo: | SACRAMENTO WEST (3812155), DAVIS (3812156) |

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<td>DFG09D0001</td>
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<tr>
<th>Scientific Name:</th>
<th>Buteo swainsoni</th>
<th>Common Name:</th>
<th>Swainson's hawk</th>
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</thead>
<tbody>
<tr>
<td>Listing Status:</td>
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<td>Rare Plant Rank:</td>
<td>BLM_S-Sensitive</td>
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<td>USFWS_BCC-Birds of Conservation Concern</td>
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**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2010-03-29
**Last Survey Date:** 2010-03-29
**Owner/Manager:** PVT-UNION PACIFIC RR
**Presence:** Presumed Extant

**Location:** 0.4 MILE NORTH OF I-80, 0.5 MILE NW OF THE I-80/HIGHWAY 50 JUNCTION, WEST SACRAMENTO.

**Detailed Location:** VICINITY OF TERRITORIES #YO160 & YO (NO # ASSIGNED) FROM CDFW DATABASE. MAPPED TO PROVIDED COORDINATES, WHICH INCLUDES ESTEP (2008) SITES YO-32 & 78.

**Ecological:**
MULTIPLE NEST SITES, PRIMARILY IN LARGE COTTONWOODS (& 1 VALLEY OAK IN 2003), WITHIN WELL-DEVELOPED RIPARIAN HABITAT AROUND THE CANALS & RAILROAD TRACKS. ADJACENT TO YOLO BYPASS FLOOD-CONTROL FACILITY, URBAN DEVELOPMENT, & CROPLAND TO WEST.

**Threats:**

**PLSS:** T09N, R04E, Sec. 32 (M)  Accuracy: specific area  Area (acres): 34
**UTM:** Zone-10 N4271208 E624478  Latitude/Longitude: 38.58063 -121.57089  Elevation (feet): 10

**County Summary:** Yolo  Quad Summary: Sacramento West (3812155)

**Sources:**
- BRA01F0014 BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2001-06-22
- BRA99F0001 BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1999-06-04
- EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
- EST88F0040 ESTEP, J. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1988-04-07
- NAV10F0001 NAVICKY, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2010-03-29
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

<table>
<thead>
<tr>
<th>Map Index Number:</th>
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<td>Occurrence Last Updated:</td>
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**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number: 23018**

**Key Quads: Sacramento West (3812155)**

**Occurrence Number: 499**

**EO Index: 13259**

**Element Code: ABNKC19070**

**Occurrence Last Updated: 2013-04-05**

**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2002-04-19

**Last Survey Date:** 2002-04-19

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:** SACRAMENTO RIVER, RM-52.7(L), BETWEEN CLAY BANK BEND AND OAK HALL BEND, ABOUT 1 MI W OF I-5 AT 43RD AVE, SACRAMENTO.

**Detailed Location:** VICINITY OF TERRITORY #SA054 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO COORDINATES GIVEN FOR CDFW NEST RECORD FROM 2002.

**Ecological:**
1990-91 NEST TREE WAS A COTTONWOOD 25 FT FROM THE RIVER WITH SURROUNDING FORAGING HABITAT CONSISTING OF AGRICULTURAL FIELDS (ALFALFA & WHEAT), YOLO CO SIDE. 2002 NEST TREE WAS A 55' COTTONWOOD WITH CROPS NE, RESIDENTIAL S, ORCHARDS NW.

**Threats:**
1991 SURVEYOR CITED THREATS FROM DEVELOPMENT OF FORAGING HABITAT & HIGH DISTURBANCE (PEDESTRIAN/BIKE TRAFFIC) NEAR SITE.

**General:**
ONE BIRD OBSERVED SOARING AT THIS SITE IN 1986; NO NEST FOUND. TWO ADULTS OBS NESTING IN 1990 AND 1991; NO YOUNG PRODUCED. A NON-BREEDING PAIR OBS IN AREA IN 1993. ACTIVE NEST OBS ON 19 APR 2002, BUT SWHA NOT SEEN AFTER 9 MAY.

**PLSS:** T08N, R04E, Sec. 28 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4264024 E627176

**Latitude/Longitude:** 38.51552 / -121.54123

**Elevation (feet):** 10

**County Summary:** Sacramento West

**Sacramento**

**Quad Summary:**

**Sources:**

- LEV90F0001 - LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
- LEV91F0001 - LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- MAI90F0001 - MAIER, L. - FIELD SURVEY FORM FOR 12 BUTEO SWAINSONI NEST SITES ALONG THE SACRAMENTO RIVER. 1990-XX-XX
- MAI90F0004 - MAIER, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-05-XX

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Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch

Report Printed on Tuesday, September 15, 2015

Page 94 of 843

Information Expires 3/1/2016
### Scientific Name: Buteo swainsoni

#### Common Name: Swainson's hawk

#### Listing Status:
- **Federal:** None
- **State:** Threatened

#### CNDDDB Element Ranks:
- **Global:** G5
- **State:** S3

#### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

#### ECological:
1990 & 1991 NEST TREE WAS A TALL COTTONWOOD; SURROUNDING FORAGING HABITAT CONSISTED OF ROW CROPS.

#### Threats:
1991 SURVEYORS NOTED VARIOUS DISTURBANCES (TREE CLEARING ACTIVITIES, MARINA OPERATIONS). DEVELOPMENT.

#### General:

#### Owners/Managers:
UNKNOWN

#### Presence:
Presumed Extant

#### Location:
W SIDE OF THE SACRAMENTO RIVER (RM55.1), ALONG S RIVER RD ABOUT 0.6 MI S OF LINDEN RD, JUST UPSTREAM FROM CHICORY BEND.

#### Detailed Location:

#### Last Date Observed:
2003-07-16

#### Last Survey Date:
2003-07-16

#### Occurrence Type:
Natural/Native occurrence

#### Occurrence Rank:
Unknown

#### Trend:
Unknown

#### Sources:
4. LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
5. LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
<table>
<thead>
<tr>
<th>Occurrence Report</th>
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<tr>
<td>California Department of Fish and Wildlife</td>
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**Map Index Number:** 23020  
**EO Index:** 20410  
**Element Code:** ABNKC19070  
**Occurrence Last Updated:** 2013-06-19

**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

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**CNDDB Element Ranks:**  
**Global:** G5  
**State:** Threatened

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<th>General Habitat:</th>
<th>Micro Habitat:</th>
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| BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, AND AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. | REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1994-08-11  
**Last Survey Date:** 1994-08-11  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Location:** SACRAMENTO RIVER, RM 55.9 - 56.6, BETWEEN LINDEN RD AND VALLEJO WY, ABOUT 1 MI S OF MILLER PARK IN SACRAMENTO.

**Detailed Location:** THREE POLYGONS, FROM NORTH: 1) TERRITORY #YO205 (PART)/SA088 AT RM56.6 ON BOTH SIDES OF RIVER. 2) TERRITORY #YO205 (PART)/YO204, ABOUT 450 M BACK FROM RIVER AT RM56.3R. 3) TERRITORY #YO203, AT RM55.9R.

**Ecological:** 1) NESTS IN LONE OAKS. 2) NEST IN SMALL OAK ABOUT 1200' BACK FROM RIVER, SURROUNDED BY FALLOW FIELDS. 3) NEST IN MEDIUM-SIZED WALNUT TREE; SURROUNDED BY FALLOW FIELDS, ROW CROPS, & WHEAT FIELDS. AERIALS SHOW DEVELOPMENT ON W SIDE POST-1993.

**Threats:** POSSIBLE AGRICULTURAL THREAT: WHEAT FIELDS WERE SPRAYED & HARVESTED DURING BREEDING SEASON (1990). DEVELOPMENT.


**PLSS:** T08N, R04E, Sec. 14 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 157

**UTM:** Zone-10 N4267035 E629591  
**Latitude/Longitude:** 38.54230 / -121.51298  
**Elevation (feet):** 20

**County Summary:** Sacramento, Yolo  
Sacramento West (3812155)

**Sources:**
- DFG92U0001  
- DFG94U0003  
- LEV90F0003  
- LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
- LEV90F0004  
- LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
- LEV91F0003  
- LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- LEV91F0004  
- LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- MA190F0001  
- MAIER, L. - FIELD SURVEY FORM FOR 12 BUTEO SWAINSONI NEST SITES ALONG THE SACRAMENTO RIVER. 1990-XX-XX
- MA190F0005  
- MAIER, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
- MA190F0006  
- MAIER, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
- MOR93F0011  
- MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 23023
Key Quad: Sacramento West (3812155)
Occurrence Number: 504

EO Index: 14240
Element Code: ABNKC19070
Occurrence Last Updated: 2013-04-04

Scientific Name: *Buteo swainsoni*
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 1994-08-11
Last Survey Date: 1994-08-11
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
SACRAMENTO RIVER, RM-57.6(R), 0.3 MILES WEST OF JEFFERSON BLVD AT 19TH ST, JUST N OF THE BARGE CANAL, WEST SACRAMENTO.

Detailed Location:
TERRITORY #YO206 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE.

Ecological:
1990 NEST TREE WAS A MEDIUM-SIZED COTTONWOOD; SURROUNDING FORAGING HABITAT CONSISTED OF FALLOW FIELDS AND ROW CROPS, THOUGH THE IMMEDIATE AREA APPEARS TO BE INDUSTRIAL.

Threats:

General:

PLSS: T08N, R04E, Sec. 10 (M)
Accuracy: 1/5 mile
Area (acres): 0

UTM: Zone-10 N4269420 E628760
Latitude/Longitude: 38.56391 / -121.52208
Elevation (feet): 35

County Summary:
Sacramento, Yolo

Quad Summary:
Sacramento West (3812155)

Sources:
LEV90F0005 LEVY, C. ET AL - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
MAI90F0001 MAIER, L. - FIELD SURVEY FORM FOR 12 BUTEO SWAINSONI NEST SITES ALONG THE SACRAMENTO RIVER. 1990-XX-XX
MAI90F0007 MAIER, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
## Occurrence Report
### California Department of Fish and Wildlife
#### California Natural Diversity Database

<table>
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<tr>
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<td>Occurrence Number:</td>
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| Scientific Name: | Buteo swainsoni |
| Common Name:     | Swainson's hawk |

| Listing Status: | Federal: None |
|                | State: Threatened |

| CNDDDB Element Ranks: | Global: G5 |
|                       | State: S3 |

### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Details:
**Last Date Observed:** 2007-XX-XX  
**Last Survey Date:** 2007-XX-XX  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant  

### Location:
SACRAMENTO RIVER, RM 47.5-47.2(R), VICINITY OF FREEPORT BEND, SACRAMENTO.

#### Detailed Location:

#### 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.

#### Threats:
**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.

### Sources:
- EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
- LEV90F0010 LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-XX-XX
- LEV91F0009 LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 23233
EO Index: 7588
Key Quad: Clarksburg (3812145)
Element Code: ABNKC19070
Occurrence Number: 509
Occurrence Last Updated: 2013-01-08

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk
Listing Status:
  Federal: None
  State: Threatened
CNDDDB Element Ranks:
  Global: G5
  State: S3

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Last Date Observed: 1994-06-30
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1994-06-30
Occurrence Rank: Unknown
Owner/Manager: UNKNOWN
Trend: Unknown
Presence: Presumed Extant

Location:
SACRAMENTO RIVER, RM 48.55-48.8(R), ABOUT 1.5 MILES EAST OF FREEPORT BEND, SACRAMENTO.

Detailed Location:

Ecological:

Threats:
General:

PLSS:
  T07N, R04E, Sec. 10 (M)
Accuracy: 1/5 mile
Area (acres): 0

UTM:
  Zone-10 N4259279 E627886
Latitude/Longitude: 38.47267 / -121.53396
Elevation (feet): 10

County Summary:
Sacramento, Yolo
Clarksburg (3812145)

Sources:
LEV90F0012 LEVY, C. ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1990-08-XX
LEV91F0010 LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX 
### Occurrence Report
#### California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

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<td>State: Threatened</td>
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**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-07-11  
**Last Survey Date:** 2003-07-11

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
ALONG BOTH SIDES OF THE SACRAMENTO RIVER RM74, AT THE GARDEN HWY/ELVERTA RD JUNCTION, NW OF THE SACRAMENTO INTL AIRPORT.

**Detailed Location:**  
TWO NESTING SITES REPRESENTED. SW SITE: TERRITORIES #YO226 & SA015 (PART- SEE ALSO EO#133) FROM CDFW DATABASE/LOC FROM FIELD SURVEY FORMS; AT RM74. NE SITE: MAPPED TO COORDINATES GIVEN FOR CDFW NEST RECORD FROM 2003.

**Ecological:**  
SW SITE: NESTS IN TALL COTTONWOODS IN NARROW RIPARIAN STRIP; SURROUNDING FORAGING HABITAT CONSISTED OF AGRICULTURE (WALNUTS, CORN, WHEAT) AND FALLOW FIELDS IN 1991. NE SITE: NEST IN 50' COTTONWOOD WITH CROPLAND TO EAST, RIPARIAN TO WEST.

**Threats:**  

**PLSS:** T10N, R03E, Sec. 13 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 22

**UTM:** Zone-10 N4286320 E621230  
**Latitude/Longitude:** 38.71722 / -121.60554  
**Elevation (feet):** 20

**County Summary:** Sacramento, Yolo  
**Quad Summary:** Taylor Monument (3812165)

### Sources:
- LEV91F0021: LEVY, C. & C. WILKINSON - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1991-XX-XX
- MOR93F0021: MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
### Occurrence Report

**California Department of Fish and Wildlife**  
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2002-04-22  
**Last Survey Date:** 2002-06-17  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
ALONG RESERVOIR RD JUST E OF GARDEN HWY, BETWEEN THE ELKHORN PUMP STATION & SACRAMENTO INTERNATIONAL AIRPORT.

**Detailed Location:**  

**Ecological:**  

**Threats:**

**General:**  
1 YOUNG FLEDGED IN 1992. ACTIVE NEST OBSERVED 22 APR 2002; BUT NO ACTIVITY OBSERVED ON OR AFTER 17 JUN.

**PLSS:** T10N, R03E, Sec. 25 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 22

**UTM:** Zone-10 N4284175 E621218  
**Latitude/Longitude:** 38.69790 / -121.60604  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Taylor Monument (3812165)**

**Sources:**

**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

| Map Index Number: | 23629 |
| Key Quad: | Sacramento West (3812155) |
| Occurrence Number: | 595 |
| EO Index: | 20518 |
| Element Code: | ABNKC19070 |
| Occurrence Last Updated: | 1996-01-03 |

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1992-XX-XX  
**Last Survey Date:** 1992-XX-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  
**Location:** 0.25 MILES WEST OF EL CENTRO ROAD AND 0.25 MILES SOUTH OF SAN JUAN ROAD, 2 MILES NORTH OF BRYTE.

**Detailed Location:**  
MAPPED TO LOCATION DESCRIPTION FROM 1992 ENGLAND REPORT.

**Ecological:**  
NEST TREE WAS A COTTONWOOD, LOCATED ALONG A SMALL DRAINAGE CANAL.

**Threats:**  
**General:**  
1 YOUNG FLEDGED IN 1992.

**PLSS:**  
T09N, R04E, Sec. 21 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:**  
Zone-10 N4276010 E626741  
**Latitude/Longitude:** 38.62357 / -121.54405  
**Elevation (feet):** 10

**County Summary:**  
Sacramento  
Sacramento West (3812155), Taylor Monument (3812165)

**Sources:**  
### Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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<td>Presence:</td>
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<td>Location:</td>
<td>SACRAMENTO RIVER, RM 46.70(R), JUST DOWNSTREAM FROM FREEPORT BEND, ABOUT 0.65 MILE NORTH OF FREEPORT BRIDGE.</td>
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**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:**  
**Threats:**

**General:**  

**PLSS:** T07N, R04E, Sec. 14 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4258455 E630433  
**Latitude/Longitude:** 38.46488 / -121.50493  
**Elevation (feet):** 15

| County Summary: | Sacramento, Yolo  
|-----------------| Clarksburg (3812145) |

**Sources:**  

MOR93F0006 MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
**Map Index Number:** 23880  
**EO Index:** 7545  
**Key Quad:** Clarksburg (3812145)  
**Occurrence Number:** 633  
**Occurrence Last Updated:** 2013-01-23

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannas, & agricultural or ranch lands with groves or lines of trees.

**Micro Habitat:**  
Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

**Last Date Observed:** 2007-XX-XX  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Location:**  
The 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.

**Threats:**

**General:**  
2 ADULTS AND 2 JUVENILES OBSERVED AT NEST SITE ON 15 JUL 1993. NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.

**PLSS:** T07N, R04E, Sec. 04 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone 10 N4261210 E625976  
**Latitude/Longitude:** 38.49034 / -121.55551  
**Elevation (feet):** 15

**County Summary:** Yolo  
**Quad Summary:** Clarksburg (3812145)

**Sources:**  
DFG94U0003  
EST08R0001  
MOR93F0008  
ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX  
MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 23875
Key Quad: Sacramento West (3812155)
Occurrence Number: 634
EO Index: 7539
Element Code: ABNKC19070
Occurrence Last Updated: 2013-04-05

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2007-XX-XX
Last Survey Date: 2007-XX-XX
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
WEST SIDE OF THE SACRAMENTO RIVER AT CLAY BANK BEND, JUST SOUTH OF THE JUNCTION OF GREGORY AVENUE AND SOUTH RIVER ROAD.

Detailed Location:
VICINITY OF TERRITORY #YO224 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE, AT RM 52.2(R). MAPPED TO COORDINATES GIVEN FOR SITE YO-38 FROM ESTEP'S 2008 REPORT.

Ecological:
2007 NEST IN WALNUT IN RIPARIAN HABITAT; NEARBY LAND USE WAS ALFALFA/IRRIGATED CROPLAND.

Threats:
General:
2 ADULTS AND 1-2 JUVENILES OBSERVED AT THE NEST SITE IN 1993. NESTING PAIR FLEDGED 1 IN 1994. ACTIVITY AT NEST OBSERVED DURING 2007 SURVEY, BUT NESTING OUTCOME COULD NOT BE CONFIRMED.

PLSS: T08N, R04E, Sec. 28 (M) Accuracy: 1/10 mile Area (acres): 0
UTM: Zone-10 N4263929 E626162 Latitude/Longitude: 38.51481 / -121.55289 Elevation (feet): 20

County Summary:
Sacramento, Yolo
Sacramento West (3812155)

Sources:
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
MOR93F0009 MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
Map Index Number: 23874  
Key Quad: Sacramento West (3812155)  
Occurrence Number: 635

EO Index: 7540  
Element Code: ABNKC19070  
Occurrence Last Updated: 2013-04-04

Scientific Name: Buteo swainsoni  
Common Name: Swainson's hawk

Listing Status:  
Federal: None  
State: Threatened

CNDDB Element Ranks:  
Global: G5  
State: S3

General Habitat:  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2007-XX-XX

Occurrence Type: Natural/Native occurrence

Last Survey Date: 2007-XX-XX

Occurrence Rank: Unknown

Owner/Manager: UNKNOWN

Trend: Unknown

Presence: Presumed Extant

Location: SACRAMENTO RIVER, RM-60.90(R), JUST UPSTREAM FROM DISCOVERY PARK, WEST SACRAMENTO.

Detailed Location: TERRITORIES #SA016 (PART - SEE ALSO EO#287) AND #YO225 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO INCLUDE GIVEN RM (60.9 R) AND TO COORDINATES FOR SITE YO-103 FROM ESTEP'S 2008 REPORT.

Ecological:  
1986 NEST WAS IN RIPARIAN COTTONWOOD, SURROUNDED BY AGRICULTURE AND DEVELOPED LAND. 2007 NEST IN COTTONWOOD SURROUNDED BY IRRIGATED CROPS AND RICE. AERIAL PHOTOS SHOW CONTINUED RESIDENTIAL DEVELOPMENT SINCE 1993.

Threats: DEVELOPMENT IS REDUCING NEARBY FORAGING HABITAT.

General:  
NEST WITH 1 ADULT AND 1 YOUNG OBSERVED IN 1986. 2 ADULTS AND 2 JUVENILES OBSERVED AT NEST SITE ON 15 JUL 1993. NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY; FLEDGING RESULTS UNKNOWN.

PLSS: T09N, R04E, Sec. 26 (M)  
Accuracy: specific area

Area (acres): 11

UTM: Zone-10 N4273770 E628806  
Latitude/Longitude: 38.60309 / -121.52075

Elevation (feet): 25

County Summary: Quad Summary:

Yolo  
Sacramento West (3812155)

Sources:


EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX

MOR93F0012 MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
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- **Scientific Name:** *Buteo swainsoni*
- **Common Name:** Swainson's hawk

- **Listing Status:**
  - Federal: None
  - State: Threatened

- **CNDB Element Ranks:**
  - Global: G5
  - State: S3

- **General Habitat:**
  - Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.
  - Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

- **Last Date Observed:** 1994-05-28
- **Last Survey Date:** 1994-05-28
- **Owner/Manager:** UNKNOWN, CITY OF SACRAMENTO
- **Presence:** Presumed Extant

- **Location:** SACRAMENTO RIVER, ATRM-62.10(L), ALONG GARDEN HWY JUST DOWNSTREAM FROM THE PIONEER BRIDGE (I-80), SACRAMENTO.

- **Detailed Location:** TERRITORY #SA051 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE (FLYOVER DETECTION IN 1985 ATTRIBUTED TO TERRITORY "SA" IN DATABASE).

- **Ecological:**
  - In 1985 surrounding habitat was riparian, agriculture, and orchards. Aerial photos show that since 1998, residential development has eliminated adjacent foraging habitat east of I-80.

- **Threats:**
  - Reduction of foraging habitat due to development.

- **General:**

- **PLSS:** T09N, R04E, Sec. 28 (M)
- **Accuracy:** 80 meters
- **Area (acres):** 0
- **UTM:** Zone-10 N4273623 E627064
- **Latitude/Longitude:** 38.60202 / -121.54078
- **Elevation (feet):** 25

- **County Summary:** Sacramento

**Sources:**
- MOR93F0014  MORENO, L.A. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1993-07-15
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Sources:**

- ROS94F0001 - ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1994-XX-XX

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**Map Index Number:** 33208

**Key Quad:** Elk Grove (3812143)

**Occurrence Number:** 662

**EO Index:** 2590

**Element Code:** ABNKC19070

**Occurrence Last Updated:** 2013-05-14

**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIeldS SUPPORTING RODENT POPULATIONS.

---

**Last Date Observed:** 1994-XX-XX

**Last Survey Date:** 1994-XX-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**

COSUMNES RIVER, RM 14.6(L), 2.5 MILES SW OF THE INTERSECTION OF WILTON ROAD AND DILLARD ROAD, EAST OF ELK GROVE.

**Detailed Location:**

TERRITORY #SA060 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE; LOCATION GIVEN AS "COSUMNES/FREEMAN RD," T6N R6E SEC 10 NE 1/4 OF SE 1/4. MAPPED TO POINT ON TOPO ATTACHED TO 1994 FIELD SURVEY FORM.

**Ecological:**

RIPARIAN AREA SURROUNDED BY AGRICULTURAL CROPLAND AND GRASSING PASTURES.

**Threats:**

**General:**

NEST WITH PAIR AND 1 YOUNG OBSERVED IN 1987. ACTIVE NEST OBSERVED DURING A SUMMER 1994 SURVEY OF THE COSUMNES RIVER AREA.

**PLSS:** T06N, R06E, Sec. 10 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4250165 E648523

**Latitude/Longitude:** 38.38737 / -121.29941

**Elevation (feet):** 50

**County Summary:** Elk Grove (3812143)

---

**Sources:**

- ROS94F0001 - ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1994-XX-XX
Sources: ROS94F0001
ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1994-XX-XX

Map Index Number: 33209
EO Index: 2588

Key Quad: Elk Grove (3812143)
Element Code: ABNKC19070

Occurrence Number: 663
Occurrence Last Updated: 2013-01-29

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 1994-XX-XX
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1994-XX-XX
Occurrence Rank: Excellent

Owner/Manager: UNKNOWN
Trend: Unknown

Presence: Presumed Extant

Location:
COSUMNES RIVER, RM 13.6(R), 3 MILES SE OF ELK GROVE.

Detailed Location:
MAPPED TO PROVIDED MAP.

Ecological:
RIPARIAN AREA SURROUNDED BY AGRICULTURAL CROPLAND AND GRAZING PASTURES.

Threats:
General:
ACTIVE NEST OBSERVED DURING A SUMMER 1994 SURVEY OF THE COSUMNES RIVER AREA.

PLSS: T06N, R06E, Sec. 10 (M)
Accuracy: 80 meters

UTM: Zone-10 N4249620 E647209
Latitude/Longitude: 38.38268 / -121.31456
Elevation (feet): 45

County Summary:
Sacramento
Elk Grove (3812143)

Area (acres): 0

Sources:
ROS94F0001
ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1994-XX-XX

Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch
Report Printed on Tuesday, September 15, 2015
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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1994-XX-XX

**Last Survey Date:** 1994-XX-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
COSUMNES RIVER, RM-13.0(L), 2.5 MILES SE OF ELK GROVE.

**Detailed Location:**
MAPPED TO PROVIDED MAP.

**Ecological:**
RIPARIAN AREA SURROUNDED BY AGRICULTURAL CROPLAND AND GRAZING PASTURES.

**Threats:**
ACTIVE NEST OBSERVED DURING A SUMMER 1994 SURVEY OF THE COSUMNES RIVER AREA.

**PLSS:** T06N, R06E, Sec. 16 (M)  Accuracy: 80 meters  Area (acres): 0

**UTM:** Zone-10 N4248800 E646620  Latitude/Longitude: 38.37539 / -121.32147  Elevation (feet): 45

**County Summary:**
Sacramento  Galt (3812133), Elk Grove (3812143)

**Sources:**
ROS94F0001  ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1994-XX-XX
### Scientific Name: Buteo swainsoni

### Common Name: Swainson's hawk

#### Listing Status:
- **Federal:** None
- **State:** Threatened

#### CNNDDB Element Ranks:
- **Global:** G5
- **State:** S3

#### General Habitat:
Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannas, & agricultural or ranch lands with groves or lines of trees.

#### Micro Habitat:
Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

#### Last Date Observed:
2001-04-12

#### Occurrence Type:
Natural/Native occurrence

#### Presence:
Presumed Extant

#### Location:
Vicinity of the Cosumnes River (about River mile 17.5) at Wilton Rd, Wilton.

#### Detailed Location:
3 nest sites, mapped to provided maps & coordinates. 1994 nest tree between Wilton Rd & River. 1995 nest tree on the N side of the river E of Wilton Rd. 2001 tree S of Wilton Rd, at 10928 Wilton Rd.

#### Ecological:
1995 nest tree was a cottonwood snag. Riparian area surrounded by row crops, sand mining, pastures, ranchettes, and low-density residential.

#### Threats:
BREEDING PAIR DETECTED IN 1992. ACTIVE NEST OBSERVED DURING SUMMER 1994. NEST WITH 1 CHICK OBSERVED ON 13 JUN 1995. NEST WITH 2 ADULTS OBSERVED ON 12 APR 2001; ADULT BROUGHT PREY TO THE NEST, THEN A SPRIG OF FRESH COTTONWOOD LEAVES.

#### PLSS:
- **T07N, R06E, Sec. 36 (M):** Non-specific area
  - **Accuracy:** Non-specific area
  - **Area (acres):** 27
- **Zone-10 N4253446 E650475:** Non-specific area
  - **Latitude/Longitude:** 38.41660 / -121.27636
  - **Elevation (feet):** 70

#### Sources:
- **ROS94F0001** ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1994-XX-XX
- **ROS95F0003** ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1995-06-13
- **SCH92F0072** SCHNEIDER, ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1992-07-10
- **SW001F0013** SWOLGAARD, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2001-04-12
Map Index Number: 33224
Key Quad: Elk Grove (3812143)
Occurrence Number: 672

EO Index: 2594
Element Code: ABNKC19070
Occurrence Last Updated: 1995-06-21

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDDB Element Ranks: Global: G5
State: S3

General Habitat: BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 1995-06-13
Last Survey Date: 1995-06-13
Owner/Manager: PVT
Presence: Presumed Extant

Location: SOUTH BANK OF COSUMNES RIVER, AT BEITZEL ROAD, ~5 MILES EAST OF ELK GROVE.
Detailed Location: HABITAT CONSISTS OF RIPARIAN SURROUNDED BY ROW CROPS.

Threats: POSSIBLE THREATS INCLUDE DEVELOPMENT AND CONVERSION TO VINEYARDS.


PLSS: T07N, R07E, Sec. 31 (M) Accuracy: 80 meters Area (acres): 0
UTM: Zone-10 N4254164 E652152 Latitude/Longitude: 38.42279 / -121.25701 Elevation (feet): 70

County Summary: Sacramento Quad Summary: Elk Grove (3812143)

Sources:
ROS95F0001 ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1995-06-13
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<td>Occurrence Number:</td>
<td>674</td>
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### Scientific Name: Buteo swainsoni

#### Common Name: Swainson's hawk

### Listing Status:

- **Federal:** None
- **State:** Threatened

### CNDDDB Element Ranks:

- **Global:** G5
- **State:** S3

### General Habitat:

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat:

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed:

1995-06-13

### Last Survey Date:

1995-06-13

### Owner/Manager:

PVT

### Presence:

Presumed Extant

### Location:

SOUTH BANK OF COSUMNES RIVER, JUST WEST OF NORTH END OF S BAR LANE, ABOUT 3 MILES EAST OF ELK GROVE.

### Detailed Location:

TERRITORY SA038 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO POINT ON TOPO ATTACHED TO 1995 FIELD SURVEY FORM.

### Ecological:

- 1987 NEST 63' UP IN VALLEY OAK SURROUNDED BY RIPARIAN HABITAT, AGRICULTURE, AND PASTURE. 1995 NEST TREE WAS A VALLEY OAK; HABITAT CONSISTED OF RIPARIAN SURROUNDED BY ROW CROPS AND LOW-DENSITY HOUSING.
- THREATS INCLUDE DEVELOPMENT AND CONVERSION TO VINEYARDS.

### General:

PAIR OBSERVED IN MAY 1984. SINGLE SWHA OBS IN 1985 & 1986; NO NESTS FOUND. NEST WITH PAIR AND 3 YOUNG OBS IN 1987. 2 ADULTS OBS SOARING IN THE VICINITY OF THE NEST TREE ON 13 JUN 1995; AT LEAST 2 CHICKS COULD BE HEARD CALLING FROM NEST.

### PLSS:

- **T06N, R06E, Sec. 02 (M)**
- **Accuracy:** 80 meters
- **Area (acres):** 0

### UTM:

- **Zone-10 N4252131 E649378**
- **Latitude/Longitude:** 38.40494 / -121.28921
- **Elevation (feet):** 55

### County Summary:

- **Sacramento**
- **Elk Grove (3812143)**

### Sources:

- ROS95F0004 - ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1995-06-13
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 41771
EO Index: 41771
Key Quad: Sacramento West (3812155)
Element Code: ABNK19070
Occurrence Number: 758
Occurrence Last Updated: 2000-06-22

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
Federal: None
State: Threatened

CNDDDB Element Ranks:
Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2000-05-25
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2000-05-25
Occurrence Rank: Good
Owner/Manager: UNKNOWN
Trend: Unknown
Presence: Presumed Extant

Location:
WEST EDGE OF NATOMAS MAIN DRAIN, BETWEEN ORCHARD LANE AND I-5, NW OF SACRAMENTO.

Detailed Location:
SITE IS LOCATED WEST OF THE BIKE TRAIL, ~70 METERS SW OF THE END OF GATEWAY OAKS BLVD. TERRITORY "SA" (NO # ASSIGNED) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE.

Ecological:
1994 NEST TREE WAS A WILLOW GROWING ON THE EAST EDGE OF THE MAIN DRAIN. 2000 NEST TREE WAS A BLACK WALNUT; NEST WAS OVERGROWN BY GRAPEVINES AND WAS BARELY VISIBLE.

Threats:

General:
ACTIVE NEST, WITH 2 JUVENILES AND 2 ADULTS ATTENDING, OBSERVED ON 3 JUN 1994. NEST IN A NEW NEST TREE WITH AN INCUBATING ADULT AND AN ATTENDING ADULT OBSERVED, 25 MAY 2000.

PLSS: T09N, R04E, Sec. 22 (M)
Accuracy: 80 meters
Area (acres): 0
UTM: Zone-10 N4275560 E628464
Latitude/Longitude: 38.61927 / -121.52435
Elevation (feet): 25

County Summary:
Sacramento
Sacramento West (3812155)

Sources:
WAR00F0002  WARENVYCA, D. & D. MCGRIFF (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2000-05-25
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<th>Map Index Number: 41774</th>
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<td>Occurrence Number: 760</td>
<td>Occurrence Last Updated: 2013-04-12</td>
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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-05-30  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2003-05-30  
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:** DEER CREEK, ABOUT 2.3 MILES ENE OF HIGHWAY 99 AT GRANT LINE ROAD, SE OF ELK GROVE.

**Detailed Location:** VINCITY OF TERRITORY #SA056 FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE AT "DEER CREEK, 2 MI EAST HWY 99," T6N R6E SEC 9 NE1/4 OF SE1/4. MAPPED TO COORDINATES GIVEN FOR CDFW NEST RECORD FROM 2003.

**Ecological:**  
1987 NEST TREE WAS AN OAK; SURROUNDED BY A MIX OF RIPARIAN, AGRICULTURAL FIELDS, AND PASTURE. 2003 NEST IN 70' VALLEY OAK SURROUNDED BY CROPLAND.

**Threats:**  
**General:**  
2 ADULTS OBSERVED NESTING IN 1987. NEST WITH 1 DOWNY YOUNG OBSERVED ON 30 MAY 2003.

**PLSS:** T06N, R06E, Sec. 09 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4249652 E646674  
**Latitude/Longitude:** 38.38305 / -121.32067  
**Elevation (feet):** 45

**County Summary:** Elk Grove (3812143)

**Sources:**  
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 41792
Key Quad: Sacramento West (3812155)
Occurrence Number: 769
EO Index: 41792
Element Code: ABNKC19070
Occurrence Last Updated: 2013-04-05

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDDB Element Ranks:
Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2007-XX-XX
Last Survey Date: 2007-XX-XX
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
BOTH SIDES OF THE SACRAMENTO RIVER AT RM-54.7, CHICORY BEND, ABOUT 0.25 MILES N OF DAVIS ROAD AT S RIVER ROAD.

Detailed Location:
2 POLYGONS REPRESENTING 3 NESTS. NORTH SITE APPED TO COORDINATES GIVEN FOR SITE YO-71 (ESTEP 2008). SOUTH SITE MAPPED TO VICINITY OF TERRITORY #SA087 FROM CDFW SWHA DATABASE & SITE YO-57 FROM ESTEP, 2008 (W SIDE RIVER).

Ecological:
NEST TREES USED IN 2007 WERE RIPARIAN COTTONWOODS WITH NEARBY ALFALFA/IRRIGATED CROPS.

Threats:
DEVELOPMENT IS REDUCING SURROUNDING FORAGING HABITAT.

General:
NORTH: ACTIVE NEST OBSERVED DURING 2007 SURVEY, OUTCOME UNKNOWN. SOUTH: 2 ADULTS AND 2 JUVENILES OBSERVED AT NEST IN 1993. ACTIVE NEST OBSERVED DURING 2007 SURVEY, OUTCOME UNKNOWN.

PLSS: T08N, R04E, Sec. 22 (M) Accuracy: specific area Area (acres): 16
UTM: Zone-10 N4265874 E628142 Latitude/Longitude: 38.53205 / -121.52982 Elevation (feet): 40

County Summary:
Sacramento, Yolo
Sacramento West (3812155)

Sources:
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<th>General Habitat:</th>
<th>Micro Habitat:</th>
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<td>BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, &amp; AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.</td>
<td>REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.</td>
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**Last Date Observed:** 2000-04-20  
**Last Survey Date:** 2000-04-20  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:** NORTH SIDE OF DEL PASO ROAD, 0.6 MILE EAST OF I-5, SACRAMENTO.  
**Detailed Location:**  
**Ecological:**  
NEST TREE IS A WILLOW, WITH THE NEST ABOUT 30-FEET HIGH.  
**Threats:**  
**General:**  
2 ADULTS OBSERVED IN COURTSHIP AND AT THE NEST TREE WITH A NEST THAT APPEARED TO BE 2/3 COMPLETED.

**PLSS:** T09N, R04E, Sec. 03 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4279749 E628556  
**Latitude/Longitude:** 38.65699 / -121.52252  
**Elevation (feet):** 25

**County Summary:** Sacramento  
**Quad Summary:**  
Taylor Monument (3812165)

**Sources:**  
CRI00U0001  
CRIIBBS, H. (CRIIBBS AND ASSOCIATES, INC.) - MEMO FROM HAL CRIIBBS TO TERRY ROSCOE (DFG) REGARDING BUTEO SWAINSONI (NEST SITE). 2000-04-20
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<th><strong>General Habitat:</strong></th>
<th>Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.</th>
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<td><strong>Micro Habitat:</strong></td>
<td>Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, &amp; agricultural or ranch lands with groves or lines of trees.</td>
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<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
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</table>

| **Location:** | Along Natomas East Main Drain, just north of the Garden Highway, 0.5 mile east of Truxel, Sacramento. |

| **Ecological:** | Nest tree was a cottonwood, located within riparian along the Natomas East Main Drain; surrounded by an urban area adjacent to the Garden Highway to the north and a recreational area along the Jedediah Smith Bike Trail to the south. |

| **Threats:** | Possible threat from human use of the nearby recreational area. |

| **General:** | On 20 Apr 2001, the male was observed perched in a cottonwood, 100 feet east of the nest tree; female was observed sitting on the nest. |

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| **Sources:** | ZET01F0001 ZETTLE, B. (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2001-04-20 |
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk  
**Listing Status:**  
- **Federal:** None  
- **State:** Threatened  

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3  

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.  
**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2001-06-02  
**Last Survey Date:** 2001-06-02  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant  
**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.  
**Threats:**  
THREATENED BY ENCROACHING URBAN DEVELOPMENT.  
**General:**  
**PLSS:** T07N, R05E, Sec. 23 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**UTM:** Zone-10 N4255673 E640451  
**Latitude/Longitude:** 38.43830 / -121.39070  
**Elevation (feet):** 34  
**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)  

**Sources:**  
AVE01F0002 AVERY, S. (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2001-06-02
**Occurrences:**

**Map Index Number:** 45692  
**EO Index:** 45692  
**Key Quad:** Sacramento West (3812155)  
**Occurrence Number:** 940  
**Occurrence Last Updated:** 2013-05-02

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-XX-XX  
**Occurrence Rank:** Good

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:** SOUTH SIDE OF THE SACRAMENTO BYPASS, JUST N OF THE CHP ACADEMY, ABOUT 1 MI WNW OF I-80 AT OLD RIVER RD, WEST SACRAMENTO.

**Detailed Location:** MAPPED TO COORDINATES PROVIDED ON FIELD SURVEY FORMS, IN CDFW NEST RECORDS FROM 2000-2004, AND FOR SITE YO-75 FROM 2008 ESTEP REPORT.

**Ecological:**  
NESTS WERE IN LARGE COTTONWOODS ON THE INSIDE LEVEE SLOPE OF THE SACRAMENTO BYPASS; SURROUNDED BY UNDISTURBED GRASSLAND/SEASONAL WETLAND IN THE BYPASS, CHP FACILITY TO THE SOUTH, AND AGRICULTURE TO THE NORTH.

**Threats:**  
2000-2001 SURVEYORS CITED POTENTIAL THREATS FROM CHP FACILITY OPERATIONS, FISHERMEN, FLOOD CONTROL PERSONNEL/PROJECTS.

**General:**  

**PLSS:** T09N, R04E, Sec. 29 (M)  
**Accuracy:** specific area  
**Area (acres):** 15

**UTM:** Zone-10 N4273382 E624910  
**Latitude/Longitude:** 38.60015 / -121.56555  
**Elevation (feet):** 35

**County Summary:**  
Yolo  
Sacramento West (3812155)

**Sources:**

BRA01F0016  
BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2001-06-22

BRA99F0002  
BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1999-06-04

DFG05U0001  

EST08R0001  
ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX

HOL00F0075  
HOLT, W. & C. SWOLGAARD - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2000-06-30
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- Federal: None
- State: Threatened

**CNDDDB Element Ranks:**
- Global: G5
- State: S3

**General Habitat:**

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX

**Last Survey Date:** 2007-XX-XX

**Owner/Manager:** DFG-SACRAMENTO BYPASS WA

**Presence:** Presumed Extant

**Location:**

N LEVEE OF SACRAMENTO BYPASS AT TULE CANAL, ABOUT 2 MI WNW OF OLD RIVER RD AT I-80, NW WEST SACRAMENTO.

**Detailed Location:**

VICINITY OF TERRITORY “YO” (NO # ASSIGNED) FROM CDFW SWAINSON’S HAWK OBSERVATIONS DATABASE. MAPPED TO TWO NEST SITES; EAST SITE COORDINATES FROM 1999 FIELD SURVEY FORM, WEST SITE YO-35 FROM ESTEP'S 2008 REPORT.

**Ecological:**

1994: NEST IN COTTONWOOD. 1999: HABITAT WAS A WELL-DEVELOPED RIPARIAN CORRIDOR W/OAKS, COTTONWOODS, & WILLOWS; FAIRLY DENSE IN PLACES. 2007: NEST IN WILLOW IN CHANNELIZED RIPARIAN HABITAT SURROUNDED BY IRRIGATED CROPLAND & SEASONAL WETLAND.

**Threats:**

NESTING PAIR OBSERVED IN 1994, SUCCESS UNKNOWN. 2 ADULTS AND 1 JUVENILE OBSERVED AT NEST ON 4 JUN 1999. NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY, FLEDGING RESULTS UNKNOWN.

**PLSS:**

- T09N, R04E, Sec. 30 (M)
- Accuracy: specific area

**UTM:**

- Zone-10 N4273301 E623087
- Latitude/Longitude: 38.59968 / -121.58649

**County Summary:**

- Yolo
- Sacramento West (3812155)

**Quad Summary:**

**Sources:**

- BRA99F0003  BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1999-06-04
- EST08R0001  ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name**: Buteo swainsoni  
**Common Name**: Swainson's hawk

**Listing Status**:  
- **Federal**: None  
- **State**: Threatened

**CNDDB Element Ranks**:  
- **Global**: G5  
- **State**: S3

**General Habitat**:  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat**:  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed**: 2007-XX-XX  
**Last Survey Date**: 2007-XX-XX  
**Owner/Manager**: DFG-SACRAMENTO BYPASS WA  
**Presence**: Presumed Extant

**Location**:  
NORTH & SOUTH SIDES OF THE SACRAMENTO BYPASS WA AT TOE DRAIN, ABOUT 1.5 MI W OF I-80 AT OLD RIVER RD, WEST SACRAMENTO.

**Detailed Location**:  
JUST WEST OF THE CHP ACADEMY AND ADJACENT TO A FLOOD CONTROL FACILITY. 2 POLYGONS, MAPPED TO COORDINATES FROM FIELD SURVEY FORMS, CDFW NEST RECORDS FROM 2000-2004, AND FOR SITES YO-74 (SOUTH) & YO-76 (NORTH) FROM ESTEP'S 2008 REPORT.

**Ecological**:  
NEST TREES WERE LARGE COTTONWOODS SURROUNDING HABITAT CONSISTS OF A WELL-DEVELOPED WETLAND CORRIDOR, ADJACENT TO A FLOOD CONTROL FACILITY, AND FURTHER SURROUNDED BY AGRICULTURE AND NON-NATIVE GRASSLAND.

**Threats**:  
2000 SURVEYOR NOTED POTENTIAL THREAT FROM LEVEE MAINTENANCE AND UPGRADES.

**General**:  

**PLSS**: T09N, R04E, Sec. 29 (M)  
**Accuracy**: specific area  
**Area (acres)**: 23  
**UTM**: Zone-10 N4272967 E623828  
**Latitude/Longitude**: 38.59656 / -121.57804  
**Elevation (feet)**: 10  
**County Summary**:  
**Quad Summary**:  
- **Yolo**: Sacramento West (3812155)

**Sources**:  
- BRA00F0013  
  BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2000-06-20  
- BRA01F0015  
  BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2001-06-22  
- BRA99F0004  
  BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1999-06-04  
- BRA99F0005  
  BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1999-06-04  
- DFG05U0001  
- EST08R0001  
  ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX  
- HOL00F0074  
  HOLT, W. & C. SWOLGAARD - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2000-06-30
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 47315
EO Index: 47315
Key Quad: Clarksburg (3812145)
Element Code: ABNK19070
Occurrence Number: 992
Occurrence Last Updated: 2013-05-08

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened
Rare Plant Rank:
Other Lists: BLM_S-Sensitive
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

CNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2009-04-29
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2009-04-29
Occurrence Rank: Good
Owner/Manager: UNKNOWN
Trend: Unknown
Presence: Presumed Extant

Location:
ALONG THE WEST BANK OF THE SACRAMENTO RIVER, JUST NORTH OF COUNTY RD 142, 0.6 MILE NNW OF HOOD.

Detailed Location:

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.

Threats:
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.

PLSS: T06N, R04E, Sec. 15 (M) Accuracy: 80 meters Area (acres): 0
UTM: Zone-10 N4248589 E628777 Latitude/Longitude: 38.37623 / -121.52571 Elevation (feet): 12

County Summary:
Yolo Quad Summary:
Clarksburg (3812145)

Sources:
DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX
ROCC00F0001 ROCO, C. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2000-06-30
Map Index Number: 50639
EO Index: 50639
Key Quad: Florin (3812144)
Element Code: ABNKC19070
Occurrence Number: 1001
Occurrence Last Updated: 2003-03-17

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
Federal: None
State: Threatened

Rare Plant Rank:
BLM_S-Sensitive
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

CNDDB Element Ranks:
Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2002-04-29
Last Survey Date: 2002-04-29
Owner/Manager: PVT
Presence: Presumed Extant

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.

Threats:
THREATENED BY HUMAN ACTIVITY FROM NEARBY STORAGE FACILITY AND FREEWAY NOISE/MAINTENANCE.

General:

PLSS: T07N, R05E, Sec. 23 (M)  Accuracy: 80 meters  Area (acres): 0
UTM: Zone-10 N4256157 E639217  Latitude/Longitude: 38.44285 / -121.40474  Elevation (feet): 30

County Summary: Sacrameneto  Quad Summary: Florin (3812144)

Sources:
HEN62F0003  HENKE, J. (MOORE BIOLOGICAL CONSULTANTS) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2002-04-18
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 50670
EO Index: 50670

Key Quad: Florin (3812144)
Element Code: ABNK19070

Occurrence Number: 1010
Occurrence Last Updated: 2012-12-19

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SA VANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2009-07-XX
Last Survey Date: 2009-07-XX
Owner/Manager: SRCSD
Presence: Presumed Extant

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.

Threats:

PLSS: T07N, R05E, Sec. 19 (M)
Accuracy: nonspecific area
Area (acres): 14

UTM: Zone-10 N4256480 E634013
Latitude/Longitude: 38.44655 / -121.46428
Elevation (feet): 15

County Summary: Quad Summary:
Sacramento Florin (3812144)

Sources:
CON09U0001 CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNS, AND A GREAT GRAY OWL 2009-08-07
CRO02F0003 CROWE, D. (CH2M HILL) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2002-05-01
HAL04F0001 HALE, J. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-05-18
Map Index Number: 50702
EO Index: 50702

Key Quad: Rio Linda (3812164)
Element Code: ABNKC19070

Occurrence Number: 1015
Occurrence Last Updated: 2013-05-03

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2002-07-01
Last Survey Date: 2002-07-01
Owner/Manager: PVT
Presence: Presumed Extant

Location:
ALONG DRY CREEK, BETWEEN RIO LINDA/MARYSVILLE BOULEVARD AND NATOMAS EAST MAIN DRAINAGE CANAL, IN RIO LINDA.

Detailed Location:
VICINITY OF 1992 DETECTION BY CDFW SURVEYORS; REPORTED ON FIELD SURVEY FORM (PER LOCATION DRAWN ON ATTACHED MAP) AND IN CDFW DATABASE AS TERRITORY #SA073. MAPPED TO POINT ON MAP SUBMITTED WITH FIELD SURVEY FORM FROM 2002.

Ecological:
1992 NEST IN OAKS SURROUNDED BY PASTURE, WITHIN URBANIZED AREA. IN 2001-2002, HABITAT CONSISTED OF A NARROW VALLEY OAK RIPARIAN CORRIDOR ALONG DRY CREEK; SURROUNDED BY GRAZED GRASSLAND. POSSIBLE FUTURE SITE OF HANSEN PARK GOLF COURSE.

Threats:
1992 SURVEYORS CITED POTENTIAL THREAT OF URBAN DEVELOPMENT.

General:
SITE WAS FIRST REPORTED AS A BREEDING TERRITORY IN 1992. TERRITORY WAS ACTIVE IN 2001. ADULT OBSERVED CARRYING PREY TO THE NEST ON 1 JUL 2002; UNKNOWN NUMBER OF YOUNG IN NEST.

PLSS: T09N, R05E, Sec. 05 (M) Accuracy: 80 meters
UTM: Zone-10 N4280493 E633499 Latitude/Longitude: 38.66296 / -121.46558 Elevation (feet): 35

County Summary:
Sacramento Quad Summary:
Rio Linda (3812164)

Sources:
KIN02F0004 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2002-07-01
SCH92F0061 SCHNEIDER, ET AL. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1992-07-10
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<td><strong>Rare Plant Rank:</strong></td>
<td>BLM_S-Sensitive</td>
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<td>State: Threatened</td>
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| **General Habitat:**    | BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. |
| **Micro Habitat:**      | REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS. |

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<th><strong>Occurrence Type:</strong></th>
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<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
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</table>

| **Location:**           | ALONG NW SIDE OF DRY CREEK SOUTH, JUST WEST OF THE RIO LINDA AIRPORT, RIO LINDA. |
| **Detailed Location:**  | NEST TREE IS LOCATED ABOUT 200' SW OF WHERE THE BIKE TRAIL CROSSES DRY CREEK. |
| **Ecological:**         | HABITAT CONSISTS OF A NARROW VALLEY OAK RIPARIAN CORRIDOR ALONG DRY CREEK; SURROUNDED BY OPEN GRASSLAND, RESIDENTIAL, AND AN AIRPORT. |
| **Threats:**            | 3-4 YOUNG HATCHED IN 2002, BUT ONLY 2 SURVIVED TO FLEDGING. |

| **PLSS:**               | T10N, R05E, Sec. 32 (M) | **Accuracy:** | 80 meters |
|                        |                           | **Area (acres):** | 0 |
| **UTM:**               | Zone-10 N4281878 E635021 | **Latitude/Longitude:** | 38.67521 / -121.44783 |
|                        |                           | **Elevation (feet):** | 40 |

| **County Summary:**    | Sacramento | **Quad Summary:** | Rio Linda (3812164) |

| **Sources:**           | KIN02F0005 | KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2002-07-11 |
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2002-07-11  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2002-07-11  
**Occurrence Rank:** Good

**Owner/Manager:** SAC COUNTY FLOOD CONTROL  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
ALONG DRY CREEK SOUTH, JUST EAST OF RIO LINDA/MARYSVILLE BOULEVARD, RIO LINDA.

**Detailed Location:**

**Ecological:**
HABITAT CONSISTS OF A NARROW VALLEY OAK RIPARIAN CORRIDOR ALONG DRY CREEK; SURROUNDED BY OPEN GRASSLAND AND NEARBY RESIDENTIAL.

**Threats:**
NEST SITE ALSO OCCUPIED IN 2001. ADULTS OBSERVED CARRYING PREY ITEMS TO NEST ON 11 JUL 2002.

**PLSS:** T10N, R05E, Sec. 32 (M)  
**Accuracy:** 80 meters

**UTM:** Zone-10 N4281475 E634654  
**Latitude/Longitude:** 38.67164 / -121.45212

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
KIN02F0006 KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2002-07-11
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2002-07-15  
**Occurrence Type:** Natural/Native occurrence

**Owner/Manager:** CITY OF SACRAMENTO  
**Occurrence Rank:** Excellent

**Location:** ALONG DRY CREEK, APPROXIMATELY 300' EAST OF THE NATOMAS EAST MAIN DRAINAGE CANAL, RIO LINDA.

**Detailed Location:**  
WESTERN PACIFIC RR TRACKS LOCATED JUST WEST OF NEST TREE.

**Ecological:**
HABITAT CONSISTS OF A NARROW VALLEY OAK RIPARIAN CORRIDOR ALONG DRY CREEK; SURROUNDED BY OPEN GRASSLAND, WITH THE NATOMAS EAST DRAINAGE CANAL AND RESIDENTIAL TO THE WEST.

**Threats:**
- **General:**  
NESTING OBSERVED ON 15 JUL 2002.

**PLSS:** T09N, R05E, Sec. 06 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4280371 E632790  
**Latitude/Longitude:** 38.66197 / -121.47375  
**Elevation (feet):** 30

**County Summary:**
Sacramento

**Quad Summary:**
Rio Linda (3812164)

**Sources:**
KIN02F0007  
KING, A. (EDAW, INC.) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2002-07-15
**Buteo swainsoni**

**Swainson's hawk**

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
- BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.
- REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2001-04-27

**Last Survey Date:** 2001-04-27

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
NE OF THE INTERSECTION OF I-5 AND POWERLINE ROAD, NORTH OF SACRAMENTO.

**Detailed Location:**
NEST TREE IS A LARGE WILLOW; SURROUNDED BY AGRICULTURE, PRIMARILY RICE FARMING.

**Threats:**
POSSIBLE THREAT FROM AIRPORT DEVELOPMENT.

**General:**
FEMALE OBSERVED IN NEST IN BROOD POSITION ON 27 APR 2001.

**PLSS:** T10N, R04E, Sec. 32 (M)
**Accuracy:** 80 meters
**Area (acres):** 0

**UTM:** Zone-10 N4281486 E623981
**Latitude/Longitude:** 38.67329 / -121.57477
**Elevation (feet):** 12

**County Summary:**
Sacramento  
Taylor Monument (3812165)

**Sources:**
BRA01F0012  
BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2001-04-27
Map Index Number: 50910
Key Quad: Sacramento West (3812155)
Occurrence Number: 1080
EO Index: 50910
Element Code: ABNKC19070
Occurrence Last Updated: 2013-04-04

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 1999-04-26
Last Survey Date: 1999-04-26
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
0.4 MILES UPSTREAM FROM THE I-80 BRIDGE OVER THE SACRAMENTO RIVER, SACRAMENTO.

Detailed Location:
VICINITY OF TERRITORY "SA" (NO # ASSIGNED, AT RM-63L) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO COORDINATES GIVEN ON FIELD SURVEY FORM FROM 1999.

Ecological:
HABITAT CONSISTED OF A RIPARIAN CORRIDOR ALONG THE SACRAMENTO RIVER (1999).

Threats:
THREATENED BY URBAN DEVELOPMENT (1999).

General:
NESTING PAIR OBSERVED ON 10 JUN 1987. 2 ADULTS OBSERVED NESTING ON 26 APR 1999; OUTCOME UNKNOWN.

PLSS: T09N, R04E, Sec. 28 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4273781 E626044
Latitude/Longitude: 38.60359 / -121.55246
Elevation (feet): 35

County Summary:
Sacramento

Quad Summary:
Sacramento West (3812155)

Sources:
BRA99F0014 Bradbury, M. (california department of water resources) - Field survey form for buteo swainsoni (nest site) 1999-04-26
DFG94U0003 DFG - Nongame Birds & Mammals - Table of Swainson's Hawk Nest Records Through 1994. 1994-xx-xx
### Buteo swainsoni

**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

#### Listing Status:
- **Federal:** None  
- **State:** Threatened

#### CNDDB Element Ranks:
- **Global:** G5  
- **State:** S3

#### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

#### Location:
0.2 MILE SOUTH OF INDUSTRIAL BOULEVARD, ON THE WEST BANK OF THE DEEP WATER CHANNEL TURNING BASIN, WEST SACRAMENTO.

#### Detailed Location:
NEST TREE UNKNOWN; SURROUNDING FORAGING HABITAT CONSISTS OF A SMALL PLOT OF NON-NATIVE GRASSLAND ADJACENT TO INDUSTRIAL CENTERS.

#### Threats:
THREATENED BY COMMERCIAL AND RESIDENTIAL DEVELOPMENT.

#### General:
2 ADULTS AND 1 JUVENILE OBSERVED AT THE NEST SITE ON 28 JUN 1999.

#### Presence:
Presumed Extant

#### Owner/Manager:
UNKNOWN

#### Last Date Observed:
1999-06-28

#### Last Survey Date:
1999-06-28

#### Occurrence Type:
Natural/Native occurrence

#### Occurrence Rank:
Fair

#### Trend:
Unknown

#### Micro Habitat:

#### Sources:
- BRA99F0015  
  BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1999-06-28
**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

---

**Map Index Number:** 50912

**Key Quad:** Sacramento West (3812155)

**Occurrence Number:** 1082

**EO Index:** 50912

**Element Code:** ABNKC19070

**Occurrence Last Updated:** 2003-04-10

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**Scientific Name:** Buteo swainsoni

**Common Name:** Swainson's hawk

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**Listing Status:**

- **Federal:** None
- **State:** Threatened

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**CNDDB Element Ranks:**

- **Global:** G5
- **State:** S3

---

**General Habitat:**

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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**Last Date Observed:** 1999-06-28

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1999-06-28

**Occurrence Rank:** Fair

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Trend:** Unknown

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**Location:**

JUST NW OF THE INTERSECTION OF LAKE WASHINGTON WITH JEFFERSON BOULEVARD, WEST SACRAMENTO.

**Detailed Location:**

Ecological:

NEST TREE IS A LARGE OAK; SURROUNDING FORAGING HABITAT CONSISTS OF NON-NATIVE GRASSLAND.

**Threats:**

THREATENED BY COMMERCIAL AND RESIDENTIAL DEVELOPMENT.

**General:**

2 ADULTS AND 2 JUVENILES OBSERVED AT THE NEST SITE ON 28 JUN 1999.

**PLSS:** T08N, R04E, Sec. 09 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4268409 E627161

**Latitude/Longitude:** 38.55503 / -121.54061

**Elevation (feet):** 10

**County Summary:** Sacramento West (3812155)

---

**Sources:**

BRA99F0016 BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1999-06-28
## Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

### Map Index Number: 50913

### Key Quad: Sacramento West (3812155)

### Occurrence Number: 1083

### Occurrence Last Updated: 2013-04-04

### Scientific Name: Buteo swainsoni

### Common Name: Swainson's hawk

### Listing Status: Federal: None  
                 State: Threatened

### CNDDDB Element Ranks: Global: G5  
                         State: S3

### General Habitat:

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat:

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed: 2004-06-09

### Last Survey Date: 2004-06-09

### Owner/Manager: UNKNOWN

### Presence: Presumed Extant

### Location: JUST SOUTHEAST OF THE I-80/WEST EL CAMINO CLOVERLEAF, SACRAMENTO.

### Detailed Location:

MAPPED TO COORDINATES FROM 2001 FIELD SURVEY FORM AND FROM CDFW NEST RECORDS, 2000-2004.

### Ecological:

2000/2001 NEST TREE WAS A COTTONWOOD NEAR THE REMAINS OF AN OLD HOMESTEAD. 2004 NEST TREE WAS A (DEAD) VALLEY OAK; SURROUNDED BY COMMERCIAL/HIGHWAY TO THE NW AND RESIDENTIAL TO THE NE, SE, AND SW.

### Threats:

THREATENED BY URBAN DEVELOPMENT; SITE WILL LIKELY BE LOST TO DEVELOPMENT (2001; TREES EXTANT IN 2012 AERIALS).

### General:


### PLSS: T09N, R04E, Sec. 22 (M)

### Accuracy: specific area

### Area (acres): 8

### UTM: Zone-10 N4274836 E627651

### Latitude/Longitude: 38.61286 / -121.53381

### Elevation (feet): 15

### County Summary: Sacramento

### Quad Summary: Sacramento West (3812155)

### Sources:

- BRA00F0027 BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2000-06-25
- BRA01F0017 BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2001-06-23
- ROS93F0011 ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1993-07-01
Map Index Number: 50993
EO Index: 50993
Key Quad: Clarksburg (3812145)
Element Code: ABNKC19070
Occurrence Number: 1104
Occurrence Last Updated: 2013-05-10

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
Federal: None
State: Threatened

CNDDB Element Ranks:
Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2009-07-14
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2009-07-14
Occurrence Rank: Excellent

Owner/Manager: UNKNOWN
Trend: Unknown

Presence: Presumed Extant

Location:
WEST SIDE OF JEFFERSON BOULEVARD, 0.3 MILE SOUTH OF GAFFNEY AVENUE, 7 MILES SW OF SACRAMENTO.

Detailed Location:

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.

Threats:
BUSY ROAD POSES A THREAT TO BIRDS.

General:

PLSS: T06N, R04E, Sec. 06 (M)
Accuracy: specific area
Area (acres): 8

UTM: Zone-10 N4251476 E623692
Latitude/Longitude: 38.40296 / -121.58340
Elevation (feet): 1

County Summary:
Yolo
Clarksburg (3812145)

SOURCES:
BRA01F0018 BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2001-06-22

DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX

RES04F0041 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-08-03

RES05F0347 RESSEGUIE, L. (UNIVERSITY OF CALIFORNIA, BERKELEY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-08-18

RES06F0068 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2006-XX-XX
### California Natural Diversity Database

**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.

**Micro Habitat:**
Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

**Last Date Observed:** 2009-07-23

**Last Survey Date:** 2009-07-23

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
Along Elk Slough, from Co Rd 142 at Rd 144 North 0.6 miles, 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.

**Threats:**
Threatened by the influx of vineyards (1999).

**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.

**PLSS:**
- **T06N, R04E, Sec. 09 (M)**

**Accuracy:**
Specific area

**Area (acres):** 19

**UTM:**
- Zone-10 N 4249516 E 627284

**Latitude/Longitude:**
38.38480 / -121.54263

**Elevation (feet):** 5

**County Summary:**
Yolo

**Quad Summary:**
Clarksburg (3812145)

**Sources:**
- BRA99F0017 BRADBURY, M. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 1999-07-04
- DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009 -XX-XX

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-06-25  
**Last Survey Date:** 2003-06-25

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:** SOUTH SIDE OF ELK GROVE BOULEVARD, JUST WEST OF WYMARK DRIVE IN ELK GROVE.

**Detailed Location:**  

**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).

**Threats:**  
RESIDENTIAL DEVELOPMENT HAS REDUCED FORAGING & NESTING HABITAT. AIR PHOTOS SHOW SOME NEST TREES MAY HAVE BEEN REMOVED.

**General:**  

**PLSS:** T06N, R05E, Sec. 03 (M)  
**Accuracy:** specific area  
**Area (acres):** 8

**UTM:** Zone-10 N4252377 E638835  
**Latitude/Longitude:** 38.40886 / -121.40985  
**Elevation (feet):** 30

**County Summary:**
Sacramento  
Florin (3812144)

**Sources:**
- AMR02F0001 AMRHEIN, R. & C. DANOFF (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2002-06-04
- STO00F0011 STOWERS, C. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2000-05-31
- STO01F0019 STOWERS, C. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2001-05-20
**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**

- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**

- **Global:** G5
- **State:** S3

**General Habitat:**

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-07-16

**Last Survey Date:** 2003-07-16

**Owner/Manager:** RECLAMATION DISTRICT 1000

**Presence:** Presumed Extant

**Location:**

WEST SIDE OF NATOMAS EAST MAIN DRAINAGE CANAL, 0.1 MILE NORTH OF THE GARDEN HIGHWAY, SACRAMENTO.

**Detailed Location:**

NEST TREE WAS LOCATED ~500' NORTH OF PUMP STATION 1B AT THE GARDEN HIGHWAY/NATOMAS MAIN DRAINAGE CANAL JUNCTION.

**Ecological:**

NEST TREE WAS A LARGE SYCAMORE, ADJACENT TO A TREE CLUMP; SURROUNDED BY RIPARIAN SYCAMORES AND OAKS.

**Threats:**

**General:**

NEST WITH 1 JUVENILE OBSERVED ON 16 JUL 2003.

**PLSS:** T09N, R04E, Sec. 27 (M)  Accuracy: 80 meters  Area (acres): 0

**UTM:** Zone-10 N4274209 E628445  Latitude/Longitude: 38.60709 / -121.52481  Elevation (feet): 25

**County Summary:**

Sacramento  Sacramento West (3812155)  Quad Summary:

**Sources:**

GER03F0001  GERSON, R. (U.S. FISH AND WILDLIFE SERVICE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2003-07-16
Map Index Number: 52146
EO Index: 52146
Key Quad: Taylor Monument (3812165)
Element Code: ABNKC19070
Occurrence Number: 1257
Occurrence Last Updated: 2003-08-18

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
- Federal: None
- State: Threatened

CNDDDB Element Ranks:
- Global: G5
- State: S3

Rare Plant Rank:
- BLM_S-Sensitive
- IUCN_LC-Least Concern
- USFWS_BCC-Birds of Conservation Concern

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Micro Habitat:

Last Date Observed: 2003-06-30
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2003-06-30
Occurrence Rank: None

Owner/Manager: PVT
Trend: Decreasing

Presence: Possibly Extirpated

Location:
NORTH SIDE OF SAN JUAN ROAD, JUST EAST OF THE NORTHBOUND I-5 ONRAMP, NORTH NATOMAS AREA OF SACRAMENTO.

Detailed Location:

Ecological:
NEST TREE IS A COTTONWOOD, LOCATED WITHIN AN AGRICULTURAL WINDBREAK OF COTTONWOODS AND SNAGS.

Threats:
THREATENED BY DEVELOPMENT; NEST TREE SCHEDULED FOR REMOVAL TO PROVIDE FOR CONSTRUCTION OF EAST COMMERCE WAY.

General:
2 ADULTS AND 2 JUVENILES OBSERVED ON 30 JUN 2003.

PLSS:
- T09N, R04E, Sec. 14 (M)

Accuracy: 80 meters
Area (acres): 0

UTM:
- Zone-10 N4276573 E629143

Latitude/Longitude: 38.62829 / -121.51635
Elevation (feet): 10

County Summary:
Sacramento
Taylor Monument (3812165)

Sources:
- CRI03F0001 CRIBBS, H. (CRIBBS AND ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2003-06-30
- CRI03U0001 CRIBBS, H. (CRIBBS AND ASSOCIATES, INC.) - "WILDLIFE CERTIFICATION RE: CONSTRUCTION ACTIVITIES AT ALLEGHANY PROPERTIES INC'S NATOMAS CROSSING-AREA 3, IN NORTH NATOMAS, CITY OF SACRAMENTO" 2003-06-30
Buteo swainsoni

Swainson's hawk

Federal: None
State: Threatened

Global: G5
State: S3

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Natural/Native occurrence
Excellent
Unknown

WEST SIDE OF JEFFERSON BOULEVARD (HIGHWAY 84), 0.4 MILE SOUTH OF BABEL SLOUGH, 3 MILES NW OF CLARKSBURG.

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).

NEST TREE WAS AN OAK; SURROUNDED BY ALFALFA TO THE NORTH AND SOUTH.

NEST SITE MONITORED 28 MAR-3 AUG 2004; 3 YOUNG FLEDGED. NEST MONITORED 20 APR-9 AUG 2005; 1 FLEDGED.

T07N, R04E, Sec. 19 (M) Accuracy: 80 meters Area (acres): 0
Zone-10 N4255589 E623534 Latitude/Longitude: 38.44004 / -121.58449 Elevation (feet): 5

Clarksburg (3812145)

RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-08-03
RESSEGUIE, L. (UNIVERSITY OF CALIFORNIA, BERKELEY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-08-09
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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Last Survey Date:** 2007-XX-XX

**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
ALONG JEFFERSON BOULEVARD (HIGHWAY 84), ABOUT 0.9 MILES 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).

**Threats:**  
**General:**  

**PLSS:** T07N, R04E, Sec. 30 (M)  
**Accuracy:** specific area  
**Area (acres):** 11

**UTM:** Zone-10 N4254832 E623701  
**Latitude/Longitude:** 38.43319 / -121.58271  
**Elevation (feet):** 5

**County Summary:**  
Yolo  
Clarksburg (3812145)

**Sources:**  
EST08R0001  
ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX

RES04F0036  
RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-08-11

RES05F0345  
RESSEGUIE, L. (UNIVERSITY OF CALIFORNIA, BERKELEY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-08-18
**Map Index Number:** 56577  
**EO Index:** 56593  
**Key Quad:** Clarksburg (3812145)  
**Element Code:** ABNKC19070  
**Occurrence Number:** 1336  
**Occurrence Last Updated:** 2012-12-20

**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-05-14  
**Last Survey Date:** 2009-05-14  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
WEST SIDE OF JEFFERSON BOULEVARD (HIGHWAY 84) AND ALONG THE SOUTH OF BABEL SLOUGH, 3.25 MILES NW OF CLARKSBURG.

**Detailed Location:**  

**Ecological:**  

**Threats:**

**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. ATLEAST 1, MAYBE 2, ACTIVE NESTS OBSERVED IN 2009; SUCCESS UNKNOWN.

**PLSS:**  
T07N, R04E, Sec. 19 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 17

**UTM:**  
Zone-10 N4256253 E623559  
**Latitude/Longitude:** 38.44602 / -121.58409  
**Elevation (feet):** 5

**County Summary:**  
Yolo  
**Quad Summary:**  
Clarksburg (3812145)

**Sources:**

- DWR11D0001  
  CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
- RES04F0037  
  RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-08-03
- RES05F0344  
  RESSEGUIE, L. (UNIVERSITY OF CALIFORNIA, BERKELEY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-07-13
- SCO92F0027  
  SCOONOVER, R. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1992-04-21
Map Index Number: 56578  
EO Index: 56594  
Key Quad: Clarksburg (3812145)  
Element Code: ABNKC19070  
Occurrence Number: 1337  
Occurrence Last Updated: 2011-09-29

Scientific Name: Buteo swainsoni  
Common Name: Swainson's hawk

Listing Status:  
Federal: None  
State: Threatened

CNDDDB Element Ranks:  
Global: G5  
State: S3

General Habitat:  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2005-08-18  
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2005-08-18  
Occurrence Rank: Good

Owner/Manager: UNKNOWN  
Trend: Unknown

Presence: Presumed Extant

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.

Threats:  
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.

PLSS: T07N, R04E, Sec. 30 (M)  
Accuracy: 80 meters  
Area (acres): 0

UTM: Zone-10 N4253879 E623706  
Latitude/Longitude: 38.42461 / -121.58282  
Elevation (feet): 5

County Summary:  
Yolo  
Clarksburg (3812145)

Sources:  
RES04F0038 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-08-03  
RES05F0343 RESSEGUIE, L. (UNIVERSITY OF CALIFORNIA, BERKELEY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-08-18
Map Index Number: 56579
Key Quad: Clarksburg (3812145)
Occurrence Number: 1338
EO Index: 56595
Element Code: ABNKC19070
Occurrence Last Updated: 2013-01-24

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2007-XX-XX
Last Survey Date: 2007-XX-XX

Presence: Presumed Extant

Location:
NORTH SIDE OF CLARKSBURG ROAD, 0.3 MILE WEST OF JEFFERSON BOULEVARD, 3 MILES WEST OF CLARKSBURG.

Detailed Location:

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.

Threats:
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.

PLSS:
T07N, R03E, Sec. 36 (M)

Accuracy: specific area
Area (acres): 9

UTM: Zone-10 N4252769 E623215
Latitude/Longitude: 38.41467 / -121.58863
Elevation (feet): 5

County Summary:
Yolo
Clarksburg (3812145)

Sources:
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
RES04F0039 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-07-27
RES05F0342 RESSEGUIE, L. (UNIVERSITY OF CALIFORNIA, BERKELEY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-07-28
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 56581  
**EO Index:** 56597  
**Key Quad:** Clarksburg (3812145)  
**Occurrence Number:** 1339  
**Occurrence Last Updated:** 2013-05-10

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-07-14  
**Last Survey Date:** 2009-07-14  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
ALONG WILLOW POINT ROAD, ABOUT 0.5 MILES EAST OF JEFFERSON BOULEVARD & 2.25 MILES WNW OF CLARKSBURG.

**Detailed Location:**  

**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.

**Threats:**  
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 8 MAR-18 AUG; NO YOUNG DETECTED. 2009: ACTIVITY OBS AROUND NEST ON 14 JUL, NO YOUNG DETECTED.

**PLSS:** T07N, R04E, Sec. 29 (M)  
**Accuracy:** specific area  
**Area (acres):** 14

**UTM:** Zone-10 N4254428 E624586  
**Latitude/Longitude:** 38.42943 / -121.57264  
**Elevation (feet):** 5

**County Summary:** Yolo  
**Quad Summary:** Clarksburg (3812145)

**Sources:**  
- DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX  
- RES04F0040 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-08-03  
- RES05F0341 RESSEGUIE, L. (UNIVERSITY OF CALIFORNIA, BERKELEY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-08-18
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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2004-08-03  
**Last Survey Date:** 2005-07-28

**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**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.

**Threats:**

**General:**  

**PLSS:** T07N, R04E, Sec. 28 (M)  
**Accuracy:** 80 meters

**UTM:** Zone-10 N4254036 E627097  
**Latitude/Longitude:** 38.42554 / -121.54396  
**Elevation (feet):** 5

**County Summary:** Yolo  
**Quad Summary:** Clarksburg (3812145)

**Sources:**
- RES04F0042 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-08-03  
- RES05F0340 RESSEGUIE, L. (UNIVERSITY OF CALIFORNIA, BERKELEY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-07-28
**Map Index Number:** 56590  
**EO Index:** 56606

**Key Quad:** Sacramento West (3812155)  
**Element Code:** ABNKC19070

**Occurrence Number:** 1343  
**Occurrence Last Updated:** 2011-09-29

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<th>Detailed Location:</th>
<th>RESSEGUIE'S SACRAMENTO WEST 2. 2004 NEST WAS AT THE 85% HEIGHT, ON THE NORTH SIDE OF A BLACK WALNUT IN THE MIDDLE OF THE SOUTH EDGE OF THE FORMER FARMSTEAD AT 3975 JEFFERSON BOULEVARD.</th>
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<tr>
<th>Ecological:</th>
<th>NEST TREE WAS A BLACK WALNUT; SURROUNDED BY RUDERAL AND ABANDONED ALFALFA.</th>
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<tr>
<th>Threats:</th>
<th>THREATENED BY IMMINENT DEVELOPMENT.</th>
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<tr>
<th>General:</th>
<th>NEST SITE MONITORED 6 JUN-3 AUG 2004; INCUBATION, BUT NO YOUNG FLEDGED. NEST SITE MONITORED 29 MAR-28 JUL 2005; ONLY PERCHING SWHA OBSERVED DURING 4 VISITS.</th>
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<tr>
<td>Quad Summary:</td>
<td>Sacramento West (3812155)</td>
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**Sources:**
- RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2004-08-03
- RESSEGUIE, L. (UNIVERSITY OF CALIFORNIA, BERKELEY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-07-28
Sources:  
DFG09D0001  CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX  
RES05F0018  RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-08-09
**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

<table>
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<th>Scientific Name:</th>
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<tr>
<td>Common Name:</td>
<td>Swainson's hawk</td>
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<tr>
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**General Habitat:**
- BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
- REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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<td>Presence:</td>
<td>Presumed Extant</td>
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<tr>
<td>Location:</td>
<td>SOUTH SHOULDER OF CENTRAL AVENUE, 0.3 MILE EAST OF Z LINE ROAD, 4.5 MILES WSW OF CLARKSBURG.</td>
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<tr>
<td>Detailed Location:</td>
<td>NEST LOCATED AT THE 80% HEIGHT, SOUTH OF CENTER, OF THE EASTMOST SHOULDER TREE.</td>
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<tr>
<td>Ecological:</td>
<td>NEST TREE IS A BLACK WALNUT.</td>
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<tr>
<td>Threats:</td>
<td>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.</td>
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<td>Clarksburg (3812145)</td>
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**Sources:**
- RES05F0030 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-07-28
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 62366  
**EO Index:** 62403  
**Element Code:** ABNKC19070

**Key Quad:** Clarksburg (3812145)  
**Occurrence Number:** 1462  
**Occurrence Last Updated:** 2005-08-23

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2005-07-13  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2005-07-13  
**Occurrence Rank:** Excellent

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant  
**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.

**Threats:**  
NESTING STRONGLY SUSPECTED IN 2004, BUT NEVER CONFIRMED. NEST MONITORED 20 APR-13 JUL 2005; 2 FLEDGED.

**PLSS:** T07N, R04E, Sec. 29 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4254304 E625886  
**Latitude/Longitude:** 38.42814 / -121.55777  
**Elevation (feet):** 3

**County Summary:**  
Yolo  
**Quad Summary:** Clarksburg (3812145)

**Sources:**  
RES05F0031  
RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-07-13
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| Scientific Name:       | Buteo swainsoni |
| Common Name:           | Swainson's hawk |

| Listing Status:        | Federal: None |
| State:                 | Threatened   |

| CNDDB Element Ranks:   |
| Global:                | G5 |
| State:                 | S3 |

| General Habitat:       |
| BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. |

| Micro Habitat:         |
| REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS. |

| Last Date Observed:    | 2009-04-15 |
| Last Survey Date:      | 2009-04-15 |
| Owner/Manager:         | PVT |
| Presence:              | Presumed Extant |

| Location:              |
| ALONG TULE ROAD, ABOUT 0.4 MILES SOUTH OF CLARKSBURG ROAD INTERSECTION & 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. |

| Threats:               |
| 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. |

| PLSS:                  | T07N, R04E, Sec. 33 (M) |
| Accuracy:              | specific area |
| Area (acres):          | 10 |

| UTM:                   | Zone-10 N4252223 E626154 |
| Latitude/Longitude:    | 38.40935 / -121.55507 |
| Elevation (feet):      | 3 |

| County Summary:        |
| Yolo                   | Clarksburg (3812145) |

| Sources:               |
| DFG09D0001             | CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX |
| RES05F0032             | RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-07-13 |
### Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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#### Scientific Name: Buteo swainsoni

**Common Name:** Swainson's hawk

**Listing Status:**
- Federal: None
- State: Threatened

**CNDDDB Element Ranks:**
- Global: G5
- State: S3

#### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

#### Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

#### Last Date Observed:
2009-05-18

#### Last Survey Date:
2009-05-18

#### Owner/Manager:
PVT

#### Presence:
Presumed Extant

#### Location:
NORTH SIDE OF CENTRAL AVENUE, JUST EAST OF MAIN SLOUGH (=MAIN DRAINAGE CANAL), ABOUT 2.6 MILES SW OF CLARKSBURG.

**Detailed Location:**

**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.

**Threats:**
NEST MONITORED 29 MAY-28 JUL 2005; 1 FLEDGED. ACTIVE NEST WITH INCUBATION OBSERVED ON 18 MAY 2009.

**General:**
NEST MONITORED 29 MAY-28 JUL 2005; 1 FLEDGED. ACTIVE NEST WITH INCUBATION OBSERVED ON 18 MAY 2009.

**PLSS:** T06N, R04E, Sec. 05 (M)

**UTM:** Zone-10 N4250714 E625080

**Accuracy:**
- specific area

**Area (acres):** 10

**Latitude/Longitude:** 38.39590 / -121.56764

**Elevation (feet):** 1

**County Summary:**
- Yolo
- Clarksburg (3812145)

**Sources:**
- DFG09D0001  CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX
- RES05F0033  RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-07-28
Map Index Number: 62531
EO Index: 62568
Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk
Listing Status: Federal: None
State: Threatened
CNDDDB Element Ranks: Global: G5
State: S3
General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2007-XX-XX
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2007-XX-XX
Occurrence Rank: Good

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.

Threats:
NEST SITE MONITORED 14 JUL-18 AUG 2005; NO NEST FOUND, BUT 2 YOUNG FLEDGED. NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.

PLSS: T07N, R04E, Sec. 08 (M)
UTM: Zone-10 N4258748 E625235
Accuracy: 80 meters
Latitude/Longitude: 38.46826 / -121.56443
Area (acres): 0
Elevation (feet): 10

County Summary:
Yolo
Clarksburg (3812145)

Sources:
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
RES05F0046 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-08-18
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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNDDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX

**Last Survey Date:** 2007-XX-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**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.

**Threats:**  
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.

**PLSS:** T07N, R04E, Sec. 17 (M)  
**Accuracy:** 80 meters

**UTM:** Zone-10 N4258193 E624931  
**Latitude/Longitude:** 38.46330 / -121.56802

**Elevation (feet):** 10

**Yolo County Summary:**  
Clarksburg (3812145)

**Sources:**  
- EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX  
- RES05F0047 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-08-09
Map Index Number: 62634
EO Index: 62671
Key Quad: Rio Linda (3812164)
Element Code: ABNKC19070
Occurrence Number: 1487
Occurrence Last Updated: 2013-03-26

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
   Federal: None
   State: Threatened

Rare Plant Rank:
   Other Lists: BLM_S-Sensitive
               IUCN_LC-Least Concern
               USFWS_BCC-Birds of Conservation Concern

CNDDDB Element Ranks:
   Global: G5
   State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2001-07-02
Last Survey Date: 2001-07-02
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
SOUTH OF LOCUST ROAD, 0.2 MILES SOUTH OF THE INTERSECTION OF BROWNING STREET AND LOCUST ROAD, 2 MILES NORTH OF ELVERTA.

Detailed Location:

Ecological:
NEST TREE WAS A 50' EUCALYPTUS; SURROUNDED BY RESIDENTIAL TO THE NE AND NW, AND GRASSLAND TO THE SE AND SW.

Threats:
General:
3 ADULTS PRESENT ON 13 APR 2001; 1 ADULT IN THE NEST AND 1 DELIVERING STICKS. ON 2 JUL 2001, THERE WERE 2 ALMOST COMPLETELY FEATHERED YOUNG IN THE NEST.

PLSS: T10N, R05E, Sec. 07 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4289374 E633047
Latitude/Longitude: 38.74304 / -121.46907
Elevation (feet): 55

County Summary:
Placer
Rio Linda (3812164)

Sources:
DFG05U0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - ACCESS DATABASE & EXCEL TABLE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004, 2005-XX-XX
GIF01F0002 GIFFORD, D. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2001-04-13
Map Index Number: 62976
Key Quad: Sacramento West (3812155)
Occurrence Number: 1541
Occurrence Last Updated: 2013-04-05

Scientific Name: *Buteo swainsoni*
Common Name: Swainson’s hawk

Listing Status: Federal: None  
State: Threatened

CNDDB Element Ranks: Global: G5  
State: S3

General Habitat: BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2009-06-10
Last Survey Date: 2009-06-10
Owner/Manager: DFG-YOLO BYPASS WA
Presence: Presumed Extant

Location: ALONG THE EAST BOUNDARY OF THE YOLO BASIN WILDLIFE AREA, ABOUT 0.4 MI W OF OATES STREET AT RAMOS DRIVE, WEST SACRAMENTO.

Detailed Location: MAPPED TO COORDINATES GIVEN IN CDFW NEST RECORDS, AND FOR SITE YO-72 FROM ESTEP’S 2008 REPORT.

Ecological:

Threats:
GENERAL:
ACTIVE NEST OBSERVED 6 MAY 2003 WAS SUBSEQUENTLY DESTROYED IN A WIND STORM. ACTIVE NEST OBS ON 28 APR 2004. ACTIVE NEST OBS DURING 2007 SURVEY; NESTING OUTCOME UNKNOWN. NEST WITH YOUNG OBS ON 10 JUN 2009; FLEDGING SUCCESS UNKNOWN.

PLSS: T08N, R04E, Sec. 18 (M)  
Accuracy: nonspecific area  
Area (acres): 19

UTM: Zone-10 N4267392 E623207  
Latitude/Longitude: 38.54642 / -121.58615  
Elevation (feet): 15

County Summary: Yolo
Sacramento West (3812155)

Sources:


DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON’S HAWK NEST RECORDS FROM 2009. 2009-XX-XX

EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON’S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 62991  
**EO Index:** 63064  
**Key Quad:** Clarksburg (3812145)  
**Occurrence Number:** 1545  
**Occurrence Last Updated:** 2012-12-21  
**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk  
**Listing Status:**  
- **Federal:** None  
- **State:** Threatened  

**CNNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3  

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-04-28  
**Last Survey Date:** 2009-04-28  
**Owner/Manager:** DFG-YOLO BYPASS WA, UNKNOWN  
**Presence:** Presumed Extant  
**Location:** YOLO BYPASS WILDLIFE AREA, 1.75 MILES SE OF THE INTERSECTION OF ROAD 34A & ROAD 106A, 5 MILES SE OF DAVIS.

**Detailed Location:**  

**Ecological:**  
2004: NEST TREE WAS IN A COTTONWOOD GROVE SURROUNDED BY ROW CROPS IN ALL DIRECTIONS. 2009: NEST IN 25' WILLOW SURROUNDED BY CROPLAND.

**Threats:**

**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.

**PLSS:** T08N, R03E, Sec. 35 (M)  
**Accuracy:** specific area  
**Area (acres):** 10  
**UTM:** Zone-10 N4261778 E620277  
**Latitude/Longitude:** 38.49624 / -121.62073  
**Elevation (feet):** 10  
**County Summary:** Yolo  
**Quad Summary:** Clarksburg (3812145), Saxon (3812146)

**Sources:**

- **DFG09D0001** CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX
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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:** Federal: None  
State: Threatened

**CNDDB Element Ranks:** Global: G5  
State: S3

**General Habitat:** BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:** REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2002-07-18  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2002-07-18  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Location:** EAST EDGE OF AMERICAN BASIN, 1.1 MILES SW OF THE INTERSECTION OF ELKHORN BOULEVARD & WEST 6TH STREET, WEST OF RIO LINDA.

**Detailed Location:**

**Ecological:** NEST TREE WAS A VALLEY OAK, WITH THE NEST LOW IN THE NEST TREE; SURROUNDED BY ROW CROPS TO THE NW AND SW, AND RIPARIAN TO THE NE AND SE.

**Threats:**

**General:** NEST SITE ACTIVE ON 19 APR, 6 JUN, AND 18 JUL 2002; 1 PARTIALLY-FEATHERED CHICK PRESENT IN NEST ON 6 JUN 2002, AND 2 ADULTS AND 1 JUVENILE FORAGING ON 18 JUL 2002.

**PLSS:** T10N, R04E, Sec. 36 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4282014 E631041  
**Latitude/Longitude:** 38.67703 / -121.49353  
**Elevation (feet):** 18

**County Summary:** Sacramento

**Quad Summary:** Rio Linda (3812164)

**Sources:**

DFG05U0001  
Buteo swainsoni

Swainson's hawk

Federal: None
State: Threatened

Global: G5
State: S3

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

General Habitat:

Last Date Observed: 2007-05-16
Last Survey Date: 2007-05-16
Owner/Manager: PVT-GENCORP AEROJET
Presence: Presumed Extant
Location: NORTH OF WHITE ROCK ROAD, 0.5 MILE EAST OF SUNRISE BOULEVARD, RANCHO CORDOVA.

Detailed Location:
NESTS WERE ALL LOCATED IN COTTONWOODS, WITH THE 2006-07 NEST TREE LOCATED ~1000' NORTH OF THE 2005 NEST TREE. SITE IS SURROUNDED BY COMMERCIAL DEVELOPMENT TO THE WEST, AND DREDGER TAILINGS TO THE NORTH, EAST, AND SOUTH.

Ecological:
NEST TREE WAS A COTTONWOOD, SURROUNDED BY SCATTERED COTTONWOODS AND OAKS, AND AN UNDERSTORY COMPOSED PRIMARILY OF DREDGER TAILINGS. ANNUAL GRASSES, THISTLES AND OTHER HERBACEOUS VEGETATE THE DREDGER TAILINGS.

Threats:

General:
IN 2005, A SWHA PAIR NESTED JUST NORTH OF WHITE ROCK ROAD. ON 8 JUN 2006, A FEMALE WAS OBSERVED ON A NEST IN A TREE 1000' NORTH OF THE 2005 NEST TREE. PAIR OBSERVED NESTING ON 16 MAY 2007 IN THE 2006 NEST TREE.

Accuracy: specific area
Area (acres): 17

Latitude/Longitude: 38.59290 / -121.25511
Elevation (feet): 130

PLSS: T09N, R07E, Sec. 31 (M)
UTM: Zone-10 N4273046 E651960

Sacramento

Carmichael (3812153)

BAL06F0001 BALLARD, A. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2006-06-08
BAL07F0001 BALLARD, A. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2007-05-16
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*
**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2006-06-23
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2006-06-23
**Occurrence Rank:** Excellent

**Owner/Manager:** UNKNOWN
**Trend:** Unknown

**Presence:** Presumed Extant

**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.

**Threats:**
THREATENED BY POTENTIAL FUTURE HOUSING DEVELOPMENT.

**General:**
2 ADULTS OBSERVED NEST-BUILDING ON 23 JUN 2006.

**PLSS:** T07N, R04E, Sec. 14 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4258381 E629442  
**Latitude/Longitude:** 38.46436 / -121.51629  
**Elevation (feet):** 7

**County Summary:** Yolo  
**Quad Summary:** Clarksburg (3812145)

**Sources:**  
TWE06F0003  
TWEEDY, C. & P. STONE (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2006-06-23
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson’s hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2005-05-15  
**Last Survey Date:** 2005-05-15  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Good  
**Location:**  
BETWEEN NATOMAS EAST MAIN DRAIN AND THE LOWER AMERICAN RIVER, 0.7 MILE EAST OF I-5, DISCOVERY PARK, SACRAMENTO.

**Detailed Location:**  
NEST SITE WAS LOCATED WITHIN A 23-MILE EXPANSE OF RIPARIAN PROTECTED BY THE AMERICAN RIVER PARKWAY. ~15 ACRES OF GRASSLAND FORAGING HABITAT IN THE VICINITY TO BE RESTORED TO RIPARIAN FOREST TO MITIGATE FOR VALLEY ELDERBERRY LONGHORN BEETLE.

**Ecological:**  
NEST TREE WAS A FREMONT COTTONWOOD WITHIN A LARGE STAND OF COTTONWOODS NEAR THE LOWER AMERICAN RIVER (RIGHT BANK).

**Threats:**  
THREATENED BY LONG-TERM LOSS OF LARGE NEST TREES (FIRE, SENESCENCE, & BANK EROSION) & LACK OF NATURAL TREE REGENERATION.

**General:**  
NEST WITH 2 ADULTS OBSERVED ON 15 MAY 2005.

**PLSS:**  
T09N, R04E, Sec. 25 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:**  
Zone-10 N4274052 E631106  
**Latitude/Longitude:** 38.60529 / -121.49429  
**Elevation (feet):**

**County Summary:**  
Sacramento  
Sacramento East (3812154)

**Sources:**  
BUR05F0002 BURWELL, T.A. (SACRAMENTO COUNTY PARKS) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-05-15
<table>
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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2006-06-06  
**Last Survey Date:** 2006-06-06  
**Owner/Manager:** SAC COUNTY-PARKS & REC  
**Presence:** Presumed Extant

**Location:**  
AMERICAN RIVER, 0.6 MILE UPSTREAM OF THE HOWE AVENUE BRIDGE, SACRAMENTO.

**Detailed Location:**  
NEST SITE IS LOCATED WITHIN A 23-MILE EXPANSE OF RIPARIAN PROTECTED BY THE AMERICAN RIVER PARKWAY. NEST TREE IS SITUATED AWAY FROM ACTIVE RECREATION USES, AND THERE IS NO ACCESS TO THIS SITE EXCEPT BY BOAT.

**Ecological:**  
NEST TREE WAS A FREMONT COTTONWOOD WITHIN A SMALL STAND OF COTTONWOODS ON A MID-CHANNEL ISLAND IN THE AMERICAN RIVER (LEFT BANK). SURROUNDING VEGETATION CONSISTS OF ARROYO WILLOW, YELLOW WILLOW, NARROW-LEAFED WILLOW, OREGON ASH, & SYCAMORE.

**Threats:**  
THREATENED BY LONG-TERM LOSS OF LARGE NEST TREES (FIRE, SENESCENCE, & BANK EROSION) & LACK OF NATURAL TREE REGENERATION.

**General:**  
2 ADULTS OBSERVED NESTING ON 6 JUN 2006.

**PLSS:** T08N, R05E, Sec. 11 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**UTM:** Zone-10 N4269368 E639522  
**Latitude/Longitude:** 38.56181 / -121.39861  
**Elevation (feet):** 25  
**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:**  
BUR06F0001 BURWELL, T.A. (SACRAMENTO COUNTY PARKS) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2006-06-06
**Occurrence Report**

California Department of Fish and Wildlife

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**Scientific Name:** Buteo swainsoni

**Common Name:** Swainson's hawk

**Listing Status:**

- Federal: None
- State: Threatened

**CNDDB Element Ranks:**

- Global: G5
- State: S3

**General Habitat:**

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2011-06-26

**Last Survey Date:** 2011-06-26

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**

BETWEEN I-5 AND SOUTH BAYOU WAY, 0.9 MILE EAST OF POWERLINE ROAD, SE OF SACRAMENTO METROPOLITAN AIRPORT.

**Detailed Location:**

MAPPED TO LOCATIONS FROM FIELD SURVEY FORMS. 2006 NEST SITE WAS ABOUT 100' S OF I-5. AREA ON WHICH THE NEST TREE IS FOUND IS UNCULTIVATED/UNDEVELOPED, POSSIBLY AN EXCESS LAND PARCEL OWNED BY CALTRANS.

**Ecological:**

2006 NEST IN 30' WILLOW IN RIPARIAN WOODLAND CONSISTING OF WILLOWS, SEASONAL DRAINAGE DITCH (SUPPORTING CATTAILS, BULRUSH, GRASSES, SEDGES) & RUDERAL GRASSLAND; PARCEL POSSIBLY OWNED BY CALTRANS. 2011 NEST IN WILLOW SURROUNDED BY GRASSLAND.

**Threats:**

DISTURBANCE FROM BIRDWATCHERS, THREAT FROM ENCROACHING DEVELOPMENT (2011).

**General:**

ADULTS FIRST OBSERVED IN COURTSHIP IN EARLY APR 2006; DURING THE FOLLOWING WEEK, NEST-BUILDING BEGAN. 2 YOUNG FLEDGED FROM THIS NEST BY 10 AUG 2006. NEST WITH TWO NEARLY-FLEDGED YOUNG OBSERVED ON 26 JUN 2011.

**PLSS:** T09N, R04E, Sec. 05 (M)

**Accuracy:** specific area

**Area (acres):** 10

**UTM:** Zone-10 N4281210 E625207

**Latitude/Longitude:** 38.67063 / -121.56073

**Elevation (feet):** 15

**County Summary:** Sacramento

**Quad Summary:** Taylor Monument (3812165)

**Sources:**

- CR06F0001 CRIIBBS, H. (CRIBBS AND ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2006-08-10
- CR06I0001 CRIIBBS, H. (CRIBBS AND ASSOCIATES, INC.) - IMAGES OF BUTEO SWAINSONI NEST SITE, ADULTS, AND 2006-08-10
- GRA11F0001 GRAY, F. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2011-06-26
**Occurrence Report**

California Department of Fish and Wildlife
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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**Rare Plant Rank:**  
BLM_S-Sensitive  
IUCN_LC-Least Concern  
USFWS_BCC-Birds of Conservation Concern

**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2006-05-02  
**Last Survey Date:** 2006-05-02

**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
ALONG LAGUNA CREEK, 0.2 MILE NNE OF THE CROSSING OF CALVINE ROAD OVER LAGUNA CREEK, ELK GROVE.

**Detailed Location:**  
NEST TREE IS TO BE PRESERVED DURING THE CONSTRUCTION OF A NEW NEW SCHOOL, BUT FORAGING AREA WILL BE LOST.

**Ecological:**  
NEST TREE IS A VALLEY OAK (30" DBH) LOCATED ADJACENT TO LAGUNA CREEK; SURROUNDED BY GRASSLAND/DRY FARMLAND, DOMINATED BY TAENIATHERUM CAPUT-MEDUSAE.

**Threats:**  
THREATENED BY LOSS OF FORAGING HABITAT TO DEVELOPMENT (CONSTRUCTION OF A NEW SCHOOL).

**General:**  
NEST WITH 2 ADULTS AND 1 JUVENILE OBSERVED ON 2 MAY 2006; NEST TREE WAS MONITORED FROM MAR-AUG 2006.

**PLSS:** T07N, R06E, Sec. 17 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4257626 E644616  
**Latitude/Longitude:** 38.45522 / -121.34259  
**Elevation (feet):** 58

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
STA06F0011, STACKHOUSE, E.L. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2006-05-02
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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| Scientific Name:                           | *Buteo swainsoni* |
| Common Name:                                | Swainson's hawk |
| Listing Status: Federal:                    | None |
| State:                                      | Threatened |
| CNDDB Element Ranks: Global:                | G5 |
| State:                                      | S3 |

| General Habitat:                           | BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. |
| Micro Habitat:                              | REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS. |

| Last Date Observed:                        | 2007-04-10 |
| Last Survey Date:                          | 2007-04-10 |
| Owner/Manager:                              | CITY OF ELK GROVE |
| Presence:                                   | Presumed Extant |
| Location:                                   | JUST NW OF THE INTERSECTION OF HIGHWAY 99 AND GRANT LINE ROAD, ALONG WEST STOCKTON BOULEVARD, ELK GROVE. |
| Detailed Location:                         | NEST TREE WAS LOCATED WITHIN A LINE OF OAKS AND EUCALYPTUS TREES BETWEEN WEST STOCKTON BOULEVARD AND HIGHWAY 99. |
| Ecological:                                 | NEST TREE WAS A BLUE-GUM EUCALYPTUS; ANNUAL GRASSLAND LIES TO THE WEST. |

| PLSS:                                       | T06N, R05E, Sec. 12 (M) |
| Accuracy:                                   | 80 meters |
| Area (acres):                               | 0 |
| UTM:                                        | Zone-10 N42499910 E642191 |
| Latitude/Longitude:                        | 38.38610 / -121.37193 |
| Elevation (feet):                           | 45 |

| County Summary:                             | Elk Grove (3812143) |

**Sources:**

CAL07F0001  CALDERARO, A. (PMC) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2007-04-06
| **Map Index Number:** | 69601 |
| **Key Quad:** | Sacramento West (3812155) |
| **Occurrence Number:** | 1689 |
| **EO Index:** | 70374 |
| **Element Code:** | ABNKC19070 |
| **Occurrence Last Updated:** | 2013-04-08 |

**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-06-28  
**Last Survey Date:** 2007-06-28  
**Owner/Manager:** PORT OF SACRAMENTO  
**Presence:** Presumed Extant

**Location:**  
JUST SW OF THE INTERSECTION OF HARBOR BOULEVARD AND INDUSTRIAL BOULEVARD, WEST SACRAMENTO.

**Detailed Location:**  
NEST TREE IS LOCATED ADJACENT TO THE ENTRANCE KIOSK AT THE PORT OF SACRAMENTO. SITE YO-36 FROM ESTEP'S 2008 REPORT.

**Ecological:**  
NEST TREE IS A PINE; SURROUNDED BY AN ACTIVE INDUSTRIAL PORT AND DEEP WATER CHANNEL. BIRDS LIKELY FORAGE IN THE YOLO BYPASS.

**Threats:**  
GENERAL:

**PLSS:** T08N, R04E, Sec. 04 (M)  
**UTM:** Zone-10 N4269956 E626288  
**Accuracy:** 80 meters  
**Latitude/Longitude:** 38.56909 / -121.55034  
**Elevation (feet):** 14  
**Area (acres):** 0

**County Summary:**  
Sacramento West (3812155)

**Sources:**  
BEE07A0001 SACRAMENTO BEE - SACRAMENTO BEE (NEWSPAPER) ARTICLE REGARDING SWHA PAIR NESTING AT THE PORT OF SACRAMENTO. 2007-06-29  
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX  
LAM07U0001 LAMARE, J. (FRIENDS OF SWAINSON'S HAWK) - MESSAGE POSTED ON THE FRIENDS OF SWAINSON'S HAWK LISTSERVE. 2007-06-20
### Map Index Number: 69763
### Key Quad: Clarksburg (3812145)
### Occurrence Number: 1693
### EO Index: 70572
### Element Code: ABNKC19070
### Occurrence Last Updated: 2007-08-20

#### Scientific Name: \textit{Buteo swainsoni}
#### Common Name: Swainson's hawk

#### Listing Status:
- **Federal:** None
- **State:** Threatened

#### CNDDB Element Ranks:
- **Global:** G5
- **State:** S3

#### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, 
& AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

#### Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

#### Last Date Observed: 2005-08-09
#### Last Survey Date: 2005-08-09
#### Owner/Manager: PVT
#### Presence: Presumed Extant

#### 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.

#### Threats:
**General:**

#### PLSS:
- **T07N, R04E, Sec. 17 (M)**

#### UTM:
- **Zone-10 N4257587 E624773**

#### County Summary:
- **Yolo**
- **Clarksburg (3812145)**

#### Sources:
RES05F0121 RESSEGUIE, L. - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) 2005-08-09
### Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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<td>1695</td>
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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.

**Micro Habitat:**  
Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

**Last Date Observed:** 2007-XX-XX  
**Last Survey Date:** 2007-XX-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
Along the Sacramento deep water channel, about 0.4 mile W of the junction of Jefferson Blvd & Burrows Ave.

**Detailed Location:**  
2 nest sites. South: mapped to nearest nesting habitat near coordinates given on 2001 survey form. North: mapped to coordinates given for site yo-37 from ESTEP's 2008 report.

**Ecological:**  
2001 nest tree was a 50' cottonwood; surrounded by row crops to the NE and SE, and fallow fields to the NW and SW.  
2007 nest tree was a cottonwood in channelized riparian habitat, adjacent to alfalfa, irrigated crops, and seasonal wetlands.

**Threats:**  
Threatened by development.

**General:**  
Active nest, incubation observed on 12 Apr 2001. Nest with 1 young observed during Jun-Aug 2007 survey; fledging success unknown.

**PLSS:** T08N, R04E, Sec. 30 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 22

**UTM:** Zone-10 N4263631 E623523  
**Latitude/Longitude:** 38.51250 / -121.58320  
**Elevation (feet):** 27

**County Summary:** Yolo  
**Quad Summary:** Sacramento West (3812155)

**Sources:**  
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX  
ROC01F0028 ROCCO, C. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2001-04-12
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 70106
Key Quad: Sacramento West (3812155)
Occurrence Number: 1697
EO Index: 70971
Element Code: ABNKC19070
Occurrence Last Updated: 2013-04-05

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2001-04-12
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2001-04-12
Occurrence Rank: Unknown

Owner/Manager: UNKNOWN
Trend: Unknown

Presence: Presumed Extant

Location:
ALONG THE EAST SIDE OF THE SACRAMENTO DEEPWATER CHANNEL, 0.85 MILE NW OF THE JUNCTION OF BURROWS AVE AND JEFFERSON BLVD.

Detailed Location:

Ecological:
1991 DETECTION OF FORAGING HAWK IN ALFALFA FIELDS TO NE. 2001 NEST TREE WAS A COTTONWOOD; SURROUNDED BY ROW CROPS TO THE NE AND SE, AND FALLOW FIELDS TO THE NW & SW. SINCE THE DETECTIONS, THE AGRICULTURAL LAND TO THE NE HAS BEEN DEVELOPED.

Threats:
FORAGING HABITAT IS BEING REDUCED BY DEVELOPMENT.

General:
1 SWAINSON'S HAWK OBSERVED FORAGING ON GROUND IN 1991. ACTIVE NEST, INCUBATION OBSERVED ON 12 APR 2001, OUTCOME UNKNOWN.

PLSS: T08N, R04E, Sec. 19 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4264747 E623545
Latitude/Longitude: 38.52255 / -121.58275
Elevation (feet): 30

County Summary:
Sacramento West (3812155)

Sources:
ROC01F0029 ROCCO, C. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2001-04-12
SCO91F0026 SCOONOVER, R. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1991-07-17
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNDDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2010-07-21  
**Last Survey Date:** 2010-07-21

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
WEST SIDE OF THE SACRAMENTO RIVER JUST SOUTH OF TOWER BRIDGE (CAPITAL MALL) AND 0.2 MILES SE OF RALEY FIELD, WEST SAC.

**Detailed Location:**  
MAPPED TO COORDINATES GIVEN FOR 2007 NEST, SITE YO-59 FROM ESTEP’S 2008 REPORT. 2008 AND 2010 NEST IN SAME LOCATION. NEST TREE WAS 400 FEET SOUTHEAST OF THE INTERSECTION OF BALLPARK DRIVE, 3RD STREET, & SOUTH RIVER ROAD IN WEST SACRAMENTO.

**Ecological:**  
NEST IN RIPARIAN COTTONWOOD IN URBAN SURROUNDINGS. DISTURBANCE FROM TRANSIENT CAMPSITES UNDER NEST, BASEBALL EVENT PARKING. UNKNOWN WHERE THESE BIRDS MIGHT FORAGE; IT SEEMS THE NEAREST FORAGING HABITAT IS OVER 3 MILES AWAY TO THE NW OR W.

**Threats:**  
PLANNED PEDESTRIAN TRAIL AND SCHEDULED DEVELOPMENT WOULD REDUCE IMMEDIATE MARGINAL FORAGING HABITAT (2010).

**General:**  
NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY; FLEDGING SUCCESS UNKNOWN. SIZEABLE CHICK WITH DARK BODY & WHITISH FACE IN AN OBVIOUS NEST OBSERVED IN 2008. NESTING PAIR MONITORED IN 2010; FLEDGED 2 YOUNG.

**PLSS:** T08N, R04E, Sec. 02 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4271054 E629739  
**Latitude/Longitude:** 38.57849 / -121.51054  
**Elevation (feet):** 30

**County Summary:**  
Sacramento West (3812155)

**Sources:**  
- ALVARADO, C. (PBS&J) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2010-04-26  
- ALVARADO, C. (PBS&J) - EMAIL REGARDING UPDATE FOR BUTEO SWAINSONI OCCURRENCE #1715 2010-07-21  
- ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX  
- LAMARE, J. - EMAIL FROM JUDE LAMARE TO PROTECT THE SWAINSON'S HAWK YAHOO! EMAIL GROUP (SNAWSIONSHAWK@YAHOOGROUPS.COM) ABOUT NEST WITH CHICK AT SAC RIVER AT O STREET ON WEST SAC SIDE. 2008-06-25
## Buteo swainsoni

### Listing Status:
- **Federal:** None
- **State:** Threatened

### CNDDDB Element Ranks:
- **Global:** G5
- **State:** S3

### General Habitat:
Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.

### Micro Habitat:
Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

### Scientific Name: Buteo swainsoni

### Common Name: Swainson's hawk

### Occurrence Number: 1769

### Occurrence Last Updated: 2011-12-16

### Scientific Name: Buteo swainsoni

### Common Name: Swainson's hawk

### Listing Status:
- **Federal:** None
- **State:** Threatened

### CNDDDB Element Ranks:
- **Global:** G5
- **State:** S3

### General Habitat:
Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.

### Micro Habitat:
Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

### Last Date Observed: 2011-04-27

### Last Survey Date: 2011-04-27

### Owner/Manager: SAC COUNTY-PARKS & REC

### Presence: Presumed Extant

### Location:
Along riparian strip (Steelhead Creek/Natomas East Main Drainage Canal) between Garden Hwy and American River Parkway Bike Path (Jedediah Smith Memorial Trail). Mapped to provided coordinates.

### Detailed Location:
South Side of Garden Hwy about 0.5 road miles west of Northgate Blvd, American River Parkway.

### Ecological:
Nest in cottonwood over water. Habitat described as cottonwood riparian, riverine, grassland, highway, residential, other birds detected nearby included northern harrier, white-tailed kite, American Kestrel, great egret, & great blue heron.

### Threats:
Potentially threatened by human disturbance associated with bike path, park, and recreation.

### General:
2 adults detected nesting on 27 Apr 2011 and the following behaviors were documented: perching on nest, food sharing, nest building, calling, perching near nest, soaring, chasing. Unknown if observations made on multiple dates.

### PLSS:
- **T09N, R04E, Sec. 25 (M)**
- **Area (acres):** 0

### UTM:
- **Zone-10 N4274349 E631812**
- **Elevation (feet):** 20

### Sources:
- CAH11F0001 CAHILL, K. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-WILDLIFE MANAGEMENT BRANCH) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2011-04-27
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 87650

**EO Index:** 88619

**Key Quad:** Florin (3812144)

**Occurrence Number:** 1881

**Occurrence Last Updated:** 2012-12-18

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

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**Listing Status:**

- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**

- **Global:** G5
- **State:** S3

**Landing Habitat:**

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

---

**Last Date Observed:** 2003-06-10

**Last Survey Date:** 2003-06-10

**Owner/Manager:** DPR-STONE LAKE PARK

**Presence:** Presumed Extant

**Location:**

STONE LAKE STATE PARK, ABOUT 0.9 MILES NNW OF I-5 AT HOOD FRANKLIN RD AND 2.3 MILES NE OF HOOD.

**Detailed Location:**


**Ecological:**

2003 NEST IN 50' COTTONWOOD SURROUNDED BY GRASSLAND.

**Threats:**

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.

**PLSS:** T06N, R04E, Sec. 12 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4249818 E632425

**Latitude/Longitude:** 38.38678 / -121.48373

**Elevation (feet):** 0

**County Summary:**

Sacramento

Fiorin (3812144)

**Sources:**

- ROS93F0008 ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1993-05-23
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-04-17

**Last Survey Date:** 2009-04-17

**Owner/Manager:** DPR-STONE LAKE PARK

**Presence:** Presumed Extant

**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:**

**Ecological:**
2003: NEST IN 45' WILLOW SURROUNDED BY PASTURE. 2009: HABITAT DESCRIBED AS RIPARIAN TREE(S).

**Threats:**

**PLSS:** T06N, R04E, Sec. 12 (M)

**UTM:** Zone-10 N4249537 E631338

**County Summary:**
Sacramento

**Accuracy:** nonspecific area

**Latitude/Longitude:** 38.38440 / -121.49622

**Elevation (feet):** 5

**Area (acres):** 8

**Sources:**
- DWR11D0001  CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.

**Micro Habitat:**
Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

**Last Date Observed:** 2009-05-05

**Last Survey Date:** 2009-05-05

**Owner/Manager:** DPR-STONE LAKE PARK

**Presence:** Presumed Extant

**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:**

**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).

**Threats:**
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.

**PLSS:** T06N, R04E, Sec. 12 (M)

**UTC:** Zone-10 N4250351 E631274

**Accuracy:** nonspecific area

**Area (acres):** 22

**Latitude/Longitude:** 38.39175 / -121.49681

**Elevation (feet):** 5

**County Summary:**
Sacramento

**Quad Summary:**
Flinor (3812144), Clarksburg (3812145)

**Sources:**
- DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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| EO Index:         | 88632 |
| Element Code:     | ABNKC19070 |
| Occurrence Last Updated: | 2012-12-17 |

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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**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.

**Threats:**  
THREATENED BY RESIDENTIAL DEVELOPMENT THAT REDUCED AVAILABLE FORAGING & NESTING HABITAT.

**General:**  
PAIR SITTING ON NEST WITH 2 FEATHERED YOUNG OBSERVED IN THE NEST ON 13 MAY 2003.

**PLSS:**  
T06N, R05E, Sec. 08 (M)  
Accuracy: 80 meters  
Area (acres): 0

**UTM:**  
Zone-10 N4249248 E635068  
Latitude/Longitude: 38.38124 / -121.45358  
Elevation (feet): 15

**County Summary:**  
Sacramento  
Florin (3812144)

**Sources:**  
DFG05U0001  
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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2002-07-18  
**Last Survey Date:** 2002-07-18  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  
**Location:** ABOUT 0.1 MILES 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.

**Threats:**  
TRACT HOUSING DEVELOPMENT JUST NORTH OF BILBY RD BUILT 2004-2005 HAS REDUCED AVAILABLE FORAGING & NESTING HABITAT.

**General:**  
1 CHICK BRANCHING ON 16 JUL; ACTIVE NEST REVISITED ON 18 JUL 2002.

**PLSS:**  
T06N, R05E, Sec. 15 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:**  
Zone-10 N4248983 E638030  
**Latitude/Longitude:** 38.37840 / -121.41974  
**Elevation (feet):** 25

**County Summary:**  
Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
Map Index Number: 87668  
EO Index: 88637  
Key Quad: Florin (3812144)  
Element Code: ABNKC19070  
Occurrence Number: 1886  
Occurrence Last Updated: 2012-12-17

**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-07-09  
**Last Survey Date:** 2009-07-09  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  
**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); SURROUNDED BY PASTURE 2009: NEST IN 40' EUCALYPTUS; FALLOW/RUDERAL LAND TO E, RESIDENTIAL TO W.

**Threats:**  
TRACT HOUSING DEVELOPMENT JUST WEST OF BRUCEVILLE RD BUILT 2004-2005 HAS REDUCED AVAILABLE FORAGING & NESTING HABITAT.

**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.

**PLSS:** T06N, R05E, Sec. 10 (M)  
**Accuracy:** specific area  
**Area (acres):** 15  
**UTM:** Zone-10 N4249493 E638349  
**Latitude/Longitude:** 38.38295 / -121.41598  
**Elevation (feet):** 25  
**County Summary:** Florin (3812144)

**Sources:**  
- DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 87670
Key Quad: Florin (3812144)
Occurrence Number: 1887
EO Index: 88639
Element Code: ABNKC19070
Occurrence Last Updated: 2012-12-17

Scientific Name: Buteo swainsoni
Common Name: Swainson’s hawk

Listing Status: Federal: None
State: Threatened

CNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2009-04-29
Last Survey Date: 2009-04-29
Owner/Manager: UNKNOWN
Presence: Presumed Extant

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.

Threats:
DEVELOPMENT OF TRACT HOUSING TO N AND W HAS REDUCED AVAILABLE FORAGING AND NESTING HABITAT.

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.

PLSS: T06N, R05E, Sec. 03 (M) Accuracy: specific area
UTM: Zone-10 N4250799 E638542 Latitude/Longitude: 38.39468 / -121.41352 Elevation (feet): 30

County Summary:
Sacramento Quad Summary:
Florin (3812144)

Sources:
DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON’S HAWK NEST RECORDS FROM 2009. 2009-XX-XX
## Swainson's Hawk

### Occurrence Report

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### Scientific Name

- **Buteo swainsoni**
- **Common Name:** Swainson's hawk

### Listing Status

- **Federal:** None
- **State:** Threatened

### CNNDB Element Ranks

- **Global:** G5
- **State:** S3

### General Habitat

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed

- 2003-06-26

### Last Survey Date

- 2003-06-26

### Owner/Manager

- PVT

### Presence

- Presumed Extant

### Location

FRANKLIN HIGH SCHOOL CAMPUS, ABOUT 0.5 MILES 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.

### Threats

DEVELOPMENT OF TRACT HOUSING IN SURROUNDING AREA HAS REDUCED AVAILABLE FORAGING AND NESTING HABITAT.

### General

1 FEATHERED CHICK OBSERVED IN NEST ON 19 JUL 2002. ADULTS SHADING 1 DOWNY CHICK IN NEST OBS ON 26 JUN 2003.

### PLSS

- T06N, R05E, Sec. 09 (M)

### UTM

- Zone-10 N4250325 E637377

### Accuracy

- 80 meters
- Area (acres): 0
- Elevation (feet): 25

### County Summary

- Sacramento

### Florin Summary

- Florin (3812144)

### Sources

**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*
**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-06-25
**Last Survey Date:** 2003-06-25
**Owner/Manager:** PVT
**Presence:** Presumed Extant
**Location:** WEST SIDE OF I-99 ABOUT 0.5 MILES 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.

**Threats:**
COMMERCIAL AND RESIDENTIAL DEVELOPMENT IN SURROUNDING AREA HAS REDUCED AVAILABLE FORAGING AND NESTING HABITAT.

**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.

**PLSS:** T06N, R05E, Sec. 01 (M)  
**Accuracy:** specific area  
**Area (acres):** 11

**UTM:** Zone-10 N4251624 E640814  
**Latitude/Longitude:** 38.40176 / -121.38734  
**Elevation (feet):** 40

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**
- STO01F0018 STOWERS, C. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2001-05-20
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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-06-25  
**Last Survey Date:** 2003-06-25

**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
ABOUT 0.2 MILES 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.

**Threats:**  
RESIDENTIAL AND COMMERCIAL DEVELOPMENT HAS REDUCED FORAGING & NESTING HABITAT.

**General:**  
ADULT MALE OBSERVED ON 18, 24, & 25 JUN; NEST WITH 1 DOWNY YOUNG OBS ON 25 JUN 2003. IF NOT EXTINGUISHED, THIS SITE IS HIGHLY DEGRADED (B. ACORD 5/2013).

**PLSS:** T06N, R05E, Sec. 03 (M)  
**UTM:** Zone-10 N4252148 E638012

**Accuracy:** 80 meters  
**Latitude/Longitude:** 38.40692 / -121.41932  
**Area (acres):** 0  
**Elevation (feet):** 25

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
DFG05U0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - ACCESS DATABASE & EXCEL TABLE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004, 2005-XX-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2002-04-02  
**Last Survey Date:** 2002-04-02  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
SOUTH SIDE OF ELK GROVE BOULEVARD ABOUT 0.6 MILES 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.

**Threats:**  
RESIDENTIAL DEVELOPMENT ELIMINATED FORAGING & NESTING HABITAT IN AREA; SUITABLE HABITAT OVER 1 MI TO THE SW AND SE.

**General:**  

**PLSS:**  
T06N, R05E, Sec. 04 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:**  
Zone-10 N4252261 E636352  
**Latitude/Longitude:** 38.40819 / -121.43831  
**Elevation (feet):** 20

**Sacramento**  
**Florin (3812144)**

**Sources:**  
LEW00F0010 LEWIS, K. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2000-07-24  
LEW00F0013 LEWIS, K. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2000-07-21
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-06-26  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2003-06-26  
**Occurrence Rank:** Poor

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**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.

**Threats:**  
RESIDENTIAL DEVELOPMENT HAS REPLACED FORAGING & NESTING HABITAT.

**General:**  
NEST WITH 1 DOWNY YOUNG OBSERVED ON 26 JUN 2003.

**PLSS:** T06N, R05E, Sec. 04 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4251575 E636275  
**Latitude/Longitude:** 38.40202 / -121.43932  
**Elevation (feet):** 20

**County Summary:**  
Sacramento

**Quad Summary:**  
Florin (3812144)

**Sources:**
DFG05U0001  
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 87684
EO Index: 88653
Key Quad: Florin (3812144)
Element Code: ABNKC19070
Occurrence Number: 1893
Occurrence Last Updated: 2012-12-18

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
Federal: None
State: Threatened

Rare Plant Rank:

CNDDDB Element Ranks:
Global: G5
State: S3

Occurrence Number: 1893
Occurrence Last Updated: 2012-12-18

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2003-05-13
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2003-05-13
Occurrence Rank: Unknown

Owner/Manager: PVT
Trend: Unknown

Presence: Presumed Extant

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.

Threats:
RESIDENTIAL DEVELOPMENT HAS REDUCED FORAGING & NESTING HABITAT.

General:
NEST WITH 2 FEATHERED YOUNG OBSERVED ON 13 MAY 2003.

PLSS: T06N, R05E, Sec. 05 (M)
Accuracy: 80 meters

UTM: Zone-10 N4251662 E635429
Latitude/Longitude: 38.40293 / -121.44898
Elevation (feet): 20

Area (acres): 0

County Summary:
Sacramento
Quad Summary:
Florin (3812144)

Sources:
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Buteo swainsoni**  
**Swainson's hawk**

### Scientific Name

- **Listing Status:**  
  - Federal: None  
  - State: Threatened  

- **CNDDDB Element Ranks:**  
  - Global: G5  
  - State: S3

### General Habitat

- **Occurrence Report**  
  - **Scientific Name:** Buteo swainsoni  
  - **Common Name:** Swainson's hawk  
  - **Map Index Number:** 87685  
  - **EO Index:** 88654  
  - **Key Quad:** Florin (3812144)  
  - **Occurrence Number:** 1894  
  - **Occurrence Last Updated:** 2013-02-21  
  - **Scientific Name:** Buteo swainsoni  
  - **Common Name:** Swainson's hawk  
  - **Listing Status:**  
    - Federal: None  
    - State: Threatened  
  - **CNDDDB Element Ranks:**  
    - Global: G5  
    - State: S3  
  - **General Habitat:** BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.
  - **Micro Habitat:** REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.
  - **Last Date Observed:** 2009-05-05  
  - **Last Survey Date:** 2009-05-05  
  - **Occurrence Type:** Natural/Native occurrence  
  - **Occurrence Rank:** Unknown  
  - **Trend:** Unknown

### Location

- **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

- **Ecological:** 2009: NEST IN COTTONWOOD TREE. SHRIKE NEST OBSERVED NEARBY. WETLAND PRESERVES AND RUDERAL FIELDS WEST OF I-5 USED AS FORAGING HABITAT.

### Threats

- **Threats:** SUITABLE HABITAT TO THE E HAS BEEN CONVERTED TO DENSE RESIDENTIAL HOUSING BEGINNING 1998.

### General

- **General:** FORAGING SWAINSON'S HAWKS OBSERVED IN 1992. NESTING SWHA OBS ON 21 APR & 5 MAY 2009. ADULT OBS ON NEST, NEST SUCCESS UNKNOWN.

### PLSS

- **PLSS:** T07N, R04E, Sec. 36 (M)  
  - **Accuracy:** 1/10 mile  
  - **Area (acres):** 0

### UTM

- **UTM:** Zone-10 N4252298 E632173  
  - **Latitude/Longitude:** 38.40916 / -121.48614  
  - **Elevation (feet):** 10

### County Summary

- **Sacramento**  
  - **Location:** Florin (3812144)  
  - **Quad Summary:**

### Sources

- DWR11D0001 - CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
- ROS92F0004 - ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1992-07-05
## Occurrence Report

**California Department of Fish and Wildlife**
**California Natural Diversity Database**

<table>
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<th>Map Index Number:</th>
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<tr>
<td>Key Quad:</td>
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<td>Occurrence Number:</td>
<td>1895</td>
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<tr>
<td>EO Index:</td>
<td>88655</td>
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<tr>
<td>Element Code:</td>
<td>ABNKC19070</td>
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<td>Occurrence Last Updated:</td>
<td>2012-12-18</td>
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### Scientific Name: Buteo swainsoni
- **Common Name:** Swainson's hawk
- **Listing Status:**
  - Federal: None
  - State: Threatened
- **CNDDB Element Ranks:**
  - Global: G5
  - State: S3
- **General Habitat:**
  - BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.
- **Micro Habitat:**
  - REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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<td>Last Survey Date:</td>
<td>2009-05-21</td>
</tr>
<tr>
<td>Owner/Manager:</td>
<td>UNKNOWN, USFWS-STONE LAKES NWR</td>
</tr>
<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
</tr>
<tr>
<td>Location:</td>
<td>ALONG CANAL PARALLELLING SOUTHERN PACIFIC RAILROAD, ABOUT 1 MI NW OF I-5 AT Elk Grove Blvd and 1.5 MI E OF CLARKSBURG.</td>
</tr>
</tbody>
</table>

### 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.

### Threats:
- 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.

### PLSS:
- T07N, R04E, Sec. 35 (M)

### UTM:
- Zone-10 N4253294 E630817
  - Accuracy: nonspecific area
  - Latitude/Longitude: 38.41833 / -121.50149
  - Area (acres): 70
  - Elevation (feet): 5

### Source:
- **DFG05U0001**
- **DWR11D0001**
  - CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
### Scientific Name: *Buteo swainsoni*

- **Common Name:** Swainson's hawk

### Listing Status:
- **Federal:** None
- **State:** Threatened

### CNDDB Element Ranks:
- **Global:** G5
- **State:** S3

### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Occurrence Data:
- **Last DateObserved:** 2009-04-30
- **Owner/Manager:** USFWS-STONE LAKES NWR
- **Presence:** Presumed Extant

### 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).

### Threats:
2 NESTING SWAINSON'S HAWKS OBSERVED ON 30 APR 2009.

### PLSS:
- **T07N, R04E, Sec. 36 (M)**
- **Accuracy:** 1/10 mile
- **Area (acres):** 0

### UTM:
- **Zone-10 N4253868 E631803**
- **Latitude/Longitude:** 38.42335 / -121.49009
- **Elevation (feet):** 10

### County Summary:
- **Sacramento**

### 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).

### Threats:
2 NESTING SWAINSON'S HAWKS OBSERVED ON 30 APR 2009.

### PLSS:
- **T07N, R04E, Sec. 36 (M)**
- **Accuracy:** 1/10 mile
- **Area (acres):** 0

### UTM:
- **Zone-10 N4253868 E631803**
- **Latitude/Longitude:** 38.42335 / -121.49009
- **Elevation (feet):** 10

### County Summary:
- **Sacramento**

### 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).

### Threats:
2 NESTING SWAINSON'S HAWKS OBSERVED ON 30 APR 2009.

### PLSS:
- **T07N, R04E, Sec. 36 (M)**
- **Accuracy:** 1/10 mile
- **Area (acres):** 0

### UTM:
- **Zone-10 N4253868 E631803**
- **Latitude/Longitude:** 38.42335 / -121.49009
- **Elevation (feet):** 10

### County Summary:
- **Sacramento**

### 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).

### Threats:
2 NESTING SWAINSON'S HAWKS OBSERVED ON 30 APR 2009.

### PLSS:
- **T07N, R04E, Sec. 36 (M)**
- **Accuracy:** 1/10 mile
- **Area (acres):** 0

### UTM:
- **Zone-10 N4253868 E631803**
- **Latitude/Longitude:** 38.42335 / -121.49009
- **Elevation (feet):** 10

### County Summary:
- **Sacramento**

### 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).

### Threats:
2 NESTING SWAINSON'S HAWKS OBSERVED ON 30 APR 2009.

### PLSS:
- **T07N, R04E, Sec. 36 (M)**
- **Accuracy:** 1/10 mile
- **Area (acres):** 0

### UTM:
- **Zone-10 N4253868 E631803**
- **Latitude/Longitude:** 38.42335 / -121.49009
- **Elevation (feet):** 10

### County Summary:
- **Sacramento**

### 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).

### Threats:
2 NESTING SWAINSON'S HAWKS OBSERVED ON 30 APR 2009.
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>Occurrence Number:</td>
<td>1897</td>
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| EO Index: | 88657 |
| Element Code: | ABNKC19070 |
| Occurrence Last Updated: | 2012-12-18 |

**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- Federal: None
- State: Threatened

**CNDDB Element Ranks:**
- Global: G5
- State: S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-07-XX

**Last Survey Date:** 2009-07-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**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 ALFALFA AND NEWLY-DISKED GRAIN FIELDS. 2003: NEST IN 70' COTTONWOOD WITH RIPARIAN TO THE WEST AND CROPLAND/FALLOW LAND TO THE EAST.

**Threats:**

**PLSS:** T07N, R04E, Sec. 25 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4255419 E631294

**Latitude/Longitude:** 38.43740 / -121.49563

**Elevation (feet):** 0

**County Summary:**
Sacramento

**Detailed Location:**
1992, 2009 DETECTIONS IN VICINITY. MAPPED TO COORDINATES FROM CDFW DATABASE OF 2000-2004 NEST RECORDS.

**Sources:**
CON09U0001 CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNS, AND A GREAT GRAY OWL 2009-08-07


SCO92FO025 SCOONOVER, R. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1992-07-20
**Occurrences Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>2012-12-18</td>
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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**

- Federal: None
- State: Threatened

**CNDDB Element Ranks:**

- Global: G5
- State: S3

**General Habitat:**

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-07-20

**Last Survey Date:** 2009-07-20

**Owner/Manager:** SRCSD-BUFFERLANDS

**Presence:** Presumed Extant

**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.

**Threats:**

General:

NEST WITH 1 YOUNG OBSERVED ON 14 MAY 2003. JUVENILE OBS IN AREA ON 20 JUL 2009, BUT NO NEST FOUND.

**PLSS:** T07N, R04E, Sec. 24 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4256354 E632425

**Latitude/Longitude:** 38.44566 / -121.48250

**Elevation (feet):** 0

**County Summary:**

Sacramento: Florin (3812144)

**Sources:**

- CON09U0001 CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNS, AND A GREAT GRAY OWL 2009-08-07
<table>
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<tr>
<td>Listing Status:</td>
<td>Federal: None</td>
<td>Rare Plant Rank:</td>
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<td>USFWS_BCC-Birds of Conservation Concern</td>
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<tr>
<th>General Habitat:</th>
<th>Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannas, &amp; agricultural or ranch lands with groves or lines of trees.</th>
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<tbody>
<tr>
<td>Micro Habitat:</td>
<td>Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.</td>
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<td>SRCSD-BUFFERLANDS</td>
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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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<tr>
<td>Location:</td>
<td>East side of I-5 on Beach Lake Rd, about 0.4 mi N of Morrison Creek Crossing &amp; 0.9 mi SE of Freeport Bridge.</td>
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<tr>
<td>Detailed Location:</td>
<td>Mapped to coordinates for 2009 Swainson's Hawk observations on Sacramento Regional Wastewater Treatment Plant Bufferlands. Location stated as &quot;NW shore of Meadowlark Lake.&quot;</td>
<td></td>
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<tr>
<td>Ecological:</td>
<td>Threats:</td>
<td></td>
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<td></td>
<td>General:</td>
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<tr>
<td></td>
<td>Nest with 1 downy chick observed Jun 2009; no activity on nest obs during 3 survey days in Jul.</td>
<td></td>
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| PLSS:             | T07N, R04E, Sec. 24 (M) | Accuracy: | 80 meters | Area (acres): | 0 |
| UTM:              | Zone-10 N4256361 E631760 | Latitude/Longitude: | 38.44582 / -121.49011 | Elevation (feet): | 5 |
| County Summary:   | Sacramento | Quad Summary: | Florin (3812144) |
| Sources:          | CON09U0001 | CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNS, AND A GREAT GRAY OWL 2009-08-07 |
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 87691

**Key Quad:** Florin (3812144)

**Occurrence Number:** 1900

**EO Index:** 88660

**Element Code:** ABNKC19070

**Occurrence Last Updated:** 2012-12-18

---

**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**

- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**

- **Global:** G5
- **State:** S3

**General Habitat:**

Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.

**Micro Habitat:**

Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

---

**Last Date Observed:** 2009-07-XX

**Last Survey Date:** 2009-07-XX

**Owner/Manager:** SRCSD-BUFFERLANDS

**Presence:** Presumed Extant

**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.

**Threats:**

Two active nests monitored from May-Jul 2009; each fledged 2 young.

**PLSS:**

- **T07N, R05E, Sec. 18 (M)**

**Accuracy:** specific area

**Area (acres):** 10

**PLSS:**

- **Zone-10 N4257621 E633091**

**Latitude/Longitude:** 38.45697° / -121.47463°

**Elevation (feet):** 5

---

**Sources:**

CON09U0001  CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNS, AND A GREAT GRAY OWL 2009-08-07
### Scientific Name: Buteo swainsoni

**Common Name:** Swainson's hawk

**Listed Status:**
- **Federal:** None
- **State:** Threatened

**CNDDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-07-XX

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Unknown

**Owner/Manager:** SRCSD

**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 GODDING'S WILLOW.

**Threats:**
ACTIVE NEST MONITORED MAY-JUL 2009; NEST FLEDGED 3 YOUNG.

**PLSS:** T07N, R05E, Sec. 18 (M)  
**Accuracy:** 80 meters  
**UTM:** Zone-10 N4257425 E639977  
**Latitude/Longitude:** 38.45507 / -121.46429  
**Elevation (feet):** 5

**County Summary:**
Sacramento  
**Quad Summary:**  
Florin (3812144)

**Sources:**
CON09U0001  CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNs, AND A GREAT GRAY OWL 2009-08-07
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 87696  
**EO Index:** 88669

**Key Quad:** Florin (3812144)  
**Element Code:** ABNKC19070

**Occurrence Number:** 1902  
**Occurrence Last Updated:** 2012-12-19

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-07-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2009-07-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** SRCSD-BUFFERLANDS  
**Trend:** Unknown

**Presence:** Presumed Extant

**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:**  
**Threats:**

**General:**  
ACTIVE NEST MONITORED MAY-JUL 2009; TWO YOUNG FLEDGED.

**PLSS:** T07N, R05E, Sec. 20 (M)  
**Accuracy:** 80 meters

**UTM:** Zone-10 N4256488 E634902  
**Latitude/Longitude:** 38.44650 / -121.45410

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
CON09U0001  
CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNs, AND A GREAT GRAY OWL 2009-08-07

---

**Sacramento**

---

**Florin (3812144)**

---

**Geographic Index Number:** 87696  
**EO Index:** 88669

**Key Quad:** Florin (3812144)  
**Element Code:** ABNKC19070

**Occurrence Number:** 1902  
**Occurrence Last Updated:** 2012-12-19

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-07-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2009-07-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** SRCSD-BUFFERLANDS  
**Trend:** Unknown

**Presence:** Presumed Extant

**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:**  
**Threats:**

**General:**  
ACTIVE NEST MONITORED MAY-JUL 2009; TWO YOUNG FLEDGED.

**PLSS:** T07N, R05E, Sec. 20 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4256488 E634902  
**Latitude/Longitude:** 38.44650 / -121.45410  
**Elevation (feet):** 15

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
CON09U0001  
CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNs, AND A GREAT GRAY OWL 2009-08-07

---

**Sacramento**

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**Florin (3812144)**

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**Geographic Index Number:** 87696  
**EO Index:** 88669

**Key Quad:** Florin (3812144)  
**Element Code:** ABNKC19070

**Occurrence Number:** 1902  
**Occurrence Last Updated:** 2012-12-19

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-07-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2009-07-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** SRCSD-BUFFERLANDS  
**Trend:** Unknown

**Presence:** Presumed Extant

**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:**  
**Threats:**

**General:**  
ACTIVE NEST MONITORED MAY-JUL 2009; TWO YOUNG FLEDGED.

**PLSS:** T07N, R05E, Sec. 20 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4256488 E634902  
**Latitude/Longitude:** 38.44650 / -121.45410  
**Elevation (feet):** 15

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
CON09U0001  
CONARD, C. - COORDINATES FOR SWAINSON'S HAWKS, LEAST TERNs, AND A GREAT GRAY OWL 2009-08-07
**Occurrence Report**
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 1990-04-20  
**Last Survey Date:** 1990-04-20

**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
BIG HORN ROAD JUST EAST OF BRUCEVILLE ROAD INTERSECTION, ABOUT 0.9 MILES 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.

**Threats:**  
RESIDENTIAL DEVELOPMENT HAS REDUCED FORAGING AND NESTING HABITAT IN THE VICINITY (2012).

**General:**  
2 ADULTS AND 1 JUVENILE SEEN AT NEST ON 20 APR 1990.

**PLSS:** T07N, R05E, Sec. 27 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4254778 E638245  
**Latitude/Longitude:** 38.43057 / -121.41613  
**Elevation (feet):** 25

**County Summary:**  
Sacramento  
**Florin (3812144)**

**Sources:**  
DFG94U0003  
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<td>Location:</td>
<td>NORTH SIDE OF SHASTA AVE ABOUT 0.2 MILES E OF BRUCEVILLE RD INTERSECTION &amp; 0.3 MILES W OF W STOCKTON BLVD, ELK GROVE.</td>
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<td>Detailed Location:</td>
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<td>Ecological:</td>
<td>2004 NEST IN 100' EUCALYPTUS WITH RESIDENTIAL TO SOUTH AND FALLOW/RUDERAL TO NORTH. SUBSEQUENTLY TENNIS COURTS, PARK &amp; LIBRARY WERE BUILT ON LAND W AND SW OF NEST SITE (FROM AERIALS).</td>
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**Sources:**

DFG05U0001  CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - ACCESS DATABASE & EXCEL TABLE OF SWAINSON'S HAWK NEST RECORDS FROM 2000-2004, 2005-XX-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Buteo swainsoni

**Common Name:** Swainson's hawk

**Listing Status:**
- Federal: None
- State: Threatened

**CNDDDB Element Ranks:**
- Global: G5
- State: S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2010-06-25

**Last Survey Date:** 2010-06-25

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
SOUTHEAST CORNER OF BING MALONEY GOLF COURSE, ABOUT 0.3 MILES 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.

**Threats:**
**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.

**PLSS:**
- T08N, R04E, Sec. 36 (M)

**UTM:**
- Zone-10 N4262286 E631339

**Accuracy:** 80 meters

**Latitude/Longitude:** 38.49926 / -121.49382

**Elevation (feet):** 10

**County Summary:**
Sacramento

Florin (3812144), Sacramento East (3812154)

**Sources:**
- GRA09F0004 GRAY, F. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2009-05-20
- GRA10F0013 GRAY, F. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2010-05-12
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:**  
* Buteo swainsoni  

**Common Name:**  
Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**Rare Plant Rank:**  
BLM_S-Sensitive  
IUCN_LC-Least Concern  
USFWS_BCC-Birds of Conservation Concern

**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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**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: NEST IN 45' VALLEY OAK. S NEST IN 25' VALLEY OAK. SURROUNDING HABITAT RIPARIAN, SEASONAL WETLAND, GRASSLAND, FALLOW, PASTURE.

**Threats:**  
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.

**PLSS:**  
T06N, R04E, Sec. 11 (M)  
Accuracy: specific area  
Area (acres): 10

**UTM:**  
Zone-10 N4249791 E630393  
Latitude/Longitude: 38.38682 / -121.50699  
Elevation (feet): 5

**County Summary:**  
Sacramento  
Clarksburg (3812145)

**Sources:**  

DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX

DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-06-19  
**Occurrence Type:** Natural/Native occurrence

**Ecological:**  
2009: NEST IN 40' COTTONWOOD WITH FALLOW LAND TO THE WEST AND PASTURE TO THE NORTHEAST.

**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."

**PLSS:** T06N, R04E, Sec. 11 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4250129 E629617  
**Latitude/Longitude:** 38.38998 / -121.51581  
**Elevation (feet):** 10

**County Summary:** Yolo  
**Quad Summary:** Clarksburg (3812145)

**Sources:**  
DFG09D0001  
CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009 -XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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| Element Code: | ABNKC19070 |
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| General Habitat: | BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. |

| Micro Habitat: | REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS. |

| Last Date Observed: | 2009-04-21 |
| Last Survey Date:   | 2009-04-21 |
| Owner/Manager:      | UNKNOWN |
| Presence:           | Presumed Extant |

| Location: | WEST SIDE OF ELK SLOUGH, ABOUT 0.2 MILES 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. |

| PLSS: T06N, R04E, Sec. 03 (M) | Accuracy: 80 meters | Area (acres): 0 |
| UTM: Zone-10 N4250962 E627857 | Latitude/Longitude: 38.39775 / -121.53581 | Elevation (feet): 10 |
| County Summary: | Yolo |
| Quad Summary: | Clarksburg (3812145) |

| Sources: | DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009 -XX-XX |

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*Report Printed on Tuesday, September 15, 2015*
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.

**Micro Habitat:**  
Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

**Last Date Observed:** 2009-07-14  
**Last Survey Date:** 2009-07-14  
**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**  
Along Willow Point Rd, 0.6 miles 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.

**Threats:**  
Swainson's Hawk(s) observed with defensive behavior on 14 Jul 2009. Nest success unknown.

**PLSS:** T07N, R03E, Sec. 25 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4254373 E622703  
**Latitude/Longitude:** 38.42920 / -121.59421  
**Elevation (feet):** 5

**County Summary:** Yolo  
**Quad Summary:** Clarksburg (3812145)

**Sources:**  
DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX
Map Index Number: 87731
EO Index: 88696
Key Quad: Clarksburg (3812145)
Occurrence Number: 1921
Occurrence Last Updated: 2013-01-23

Science Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
Federal: None
State: Threatened

CNDDB Element Ranks:
Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2009-06-11
Last Survey Date: 2009-06-11
Owner/Manager: DFG-YOLO BYPASS WA
Presence: Presumed Extant

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.

Threats:
General:
NESTING TERRITORY DETECTED DURING 2007 SURVEY; NESTING OUTCOME UNKNOWN/UNCONFIRMED. ACTIVE NEST, INCUBATION OBSERVED ON 11 JUN 2009; NEST SUCCESS UNKNOWN.

PLSS:
T07N, R03E, Sec. 12 (M)  Accuracy: specific area
Area (acres): 11

UTM:
Zone-10 N4259295 E622269  Area (acres):
Lat/Lon: 38.47360 / -121.59833
Elevation (feet): 5

County Summary: Yolo
Quad Summary: Clarksburg (3812145)

Sources:
DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009 -XX-XX
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-04-27

**Last Survey Date:** 2009-04-27

**Presence:** Presumed Extant

**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.

**Threats:**

**General:**
NEST-BUILDING OBSERVED ON 27 APR 2009. NEST SUCCESS UNKNOWN.

**PLSS:** T08N, R03E, Sec. 35 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4260954 E620239

**Latitude/Longitude:** 38.48883 / -121.62131

**Elevation (feet):** 5

**County Summary:** Yolo

**Quad Summary:** Clarksburg (3812145)

**Sources:**
DFG09D0001  CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*
**Common Name:** Swainson's hawk

**Listing Status:**
- Federal: None
- State: Threatened

**CNDDB Element Ranks:**
- Global: G5
- State: S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-06-08
**Last Survey Date:** 2009-06-08
**Owner/Manager:** DFG-YOLO BYPASS WA, UNKNOWN
**Presence:** Presumed Extant

**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.

**Threats:**
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.

**PLSS:** T08N, R03E, Sec. 36 (M)  
**Accuracy:** specific area  
**Area (acres):** 17

**UTM:** Zone-10 N4262402 E622525  
**Latitude/Longitude:** 38.50156 / -121.59485  
**Elevation (feet):** 10

**County Summary:**
Yolo  
Clarksburg (3812145), Sacramento West (3812155)

**Sources:**
DFG05U0001  

DFG09D0001  
CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX
### Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNNDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Last Survey Date:** 2007-XX-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  
**Location:** ALONG SACRAMENTO NORTHERN RR, ABOUT 0.3 MILES 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.

**Threats:**  
**General:** ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.

**PLSS:** T07N, R04E, Sec. 06 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4260030 E623989  
**Latitude/Longitude:** 38.47999 / -121.57849  
**Elevation (feet):** 20

**County Summary:** Yolo  
**Quad Summary:** Clarksburg (3812145)

**Sources:**  
EST08R0001  
ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
Buteo swainsoni

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-XX-XX
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
ALONG UNNAMED SLOUGH ABOUT 0.3 MI ESE OF ARCADE & 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.

**Threats:**
**General:**
ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.

**PLSS:** T07N, R04E, Sec. 08 (M)
**Accuracy:** 80 meters
**Area (acres):** 0

**UTM:** Zone-10 N4259277 E624335
**Latitude/Longitude:** 38.47316 / -121.57466
**Elevation (feet):** 10

**County Summary:**
Yolo
**Quad Summary:**
Clarksburg (3812145)

**Sources:**
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk  
**Listing Status:**  
- **Federal:** None  
- **State:** Threatened  
**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3  

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant  

**Location:**  
ALONG SACRAMENTO NORTHERN RAILROAD, ABOUT 0.9 MILES 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.

**Threats:**  
**General:**  
ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.

**PLSS:** T07N, R04E, Sec. 05 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4261295 E624464  
**Latitude/Longitude:** 38.49132 / -121.57282  
**Elevation (feet):** 20

**County Summary:** Yolo  
**Quad Summary:** Clarksburg (3812145)

**Sources:**  
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
Buteo swainsoni

Swainson's hawk

Federal: None
State: Threatened

Global: G5
State: S3

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

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.

NESTING TERRITORY DETECTED DURING 2007 SURVEY; NESTING OUTCOME UNKNOWN/UNCONFIRMED.

PLSS: T08N, R04E, Sec. 32 (M)
UTM: Zone-10 N4262279 E624754

Accuracy: 1/10 mile
Latitude/Longitude: 38.50015 / -121.56932
Elevation (feet): 20

Area (acres): 0

General Habitat:

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Micro Habitat:

ALONG SACRAMENTO NORTHERN RAILROAD, ABOUT 0.5 MI W OF GARCIA BEND & 1.7 MI NNE OF ARCADE.

MAPPED TO COORDINATES FOR SITE YO-65 FROM 2008 ESTEP REPORT.

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.
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX

**Last Survey Date:** 2007-XX-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
JUST NORTH OF REAMER LANE, ABOUT 0.3 MILES 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.

**Threats:**
ACTIVE NEST OBSERVED DURING 2007 SURVEY; SUCCESS UNKNOWN.

**PLSS:** T07N, R04E, Sec. 19 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4256074 E624108  
**Latitude/Longitude:** 38.44432 / -121.57782  
**Elevation (feet):** 10

**County Summary:** Clarksburg (3812145)

**Sources:**
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
Map Index Number: 88000
EO Index: 89042
Key Quad: Clarksburg (3812145)
Element Code: ABNKC19070
Occurrence Number: 1974
Occurrence Last Updated: 2013-01-24

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk
Listing Status:
  Federal: None
  State: Threatened
CNDDB Element Ranks:
  Global: G5
  State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2007-XX-XX
Last Survey Date: 2007-XX-XX
Owner/Manager: UNKNOWN
Presence: Presumed Extant

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.

Threats:
General:
NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.

Accuracy: 80 meters
Area (acres): 0

PLSS: T07N, R04E, Sec. 26 (M)
UTM: Zone-10 N4255257 E629839
Latitude/Longitude: 38.43616 / -121.51232
Elevation (feet): 10

County Summary: Yolo
Quad Summary: Clarksburg (3812145)

Sources:
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
**Sources:**
EST08R0001  ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
Map Index Number: 88004
EO Index: 89045
Key Quad: Clarksburg (3812145)
Occurrence Number: 1976
Occurrence Last Updated: 2013-05-30
Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk
Listing Status: Federal: None
State: Threatened
CNDDDB Element Ranks: Global: G5
State: S3
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Unknown
Trend: Unknown
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 MILES NORTH IN 2008.
Threats:
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.
PLSS: T07N, R04E, Sec. 34 (M)
UTM: Zone-10 N4253171 E628138
County Summary:
Yolo
Quad Summary: Clarksburg (3812145)
Sources:
BRO08F0005 BRONNY, C. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2008-03-12
EST08R001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
WOO09R0011 WOOD, J. (PRBO CONSERVATION SCIENCE) - DECKER ISLAND AND ELK SLOUGH BIRD MONITORING REPORT 2008. 2009-01-14
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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| General Habitat:          | BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. |
|                           | REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS. |

| Last Date Observed:       | 2007-XX-XX |
| Last Survey Date:         | 2007-XX-XX |
| Owner/Manager:            | UNKNOWN    |
| Presence:                 | Presumed Extant |

**Location:**
W SIDE SACRAMENTO RIVER AT RM76.1; ABOUT 0.3 MI SSW OF CO RD 117 AT RD 16 & 3 MI N OF SACRAMENTO INTERNATIONAL AIRPORT.

**Detailed Location:**
VICINITY OF TERRITORIES YO068 AND SA030 (PART - SEE ALSO EO#155) FROM CDFW SWAINSON'S HAWK OBSERVATIONS DATABASE. MAPPED TO COORDINATES GIVEN FOR SITE YO-119 FROM ESTEP'S 2008 REPORT.

**Ecological:**
1986 NEST 40' UP IN COTTONWOOD, SURROUNDED BY RIPARIAN HABITAT AND AGRICULTURE. 2007 NEST IN RIPARIAN COTTONWOOD SURROUNDED BY ORCHARDS AND IRRIGATED CROPLAND.

**Threats:**

**General:**
2 SWHA OBSERVED IN VICINITY IN 1983. NEST WITH 1 ADULT AND 2 YOUNG OBSERVED ON 8 JUL 1986. NO NESTS OR SWHA OBS IN 1992. ACTIVE NEST, BUT NO YOUNG OBSERVED DURING 2007 SURVEY.

| PLSS: T10N, R03E, Sec. 01 (M) | Accuracy: 80 meters |
| UTM: Zone-10 N4289353 E621623 | Latitude/Longitude: 38.74449 / -121.60048 |
| County Summary: Yolo | Elevation (feet): 30 |

**Sources:**


EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
Map Index Number: 88512
EO Index: 89523
Key Quad: Taylor Monument (3812165)
Element Code: ABNKC19070
Occurrence Number: 2197
Occurrence Last Updated: 2013-03-25

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
Federal: None
State: Threatened

CNNDDB Element Ranks:
Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2002-07-24
Last Survey Date: 2002-07-24
Owner/Manager: SAC INTERNATIONAL AIRPORT
Presence: Presumed Extant

Location:
LANDSCAPED AREA AT SACRAMENTO INTERNATIONAL AIRPORT, JUST EAST OF AIRPORT BOULEVARD AT EARHART DRIVE.

Detailed Location:
MAPPED TO COORDINATES FROM CDFW 2000-2004 NEST RECORDS.

Ecological:
NEST IN 40' WILLOW IN CLUSTER OF TREES IN A LANDSCAPED ISLAND SURROUNDED BY ROADS, RUNWAYS, AND TERMINALS ASSOCIATED WITH THE AIRPORT.

Threats:

General:
NEST WITH 2 PARTIALLY-FEATHERED YOUNG OBSERVED ON 24 JUL 2002.

PLSS: T10N, R04E, Sec. 31 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4282478 E622370
Latitude/Longitude: 38.68245 / -121.59310
Elevation (feet): 15

County Summary: Sacramento
Quad Summary: Taylor Monument (3812165)

Sources:
**Map Index Number:** 88519  
**Key Quad:** Taylor Monument (3812165)  
**Occurrence Number:** 2198  
**EO Index:** 89530  
**Element Code:** ABNKC19070  
**Occurrence Last Updated:** 2013-05-09

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2002-05-14  
**Last Survey Date:** 2002-06-17  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
ALONG CO RD 124, ABOUT 0.2 MI SSW OF THE RD 122 JUNCTION & 1.5 MI SSE OF THE I-5 BRIDGE OVER THE SACRAMENTO RIVER.

**Detailed Location:**  
MAPPED TO COORDINATES FROM CDFW 2000-2004 NEST RECORDS.

**Ecological:**  
NEST IN 50' COTTONWOOD SURROUNDED BY CROPLAND. COORDINATES PLACE NEST TREE ADJACENT TO CANAL THAT RUNS ALONG EAST SIDE OF ROAD 124.

**Threats:**  
ACTIVE NEST OBSERVED ON 14 MAY 2002; NO ACTIVITY AT NEST OBSERVED ON OR AFTER 17 JUN.

**PLSS:** T09N, R03E, Sec. 03 (M)  
**UTM:** Zone-10 N4279064 E620377

**Accuracy:** 80 meters  
**Latitude/Longitude:** 38.65197 / -121.61661  
**Elevation (feet):** 15

**Area (acres):** 0  
**County Summary:** Yolo  
**Quad Summary:** Taylor Monument (3812165)

**Sources:**  
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:** BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:** REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Last Survey Date:** 2007-XX-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:** YOLO BYPASS; ALONG TULE CANAL ABOUT 2.3 MILES S OF OLD RIVER RD AT CO RD 124 & 2.3 MILES NNW OF CO RD 124 AT RD 126.

**Ecological:**  
- 2002 NEST IN 45' COTTONWOOD SURROUNDED BY CROPLAND. 2007 NEST TREE A WILLOW IN CHANNELIZED RIPARIAN HABITAT SURROUNDED BY IRRIGATED CROPLAND.

**Threats:**  
- ACTIVE NEST MONITORED IN 2002, INCUBATION OBS THROUGH 17 JUN, NO ACTIVITY ON OR AFTER 3 JUL; DOWNY FEATHERS, BUT NO YOUNG SEEN. NEST WITH 2 YOUNG OBSERVED DURING 2007 SURVEY.

**PLSS:** T09N, R03E, Sec. 14 (M)  
**Accuracy:** specific area  
**Area (acres):** 10

**UTM:** Zone-10 N4276484 E620688  
**Latitude/Longitude:** 38.62868 / -121.61348  
**Elevation (feet):** 15

**County Summary:**  
- Yolo  
- Taylor Monument (3812165)

**Sources:**  
- EST08R0001 - ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA, 2008-03-XX

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Information Expires 3/1/2016
## Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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<td>General Habitat:</td>
<td>BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, &amp; AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.</td>
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<td>Micro Habitat:</td>
<td>REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.</td>
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<td>Last Date Observed:</td>
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<td>Location:</td>
<td>WEST SIDE OF PLEASANT GROVE RD, ABOUT 0.25 MILES SOUTH OF W RIEGO RD &amp; 1 MILE NORTH OF RIO LINDA BLVD, NW OF RIO LINDA.</td>
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<td>Detailed Location:</td>
<td>MAPPED TO COORDINATES GIVEN ON FIELD SURVEY FORM FROM 2010.</td>
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<td>Ecological:</td>
<td>NEST IN LARGE PINE IN FRONT YEARD OF RURAL HOMESTEAD. SURROUNDING HABITAT INCLUDED RURAL RESIDENCES, PASTURES, AND AGRICULTURAL FIELDS.</td>
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<tr>
<td>Threats:</td>
<td>General: NEST SITE MONITORED IN 2010; NEST-BUILDING OBSERVED IN APR, INCUBATION OBS IN MAY, YOUNG IN NEST OBS 10 JUN, FLEDGED YOUNG IN NEST TREE OBS 10 JUL.</td>
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<td>PLSS:</td>
<td>T10N, R04E, Sec. 01 (M)</td>
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<td>Accuracy:</td>
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<td>County Summary:</td>
<td>Placer, Sutter Rio Linda (3812164)</td>
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<td>Sources:</td>
<td>WIL10F0064 WILMING, R. (GARCIA AND ASSOCIATES) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2010-04-16</td>
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</table>
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>Occurrence Last Updated:</td>
<td>2013-05-10</td>
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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-07-19  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2003-07-19  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant  

**Location:**  
NORTH OF DRY CREEK, ON EITHER SIDE OF DYER LN ABOUT 0.2 MILES WEST OF ITS JUNCTION WITH WATT AVENUE, NW OF ANTELOPE.

**Detailed Location:**  

**Ecological:**  
2001: SUSPECTED NEST IN LARGE VALLEY OAKS SURROUNDED BY FALLOW LAND, GRASSLAND, AND RIPARIAN, WITH RESIDENTIAL TO THE SE.  
2003: NEST IN 45' VALLEY OAK WITH GRASSLAND TO THE SOUTH AND CROPLAND TO THE NORTH.

**Threats:**  
**General:**  
DEFENSIVE SWAINSON'S HAWK PAIR OBSERVED APR 2001; HAWK FLUSHED FROM A TREE CONTAINING POSSIBLE NEST. NEST MONITORED IN 2003; FLEDGED 2.

**PLSS:** T10N, R05E, Sec. 11 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 75

**UTM:** Zone-10 N4289075 E639279  
**Latitude/Longitude:** 38.73938 / -121.39744  
**Elevation (feet):** 90

**County Summary:**  
Placer  
Rio Linda (3812164)

**Sources:**  
COR01F0035 CORDES, S. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2001-04-25  
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 88537
EO Index: 89549
Key Quad: Rio Linda (3812164)
Element Code: ABNKC19070
Occurrence Number: 2202
Occurrence Last Updated: 2013-03-26

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
Federal: None
State: Threatened

Special Status:

CNDDB Element Ranks:
Global: G5
State: S3

Rare Plant Rank:

Other Lists:
BLM_S-Sensitive
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence Number:

Last Date Observed: 2003-07-19
Last Survey Date: 2003-07-19
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
N SIDE OF DYER LN, ABOUT 0.25 MI ENE OF TAN WOODS RD JUNCTION & 1.75 MI NNW OF WATT AVE AT ELVERTA RD, NW OF ANTELOPE.

Detailed Location:
MAPPED TO COORDINATES FROM CDFW 2000-2004 NEST RECORDS.

Ecological:
NEST IN 50' VALLEY OAK WITH GRASSLAND TO THE EAST AND CROPS TO THE WEST. SURVEYOR NOTED MOBBING OF ADULT SWAINSON'S HAWK BY SMALLER BIRD.

Threats:

General:
ACTIVE NEST MONITORED IN 2003; FLEDGLING/BRANCHER, STILL A BIT DOWNY, OBSERVED OUT OF NEST ON 19 JUL, WITH BOTH PARENTS AT TOP OF NEST TREE.

PLSS: T10N, R05E, Sec. 11 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4288756 E638478
Latitude/Longitude: 38.73663 / -121.40671
Elevation (feet): 95

County Summary:
Placer
Rio Linda (3812164)

Sources:
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 88585
EO Index: 89602
Key Quad: Carmichael (3812153)
Element Code: ABNKC19070
Occurrence Number: 2204
Occurrence Last Updated: 2013-05-10

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status:
- Federal: None
- State: Threatened

Rare Plant Rank:
- BLM_S-Sensitive
- IUCN_LC-Least Concern
- USFWS_BCC-Birds of Conservation Concern

CNDDDB Element Ranks:
- Global: G5
- State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2010-06-20
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2010-06-20
Occurrence Rank: Poor

Owner/Manager: UNKNOWN
Trend: Unknown

Presence: Presumed Extant

Location:
AT THE SOUTHEAST CORNER OF THE INTERSECTION OF BRADSHAW ROAD AND KIEFER BLVD, ROSEMONT.

Detailed Location:
MAPPED TO COORDINATES GIVEN ON FIELD SURVEY FORM.

Ecological:
NEST WAS IN A MEDIUM-SIZED EUCALYPTUS IN A ROW OF ROADSIDE TREES; IN COMMERCIAL ZONE. ADJACENT LOT WAS FORMER GRAVEL MINE, GROWN OVER WITH GRASS. SINCE 2010, ALL OF THE TREES AT THIS SITE HAVE BEEN REMOVED & THE LOT HAS BEEN DEVELOPED.

Threats:
AERIAL PHOTOS FROM 2011 AND LATER SHOW THE NEST TREE HAS BEEN REMOVED AND THE ADJACENT LOT PAVED AND DEVELOPED.

General:
NESTING PAIR OBSERVED FROM 17 TO 20 JUN 2010; FEMALE ON NEST 17 JUN, SUCCESS UNKNOWN.

PLSS: T08N, R06E, Sec. 16 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4267438 E645122
Latitude/Longitude: 38.54353 / -121.33475
Elevation (feet): 70

County Summary:
Sacramento
Quad Summary: Carmichael (3812153)

Sources:
WHI10F0011 WHISLER, E. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2010-06-17
**Map Index Number:** 88589  
**EO Index:** 89605  
**Key Quad:** Carmichael (3812153)  
**Element Code:** ABNKC19070  
**Occurrence Number:** 2205  
**Occurrence Last Updated:** 2013-03-29

### Scientific Name

- **Buteo swainsoni**  
- **Common Name:** Swainson's hawk

### Listing Status

- **Federal:** None  
- **State:** Threatened

### CNDDDB Element Ranks

- **Global:** G5  
- **State:** S3

### General Habitat

BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat

REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed

- 2010-08-19

### Occurrence Type

- Natural/Native occurrence

### Occurrence Rank

- Unknown

### Trend

- Unknown

### Location

EAST SIDE OF BRADSHAW ROAD, LESS THAN 0.1 MILES SOUTH OF GOETHE ROAD INTERSECTION, ROSEMONT.

### Detailed Location

MAPPED TO PROVIDED COORDINATES.

### Ecological

NEST IN VALLEY OAK WITHIN THE OFF-LEASH DOG PARK OPERATED BY THE SACRAMENTO COUNTY ANIMAL SHELTER. HABITAT SURROUNDING SITE WAS MOSTLY COMMERCIAL AND RESIDENTIAL; NEARBY MATHER AIR FORCE BASE & GRANITE CONSTRUCTION OFFERED FORAGING HABITAT.

### Threats

**General:**

NEST MONITORED WEEKLY JUL - AUG 2010; FLEDGED 2 YOUNG.

### PLSS

- **T08N, R06E, Sec. 16 (M)**  
- **Area (acres):** 0  
- **Accuracy:** 80 meters

### UTM

- **Zone-10 N4268585 E645032**  
- **Latitude/Longitude:** 38.55388 / -121.33555  
- **Elevation (feet):** 70

### County Summary

- Sacramento  
- Carmichael (3812153)

### Sources

CRO10F0003  
CROUCH, K. (PADRE ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2010-08-19
### Scientific Name: Buteo swainsoni

#### Common Name: Swainson's hawk

### Listing Status:
- **Federal:** None
- **State:** Threatened

### CNDDDB Element Ranks:
- **Global:** G5
- **State:** S3

### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed: 2004-04-18

### Occurrence Type: Natural/Native occurrence

### Presence: Presumed Extant

### Location:
ANCIL HOFFMAN PARK, ON THE NORTH SIDE OF THE AMERICAN RIVER IN CARMICHAEL.

### Detailed Location:
NEST TREE WAS LOCATED ON THE BLUFFS BEHIND THE PRESERVE AT EFFIE YEAW NATURE CENTER IN ANCIL HOFFMAN PARK.

### Ecological:
2004 NEST IN TALL EUCALYPTUS ON BLUFFS OVERLOOKING ANCIL HOFFMAN PARK. A VARIETY OF OTHER BIRDS WERE ALSO OBSERVED INCLUDING VAUX'S SWIFTS, OSPREYS, AND NESTING GREAT HORNED OWLS.

### Threats:
NEST-BUILDING OBSERVED ON 5-6 APR 2004. PAIR OBSERVED NEAR NEST ON 18 APR, NESTING OUTCOME UNKNOWN. NO SWAINSON'S HAWKS WERE OBSERVED 2005-2012; A PAIR OF RED-TAILED HAWKS TOOK OVER THE SITE.

### PLSS:
- **T09N, R06E, Sec. 22 (M)**
- **Zone-10 N4275864 E647151**

### Accuracy:
2/5 mile

### Area (acres):
0

### UTM:
- **Latitude/Longitude:** 38.61910 / -121.30971
- **Elevation (feet):** 70

### Sources:
- HAR04U0001 HARPER, E. - EMAIL FROM ED HARPER REGARDING SWAINSON'S HAWKS NESTING IN ANCIL HOFFMAN PARK. 2004-04-18
- HAR13U0001 HARPER, E. - EMAIL REGARDING NESTING SWAINSON'S HAWKS AT ANCIL HOFFMAN PARK, SACRAMENTO. 2013-04-02
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 88604  
**EO Index:** 89620  
**Element Code:** ABNKC19070  
**Occurrence Last Updated:** 2013-05-14

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:** Federal: None  
State: Threatened  
**Rare Plant Rank:** BLM_S-Sensitive

**CNDDB Element Ranks:**  
Global: G5  
State: S3  
**Other Lists:**  
IUCN_LC-Least Concern  
USFWS_BCC-Birds of Conservation Concern

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2012-XX-XX  
**Last Survey Date:** 2012-XX-XX  
**Owner/Manager:** SAC COUNTY, CITY OF SACRAMENTO  
**Presence:** Presumed Extant  
**Location:** SUTTERS LANDING PARK, ON THE SOUTH SIDE OF THE AMERICAN RIVER AT THE NORTH END OF 28TH STREET.

**Detailed Location:**  
MAPPED TO THE VICINITY OF THE PARK.

**Ecological:**  
NESTS WERE IN COTTONWOODS IN RIPARIAN STRIP; ADJACENT GRASSLAND OVER CAPPED LANDFILL USED FOR FORAGING.

**Threats:**  
SOLAR POWER PLANT PROPOSED FOR OLD LANDFILL SITE WOULD ELIMINATE FORAGING HABITAT (2011).

**General:**  
PAIR OBSERVED COPULATING IN LARGE SNAG, 2005. NESTING PAIR DOCUMENTED FROM 2008-2011; FLEDGED CHICKS IN 3 OUT OF 4 YEARS. PREVIOUS YEARS' NEST OCCUPIED BY GREAT HORNED OWLS IN 2011 & POSS. 2012, THOUGH SWHA PAIR OBS ON TERRITORY BOTH YEARS.

**PLSS:** T09N, R05E, Sec. 32 (M)  
**Accuracy:** 2/5 mile  
**Area (acres):** 0  
**UTM:** Zone-10 N4272313 E634370  
**Latitude/Longitude:** 38.58914 / -121.45715  
**Elevation (feet):** 25  

**County Summary:**  
Sacramento

**Quad Summary:**  
Sacramento East (3812154)

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<td>BUR05F0004</td>
<td>BURWELL, T. (SACRAMENTO COUNTY PARKS) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2005-05-15</td>
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<tr>
<td>LAM11U0001</td>
<td>LAMARE, J. &amp; K. WAGNER - LETTER REGARDING SUTTER LANDING PARK SOLAR PHOTOVOLTAIC PROJECT MITIGATED NEGATIVE DECLARATION 2011-10-10</td>
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<td>LAM13U0001</td>
<td>LAMARE, J. - EMAIL CORRESPONDENCE REGARDING SUTTERS LANDING SWAINSON'S HAWKS. 2013-04-03</td>
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<td>ORT11A0001</td>
<td>ORTIZ, G. - SACRAMENTO BEE (NEWSPAPER) ARTICLE REGARDING SWHA PAIR NESTING NEAR SUTTER'S LANDING REGIONAL PARK. 2011-04-07</td>
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<td>SEW13U0001</td>
<td>SEWELL, R. - EMAIL CORRESPONDENCE REGARDING NESTING SWAINSON'S HAWKS AT SUTTER'S LANDING IN SACRAMENTO. 2013-04-06</td>
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### Occurrence Report

**California Department of Fish and Wildlife**  
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2010-XX-XX  
**Last Survey Date:** 2010-XX-XX  
**Owner/Manager:** SAC COUNTY  
**Presence:** Presumed Extant

**Location:**  
ALONG THE AMERICAN RIVER AT RM-5, JUST SOUTH OF CAL EXPO.

**Detailed Location:**  

**Ecological:**  
1992: SUSPECTED NEST IN RIPARIAN VEGETATION WITH GRASS FIELDS.

**Threats:**  
**General:**  
SWAINSON'S HAWK PAIR OBSERVED FORAGING, RETURNING TO SUSPECTED NEST LOCATION ON SEVERAL OCCASIONS IN JUL 1992; NEST NOT FOUND/NOT DOCUMENTED. NEST-BUILDING OBSERVED IN 2009 AND 2010; SUCCESS UNKNOWN.

**PLSS:** T08N, R05E, Sec. 04 (M)  
**Accuracy:** 2/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4271590 E636884  
**Latitude/Longitude:** 38.58224 / -121.42844  
**Elevation (feet):** 35

**County Summary:**  
Sacramento  
Sacramento East (3812154)

**Sources:**  
CAH11F0001 CAHILL, K. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-WILDLIFE MANAGEMENT BRANCH) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2011-04-27  
SCH92F0074 SCHNEIDER, T. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 1992-07-XX
# Occurrence Report

## California Department of Fish and Wildlife

### California Natural Diversity Database

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| CNNDDB Element Ranks: | Global: G5 |
|-----------------------| State: S3 |

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| Last Date Observed:   | 2010-07-14 |
| Last Survey Date:     | 2010-07-14 |
| Owner/Manager:        | PVT |
| Presence:             | Presumed Extant |
| Location:             | 2402 AMERICAN AVENUE, GARDENLAND, N OF AMERICAN RIVER PARKWAY. |

| Detailed Location:    | MAPPED TO ADDRESS GIVEN ON FIELD SURVEY FORM. NEST TREE IS IN FRONT YARD OF RESIDENCE. |
| Ecological:           | NEST WAS AT THE TOP OF A COTTONWOOD TREE ADJACENT TO A BUSY, NOISY STREET. |
| Threats:              | POSSIBLE THREAT OF TREE TRIMMING OR REMOVAL. |

| General:              | ACTIVE NEST IN 2009, SUCCESS UNKNOWN. ACTIVE NEST MONITORED IN 2010. 2 CHICKS OBSERVED ON THE NEST, TRYING THEIR WINGS ON 14 JUL 2010; FLEDGING SUCCESS UNKNOWN. |

| PLSS:                 | T09N, R05E, Sec. 30 (M) |
| Accuracy:             | 80 meters |
| Area (acres):         | 0 |

| UTM:                  | Zone-10 N4274672 E633062 |
| Latitude/Longitude:   | 38.61059 / -121.47171 |
| Elevation (feet):     | 20 |

| County Summary:       | Sacramento |
| Quad Summary:         | Sacramento East (3812154) |

## Sources:

- GRA10F0014  GRAY, F. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2010-05-21
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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- Federal: None  
- State: Threatened |
| Rare Plant Rank |  
- BLM_S-Sensitive  
- IUCN_LC-Least Concern  
- USFWS_BCC-Birds of Conservation Concern |
| CNDDDB Element Ranks |  
- Global: G5  
- State: S3 |
| General Habitat | BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS. |
| Occurrence Type | Natural/Native occurrence |
| Occurrence Rank | Fair |
| Trend | Unknown |
| Location | FREMONT PARK, AT 15TH AND Q STREETS IN DOWNTOWN SACRAMENTO. |
| Detailed Location | MAPPED TO COORDINATES PROVIDED ON FIELD SURVEY FORMS. |
| Ecological | 2006-2012 NEST IN 60’ REDWOOD (GIANT SEQUOIA). NEST TREE IN CITY PARK 1 SQUARE BLOCK IN SIZE, PLANTED WITH NATIVE & NON-NATIVE TREES. SURROUNDING HABITAT URBAN, WITH HIGH DENSITY OF NON-NATIVE TREES. SOME FORAGING HABITAT WITHIN 2-4 MILES. |
| Threats | NO APPARENT THREATS, BUT TREE TRIMMING DURING NESTING SEASON WOULD POSE A THREAT (2012). |
| PLSS | T08N, R04E, Sec. 01 (M) |
| Accuracy | 80 meters |
| Area (acres) | 0 |
| UTM | Zone-10 N4270242 E631636 |
| Latitude/Longitude | 38.57089 / -121.48892 |
| Elevation (feet) | 20 |
| County Summary | Sacramento |
| Quad Summary | Sacramento East (3812154) |
| Sources: |  
- COM12F0002 COMRACK, L. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-WILDLIFE MANAGEMENT BRANCH) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2012-04-23  
- SWO09F0001 SWOLGAARD, C. (CALIFORNIA DEPARTMENT OF PARKS AND RECREATION) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2009-04-10  
- SWO11F0001 SWOLGAARD, C. (CALIFORNIA DEPARTMENT OF PARKS AND RECREATION) - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2011-05-06 |
**Map Index Number:** 88619  
**EO Index:** 89634  
**Key Quad:** Sacramento East (3812154)  
**Occurrence Number:** 2217  
**Occurrence Last Updated:** 2013-04-03

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<td>Federal: None</td>
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**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-07-13  
**Last Survey Date:** 2007-07-13  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant  
**Location:** CAMP POLLOCK, ON THE NORTH SIDE OF THE AMERICAN RIVER ABOUT 0.25 MILES NW OF THE HWY 160 BRIDGE.

**Detailed Location:**  
MAPPED TO LOCATION MARKED ON GOOGLE EARTH MAP.

**Ecological:**  
NEST TREE WAS A TALL COTTONWOOD UNDER POWERLINE TOWERS.

**Threats:**  
ACTIVE NEST MONITORED IN 2007; FLEDGED 2 YOUNG.

**PLSS:** T09N, R05E, Sec. 30 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**UTM:** Zone-10 N4273481 E632447  
**Latitude/Longitude:** 38.59995 / -121.47900  
**Elevation (feet):** 25  
**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:**  
SEW07U0001 SEWELL, R. ET AL. - EMAIL CORRESPONDENCE REGARDING SWAINSON’S HAWK NEST SITE IN THE AMERICAN RIVER PARKWAY. 2007-07-11
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 88627
EO Index: 89641
Key Quad: Sacramento West (3812155)
Element Code: ABNKC19070
Occurrence Number: 2218
Occurrence Last Updated: 2013-04-04

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2007-XX-XX
Last Survey Date: 2007-XX-XX
Owner/Manager: DPR, UNKNOWN
Presence: Presumed Extant

Location:
WEST BANK OF THE SACRAMENTO RIVER AT RM-60, ABOUT 0.5 MILES NNW OF THE I STREET BRIDGE, SACRAMENTO.

Detailed Location:
MAPPED TO COORDINATES GIVEN FOR SITE YO-102 FROM ESTEP'S 2008 REPORT.

Ecological:
2007 NEST IN RIPARIAN COTTONWOOD.

Threats:
General:
NEST WITH ONE YOUNG OBSERVED DURING 2007 SURVEY.

PLSS: T09N, R04E, Sec. 35 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4272796 E629839
Latitude/Longitude: 38.59416 / -121.50907
Elevation (feet): 25

County Summary:
Sacramento, Yolo

Quad Summary:
Sacramento West (3812155)

Sources:
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX

Report Printed on Tuesday, September 15, 2015
**Map Index Number:** 88631  
**EO Index:** 89646  
**Key Quad:** Sacramento West (3812155)  
**Occurrence Number:** 2219  
**Occurrence Last Updated:** 2013-04-05  
**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson’s hawk  
**Listing Status:**  
- **Federal:** None  
- **State:** Threatened  
**CNNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3  
**General Habitat:** BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.  
**Micro Habitat:** REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.  
**Last Date Observed:** 2007-XX-XX  
**Last Survey Date:** 2007-XX-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  
**Location:** WEST SIDE SACRAMENTO RIVER, ABOUT 0.2 MI SW OF S RIVER RD AT DAVIS RD & 1.1 MI SE OF JEFFERSON BLVD AT MARSHALL RD.  
**Detailed Location:** MAPPED TO COORDINATES GIVEN FOR SITE YO-68 FROM ESTEP’S 2008 REPORT.  
**Ecological:**  
NEST IN LONE VALLEY OAK SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.  
**Threats:**  
**General:** ACTIVE NEST WAS OBSERVED DURING 2007 SURVEY; NESTING OUTCOME WAS NOT CONFIRMED.  
**PLSS:** T08N, R04E, Sec. 22 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**UTM:** Zone-10 N4265339 E627629  
**Latitude/Longitude:** 38.52731 / -121.53580  
**Elevation (feet):** 15  
**County Summary:** Yolo  
**Quad Summary:** Sacramento West (3812155)  
**Sources:**  
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNNDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
WEST SIDE SACRAMENTO RIVER, ABOUT 0.2 MI S OF ANTIOCH AVE AT DAVIS RD & 0.8 MI E OF JEFFERSON BLVD AT TAPLEY RD.

**Detailed Location:**  
MAPPED TO COORDINATES GIVEN FOR SITE YO-69 FROM ESTEP'S 2008 REPORT.

**Ecological:**  
NEST IN LONE VALLEY OAK SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.

**Threats:**

**General:**  
NEST WITH 2 YOUNG OBSERVED DURING 2007 SURVEY.

**PLSS:** T08N, R04E, Sec. 21 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4265522 E626917  
**Latitude/Longitude:** 38.52906 / -121.54394  
**Elevation (feet):** 10

**County Summary:** Yolo  
**Quad Summary:** Sacramento West (3812155)

**Sources:**  
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
### Occurrence Report
#### California Department of Fish and Wildlife
#### California Natural Diversity Database

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| Scientific Name:      | Buteo swainsoni                           |
| Common Name:          | Swainson's hawk                           |
| Listing Status:       | Federal: None                             |
|                       | State: Threatened                        |
| CNDDDB Element Ranks: | Global: G5                                |
|                       | State: S3                                 |

| General Habitat:      | BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES. |
| Micro Habitat:        | REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS. |

| Last Date Observed:   | 2007-XX-XX                                |
| Last Survey Date:     | 2007-XX-XX                                |
| Owner/Manager:        | UNKNOWN                                   |
| Presence:             | Presumed Extant                           |

**Location:**
WEST OF SACRAMENTO RIVER, ON THE N SIDE OF BEVAN RD JUST W OF PARTRIDGE AVENUE & ABOUT 0.7 MILES E OF JEFFERSON BLVD.

**Detailed Location:**
MAPPED TO COORDINATES GIVEN FOR SITE YO-67 FROM ESTEP'S 2008 REPORT.

**Ecological:**
NEST IN VALLEY OAK IN YARD OF RURAL RESIDENCE, SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.

**Threats:**
NESTING ACTIVITY WAS OBSERVED AT THIS NEST SITE DURING A 2007 SURVEY, BUT THE NESTING OUTCOME WAS NOT CONFIRMED.

**PLSS:**
T08N, R04E, Sec. 21 (M)

**Accuracy:**
1/10 mile

**Area (acres):**
0

**UTM:**
Zone-10 N4264950 E626267

**Latitude/Longitude:**
38.52399 / -121.55149

**Elevation (feet):**
10

**County Summary:**
Yolo

**Quad Summary:**
Sacramento West (3812155)

**Sources:**
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
ALONG THE CLARKSBURG BRANCH LINE TRAIL (OLD RR TRACKS) ABOUT 0.2-0.4 MI NNE OF ANTIOCH AVE AT DAVIS RD, WEST SACRAMENTO.

**Detailed Location:**  
2 SITES REPRESENTED; MAPPED TO COORDINATES GIVEN FOR SITE YO-70 FROM ESTEP'S 2008 REPORT (NORTH SITE) AND FOR CDFW NEST RECORD FROM 2003 (SOUTH SITE).

**Ecological:**  
2003 NEST WAS IN A 65' COTTONWOOD SURROUNDED BY CROPLAND WITH RESIDENTIAL LAND USE TO THE SOUTHWEST. 2007 SUSPECTED NEST WITHIN TREE ROW; NEST LOCATION NEVER CONFIRMED. SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.

**Threats:**  
GENERAL:
NEST WITH 1 DOWNY YOUNG OBSERVED ON 3 JUN 2003. NESTING OR TERRITORIAL BEHAVIORS OBSERVED IN 2007, BUT NEST ITSELF WAS NOT LOCATED AND NESTING OUTCOME NOT CONFIRMED.

**PLSS:** T08N, R04E, Sec. 21 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 22

**UTM:** Zone-10 N4266197 E626991  
**Latitude/Longitude:** 38.53512 / -121.54296  
**Elevation (feet):** 10

**County Summary:**  
Sacramento West (3812155)

**Sources:**

- EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<td>Occurrence Last Updated:</td>
<td>2013-04-05</td>
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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
**Federal:** None  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
ALONG THE CLARKSBURG BRANCH LINE TRAIL (OLD RR TRACKS) ABOUT 0.4 MI SSE OF JEFFERSON BLVD AT LINDEN RD, WEST SACRAMENTO.

**Detailed Location:**  
MAPPED TO COORDINATES GIVEN FOR SITE YO-39 FROM ESTEP'S 2008 REPORT.

**Ecological:**
NEST IN WILLOW IN CHANNELIZED RIPARIAN HABITAT, SURROUNDED BY URBAN LAND USE, WITH NEARBY ALFALFA AND IRRIGATED CROPLAND.

**Threats:**  
DEVELOPMENT IS DECREASING ADJACENT FORAGING HABITAT ACCORDING TO 1993-2002 AERIAL PHOTOS.

**General:**
NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.

**PLSS:** T08N, R04E, Sec. 15 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4267324 E627471  
**Latitude/Longitude:** 38.54521 / -121.53725  
**Elevation (feet):** 10

**County Summary:** Yolo  
**Quad Summary:** Sacramento West (3812155)

**Sources:**  
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 88638
**EO Index:** 89652
**Key Quad:** Sacramento West (3812155)
**Element Code:** ABNKC19070
**Occurrence Number:** 2224
**Occurrence Last Updated:** 2013-04-05

**Scientific Name:** *Buteo swainsoni*
**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX
**Last Survey Date:** 2007-XX-XX
**Owner/Manager:** UNKNOWN
**Presence:** Presumed Extant

**Location:**
ABOUT 0.5 MI SSE OF JEFFERSON BLVD AT BEVAN RD AND 0.6 MI NNW OF GREGORY AVE AT BURROWS AVE, W OF THE SACRAMENTO RIVER.

**Detailed Location:**
MAPPED TO COORDINATES GIVEN FOR SITE YO-66 FROM ESTEP'S 2008 REPORT.

**Ecological:**
NEST IN ISOLATED VALLEY OAK SURROUNDED BY ALFALFA AND IRRIGATED CROPLAND.

**Threats:**
**General:**
ACTIVITY OBSERVED AT NEST DURING 2007 SURVEY; NESTING OUTCOME NOT CONFIRMED.

**PLSS:** T08N, R04E, Sec. 29 (M)
**UTM:** Zone-10 N4264189 E625402
**Accuracy:** 80 meters
**Latitude/Longitude:** 38.51726 / -121.56155
**Area (acres):** 0
**Elevation (feet):** 10

**County Summary:**
**Quad Summary:**
Yolo
Sacramento West (3812155)

**Sources:**
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- **Federal:** None  
- **State:** Threatened

**CNDDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-05-28  
**Last Survey Date:** 2009-05-28

**Owner/Manager:** DFG-YOLO BYPASS WA, UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
YOLO BYPASS WA; ABOUT 2.5 MI WSW OF JEFFERSON BLVD AT BURROWS AVE, 5 MI SE OF EL MACERO.

**Detailed Location:**  
MAPPED TO POINT FROM CDFW SHAPEFILE OF NEST SITES DOCUMENTED IN 2009.

**Ecological:**  
NEST IN 30' COTTONWOOD SURROUNDED BY CROPLAND WITH GRAZING LAND TO THE NE.

**Threats:**  
**General:**  
ACTIVE NEST, INCUBATION AND DEFENSIVE BEHAVIOR OBSERVED ON 28 MAY 2009; SUCCESS UNKNOWN.

**Accuracy:** 80 meters  
**Area (acres):** 0

**Latitude/Longitude:** 38.50186 / -121.62047  
**Elevation (feet):** 10

**PLSS:** T08N, R03E, Sec. 35 (M)  
**UTM:** Zone-10 N4262401 E620291

**County Summary:** Yolo  
Sacramento West (3812155)

**Sources:**  
DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009 -XX-XX
**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

### Listing Status:
- **Federal:** None  
- **State:** Threatened

### CNNDDB Element Ranks:
- **Global:** G5  
- **State:** S3

### General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed:
2007-XX-XX

### Location:
YOLO BYPASS WA, ABOUT 2.6 MI SW OF JEFFERSON BLVD AT SOUTHPORT PKWY & 5.75 MI SE OF I-80 AT MACE BLVD IN EL MACERO.

### Detailed Location:
MAPPED TO COORDINATES GIVEN FOR SITE YO-115 FROM ESTEP’S 2008 REPORT.

### Ecological:
NEST IN EUCALYPTUS IN TREE ROW SURROUNDED BY SEASONAL WETLAND, ALFALFA, AND IRRIGATED CROPLAND.

### Threats:
**General:**
ACTIVE NEST OBSERVED DURING 2007 PRODUCED 0 YOUNG.

### PLSS:
- **T08N, R03E, Sec. 35 (M)**
- **Accuracy:** 80 meters
- **Area (acres):** 0

### UTM:
- **Zone-10 N4262400 E621183**
- **Latitude/Longitude:** 38.50172 / -121.61024
- **Elevation (feet):** 10

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**Sources:**
EST08R0001  
ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON’S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 88649  
**EO Index:** 89663  
**Key Quad:** Sacramento West (3812155)  
**Element Code:** ABNKC19070  
**Occurrence Number:** 2227  
**Occurrence Last Updated:** 2013-04-08

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

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**Listing Status:**  
**Federal:** None  
**State:** Threatened

**Rare Plant Rank:**  
**BLM_S-Sensitive**  
**IUCN_LC-Least Concern**  
**USFWS_BCC-Birds of Conservation Concern**

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**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

---

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

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**Last Date Observed:** 2003-05-28  
**Last Survey Date:** 2003-05-28

---

**Owner/Manager:** DFG-YOLO BYPASS WA  
**Presence:** Presumed Extant

---

**Location:**  
YOLO BYPASS WA ALONG S FORK PUTAH CREEK, ABOUT 2.4 MI WSW OF CA-84 AT SOUTHPORT PKWY & 5.3 MI SE OF I-80 AT MACE BLVD.

**Detailed Location:**  
MAPPED TO COORDINATES GIVEN FOR CDFW NEST RECORD FROM 2003. STATED LOCATION IS “SOUTH OF PARKING LOT G.”

**Ecological:**  
NEST IN 40’ WILLOW WITH RIPARIAN HABITAT TO THE NORTH AND GRAZING LAND TO THE SOUTH.

**Threats:**

**General:**  
NEST WITH 1 PARTIALLY-FEATHERED YOUNG OBSERVED ON 28 MAY 2003; FLEDGING SUCCESS UNKNOWN.

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**PLSS:** T08N, R03E, Sec. 26 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4263714 E621046  
**Latitude/Longitude:** 38.51358 / -121.61159  
**Elevation (feet):** 10

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**County Summary:**  
**Quad Summary:**

**Yolo**  
Sacramento West (3812155)

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**Sources:**

DFG05U0001  
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNEDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-06-08  
**Occurrence Type:** Natural/Native occurrence

**Owner/Manager:** DFG-YOLO BYPASS WA  
**Occurrence Rank:** Unknown

**Location:**  
YOLO BYPASS WA, ABOUT 0.8 MI ENE OF I-80 AT CHILES RD, 2.6 MI WSW OF I-80 AT ENTERPRISE BLVD IN WEST SACRAMENTO.

**Detailed Location:**  
MAPPED TO POINT FROM CDFW SHAPEFILE OF NEST RECORDS FROM 2009.

**Ecological:**  
NEST IN 30' WILLOW WITH FALLOW/RUDERAL LAND TO THE SOUTH AND CROPLAND TO THE NORTH.

**Threats:**  
**General:**  
ACTIVE NEST, INCUBATION OBSERVED ON 8 JUN 2009; FLEDGING SUCCESS UNKNOWN.

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**County Summary:**  
Yolo
Sacramento West (3812155)

**Sources:**
DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX

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Report Printed on Tuesday, September 15, 2015

Information Expires 3/1/2016
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVALANAS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2004-06-21

**Last Survey Date:** 2004-06-21

**Owner/Manager:** DFG-YOLO BYPASS WA

**Presence:** Presumed Extant

**Location:**
YOLO BYPASS WA, ALONG RAILROAD TRACK, ABOUT 1.4 MI ENE OF I-80 AT CHILES RD & 1.75 MI W OF I-80 AT ENTERPRISE BLVD.

**Detailed Location:**

**Ecological:**
2002 NEST IN 50’ WILLOW WITH CROPLAND TO NORTH AND RIPARIAN SOUTH. 2003 NEST IN 40’ COTTONWOOD SURROUNDED BY FALLOW LAND. 2004 NEST IN 30’ WILLOW WITH CROPLAND NORTH AND FALLOW LAND SOUTH.

**Threats:**
General:
2002: 1 DOWNY YOUNG OBS IN NEST ON 24 JUN. 2003: 1 DOWNY YOUNG OBS ON 29 MAY; NEST WAS MONITORED BY BIOLOGICAL CONSULTANTS DURING RR TRESTLE CONSTRUCTION. 2004: BIRDS "JUMPY," FLUSHED FROM NEST 13 MAY; 1 DOWNY YOUNG OBS IN NEST ON 21 JUN.

**PLSS:** T08N, R03E, Sec. 02 (M)

**Accuracy:** Specific area

**Area (acres):** 15

**UTM:** Zone-10 N4270151 E620659

**Latitude/Longitude:** 38.57163 / -121.61491

**Elevation (feet):** 15

**County Summary:** Sacramento West (3812155)

**Sources:**
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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:**
- Federal: None
- State: Threatened

**CNDDB Element Ranks:**
- Global: G5
- State: S3

**General Habitat:**
Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.

**Micro Habitat:**
Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

**Last Date Observed:** 2007-XX-XX

**Last Survey Date:** 2007-XX-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
ON UNNAMED CANAL ALONG N SIDE OF RR TRACKS ON N BOUNDARY OF YOLO BYPASS WA, ABOUT 0.7 MI NW OF I-80 AT ENTERPRISE BLVD.

**Detailed Location:**
MAPPED TO COORDINATES GIVEN FOR SITE YO-73 FROM ESTEP'S 2008 REPORT.

**Ecological:**
Nest in cottonwood surrounded by seasonal wetland, urban land use, and rice fields.

**Threats:**
**General:**
Activity at nest observed during 2007 survey; nesting outcome unconfirmed.

**PLSS:** T09N, R03E, Sec. 36 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4270872 E622805  
**Latitude/Longitude:** 38.57783 / -121.59015  
**Elevation (feet):** 10

**County Summary:**
Yolo

**Quad Summary:** Sacramento West (3812155)

**Sources:**
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2007-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:** JUST EAST OF THE YOLO BYPASS WA, ALONG TOE DRAIN, ABOUT 0.2 MILES NW OF I-80 AT ENTERPRISE BLVD IN WEST SACRAMENTO.

**Detailed Location:** MAPPED TO COORDINATES PROVIDED FOR SITE YO-31 FROM ESTEP'S 2008 REPORT.

**Ecological:**  
NEST IN WILLOW IN CHANNELIZED RIPARIAN HABITAT.

**Threats:**  
NEST WITH 2 YOUNG OBSERVED DURING 2007 SURVEY.

**PLSS:** T08N, R04E, Sec. 06 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4270644 E623661  
**Latitude/Longitude:** 38.57566 / -121.58037  
**Elevation (feet):** 10

**County Summary:** Yolo  
**Quad Summary:** Sacramento West (3812155)

**Sources:**  
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
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<td><strong>Common Name:</strong></td>
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<td><strong>Micro Habitat:</strong></td>
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<td><strong>Owner/Manager:</strong></td>
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<tr>
<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
</tr>
<tr>
<td><strong>Location:</strong></td>
<td>W SIDE TULE CANAL, ABOUT 2 MI W OF OLD RIVER RD AT LEVEE RD &amp; 2.5 MI NNW OF I-80 AT ENTERPRISE RD IN WEST SACRAMENTO.</td>
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<td><strong>Detailed Location:</strong></td>
<td>MAPPED TO COORDINATES FROM CDFW NEST RECORD FROM 2003. STATED LOCATION &quot;YOLO BYPASS E SIDE, 1/4 MILE N OF SACRAMENTO BYPASS.&quot;</td>
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<tr>
<td><strong>Ecological:</strong></td>
<td>NEST IN 50' COTTONWOOD SURROUNDED BY CROPLAND.</td>
</tr>
<tr>
<td><strong>Threats:</strong></td>
<td>ACTIVE NEST OBSERVED 28 APR 2003; 1 FEATHERED YOUNG OBS IN NEST ON 30 JUN.</td>
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<td><strong>PLSS:</strong></td>
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<td><strong>UTM:</strong></td>
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<td><strong>County Summary:</strong></td>
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</tr>
<tr>
<td></td>
<td>Sacramento West (3812155)</td>
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</table>

**Sources:**

Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 88669
EO Index: 89684
Key Quad: Sacramento West (3812155)
Element Code: ABNKC19070
Occurrence Number: 2233
Occurrence Last Updated: 2013-04-09

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened
Rare Plant Rank:
Other Lists: BLM_S-Sensitive
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

CNDDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAINフィIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2007-XX-XX
Last Survey Date: 2007-XX-XX
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Unknown
Trend: Unknown

Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
ALONG TULE CANAL, ABOUT 2.4 MI WNW OF OLD RIVER RD AT LEVEE RD & 3.1 MI NNW OF I-80 AT ENTERPRISE RD IN WEST SACRAMENTO.

Detailed Location:
MAPPED TO COORDINATES GIVEN FOR SITE YO-34 FROM ESTEP'S 2008 REPORT.

Ecological:
NEST IN WILLOW IN CHANNELIZED RIPARIAN HABITAT SURROUNDED BY IRRIGATED CROPLAND.

Threats:
General:
NEST WITH 1 YOUNG OBSERVED DURING 2007 SURVEY.

PLSS: T09N, R03E, Sec. 23 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4274950 E621595
Latitude/Longitude: 38.61474 / -121.60333
Elevation (feet): 15

County Summary: Yolo
Quad Summary: Sacramento West (3812155)

Sources:
EST08R0001 ESTEP ENVIRONMENTAL CONSULTING - THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF THE SWAINSON'S HAWK IN YOLO COUNTY, CALIFORNIA. 2008-03-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 88769
EO Index: 89784

Key Quad: Elk Grove (3812143)
Occurrence Number: 2244

Occurrence Last Updated: 2013-04-12

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNNDDB Element Ranks: Global: G5
State: S3

General Habitat:
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

Micro Habitat:
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Last Date Observed: 2009-07-06

Occurrence Type: Natural/Native occurrence

Occurrence Rank: Unknown

Owner/Manager: UNKNOWN

Trend: Unknown

Presence: Presumed Extant

Location:
EAST SIDE OF BRADSHAW RD, ABOUT 0.4 MI ENE OF GERBER RD INTERSECTION & 1 MI SSE OF FLORIN RD, N OF ELK GROVE.

Detailed Location:
MAPPED TO POINT FROM CDFW SHAPEFILE OF NESTS SITES RECORDED IN 2009.

Ecological:
NEST IN 40' TREE CODED AS "OTHER NATIVE" (NOT VALLEY OR BLUE OAK, PINE, WILLOW, OR COTTONWOOD). SURROUNDED BY FALLOW LAND WITH RESIDENTIAL LAND USE TO THE NE.

Threats:
General:
NEST WITH YOUNG OBSERVED ON 6 JUL 2009.

NEST WITH YOUNG OBSERVED ON 6 JUL 2009.

PLSS: T07N, R06E, Sec. 04 (M)
Accuracy: 1/5 mile

UTM: Zone-10 N4260790 E645783
Latitude/Longitude: 38.48353 / -121.32855

County Summary: Sacramento
Quad Summary: Elk Grove (3812143)

Area (acres): 0
Elevation (feet): 65

Sources:
DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009 -XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

<table>
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<tr>
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<th>88770</th>
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<tbody>
<tr>
<td>Key Quad:</td>
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<td>Occurrence Number:</td>
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**EO Index:** 89785  
**Element Code:** ABNKC19070  
**Occurrence Last Updated:** 2013-05-13

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<th>Scientific Name:</th>
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<tbody>
<tr>
<td>Common Name:</td>
<td>Swainson's hawk</td>
</tr>
</tbody>
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**Listing Status:**
- **Federal:** None
- **State:** Threatened

**CNNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Last Date Observed:** 2011-06-27

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Fair

**Trend:** Unknown

<table>
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<tr>
<th>Location:</th>
<th>ABOUT 0.3 MILES NW OF BRADSHAW RD AT SHELDON RD AND 0.75 MILES SSW OF BRADSHAW AND CALVINE, NE OF ELK GROVE.</th>
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<tbody>
<tr>
<td>Detailed Location:</td>
<td>MAPPED TO COORDINATES GIVEN ON 2011 FIELD SURVEY FORM.</td>
</tr>
<tr>
<td>Ecological:</td>
<td>NEST WAS IN MEDIUM-SIZED VALLEY OAK ALONG THE NORTH FENCELINE OF RURAL RANCHETTE. GOOGLE EARTH AERIALS SHOW THAT PARCEL WAS DEVELOPED IN LATE 2011.</td>
</tr>
<tr>
<td>Threats:</td>
<td>POSSIBLE THREAT FROM DISTURBANCE AND LOSS OF FORAGING HABITAT DUE TO DEVELOPMENT.</td>
</tr>
</tbody>
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**General:**
NESTING PAIR OBSERVED ON 19 MAY 2011; FEMALE WAS TENDING NEST AND MALE WAS CIRCLING AND CALLING. NEST FAILED BY 27 JUN; REASON FOR FAILURE NOT DETERMINED.

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<tr>
<th>PLSS:</th>
<th>T07N, R06E, Sec. 20 (M)</th>
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<td>Accuracy:</td>
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<td>Area (acres):</td>
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<th>UTM:</th>
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<td>Latitude/Longitude:</td>
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<td>Elevation (feet):</td>
<td>60</td>
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| County Summary: | Elk Grove (3812143) |

**Sources:**
WHI11F0006  
WHISLER, E. - FIELD SURVEY FORM FOR BUTEO SWAINSONI 2011-05-19

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**Sacramento**  
**Quad Summary:**

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**Report Printed on Tuesday, September 15, 2015**

**Information Expires 3/1/2016**
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<th>EO Index:</th>
<th>89788</th>
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<tr>
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<td>Elk Grove (3812143)</td>
<td>Element Code:</td>
<td>ABNKC19070</td>
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<td>Occurrence Number:</td>
<td>2246</td>
<td>Occurrence Last Updated:</td>
<td>2013-04-12</td>
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</table>

**Scientific Name:** *Buteo swainsoni*  
**Common Name:** Swainson's hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2009-07-06  
**Last Survey Date:** 2009-07-06

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
ON CHERRINGTON LN, ABOUT 0.6 MI N OF THE SHELDON RD JUNCTION & 0.4 MI S OF CALVINE RD AT VINEYARD RD, NE OF ELK GROVE.

**Detailed Location:**  
MAPIED TO POINT FROM CDFW SHAPEFILE OF SWAINSON'S HAWK NEST SITES RECORDED IN 2009.

**Ecological:**  
NEST IN 40' COTTONWOOD SURROUNDED BY RESIDENTIAL LAND USE, WITH FALLOW LAND TO THE SW.

**Threats:**

**General:**  
NEST WITH YOUNG OBSERVED ON 6 JUL 2009; FLEDGING SUCCESS UNKNOWN.

**PLSS:** T07N, R06E, Sec. 22 (M)  
**UTM:** Zone-10 N4256809 E646940  
**Accuracy:** 80 meters  
**Latitude/Longitude:** 38.44748 / -121.31613  
**Area (acres):** 0  
**Elevation (feet):** 60

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
DFG09D0001 CALIFORNIA DEPARTMENT OF FISH & GAME - REGION 2 - SHAPEFILE OF SWAINSON'S HAWK NEST RECORDS FROM 2009. 2009-XX-XX

Map Index Number: 88786
EO Index: 89801
Key Quad: Elk Grove (3812143)
Element Code: ABNKC19070
Occurrence Number: 2249
Occurrence Last Updated: 2013-04-12

Scientific Name: Buteo swainsoni
Common Name: Swainson's hawk

Listing Status: Federal: None
State: Threatened

CNDDDB Element Ranks: Global: G5
State: S3

Occurrence Type: Natural/Native occurrence
Occurrence Rank: Unknown
Trend: Unknown

Location: ABOUT 0.6 MILES SE OF GRANT LINE RD AT WATERMAN RD AND 1.7 MILES NNE OF HWY 99 BRIDGE OVER DEER CREEK, SE OF ELK GROVE.

Detailed Location: MAPPED TO COORDINATES FROM CDFW NEST RECORD FROM 2003.

Ecological:
NEST IN 50' VALLEY OAK SURROUNDED BY GRAZING LAND.

Threats:
General:
ACTIVE NEST RECORDED ON 28 MAY 2003, NO YOUNG SEEN. NESTING OUTCOME NOT CONFIRMED.

PLSS: T06N, R06E, Sec. 08 (M)
UTM: Zone-10 N4249471 E645084
Latitude/Longitude: 38.38168 / -121.33891
Accuracy: 80 meters
Elevation (feet): 50
Area (acres): 0

County Summary: Sacramento
Quad Summary: Elk Grove (3812143)

### Occurrence Report
#### California Department of Fish and Wildlife
#### California Natural Diversity Database

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<td>EO Index:</td>
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<td>Occurrence Last Updated:</td>
<td>2013-05-14</td>
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</table>

**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson’s hawk

**Listing Status:**  
- Federal: None  
- State: Threatened

**CNDDB Element Ranks:**  
- Global: G5  
- State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-07-01  
**Last Survey Date:** 2003-07-01

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
NORTH OF DEER CREEK, FROM GRANT LINE RD 0.2 ROAD MILES SW OF MOSHER RD JUNCTION, TO ABOUT 0.3 MI ESE, ALONG FARM ROAD.

**Detailed Location:**  
MAPPED TO COORDINATES FROM CDFW NEST RECORDS FROM 2003. TWO ACTIVE NEST SITES RECORDED.

**Ecological:**  
W NEST (W SIDE GRANT LINE RD) IN 75' EUCALYPTUS SURROUNDED BY GRAZING LAND W/RESIDENTIAL TO NE. AIR PHOTOS INDICATE THIS TREE WAS REMOVED IN 2009 W/EXTENSION OF WATERMAN RD. E NEST (ON FARM RD) IN 70' VALLEY OAK SURROUNDED BY GRAZING LAND.

**Threats:**  
REMOVAL OF NEST TREES DUE TO ROAD BUILDING AND DEVELOPMENT.

**General:**  
1 YOUNG FLEDGED FROM WEST NEST BY 1 JUL 2003. ACTIVE NEST RECORDED AT EAST SITE IN 2003; NO YOUNG OBSERVED. NESTING OUTCOME NOT RECORDED.

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<tr>
<th>PLSS: T06N, R06E, Sec. 08 (M)</th>
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<td>UTM: Zone-10 N4249911 E644675</td>
<td>Latitude/Longitude: 38.38571 / -121.34350</td>
<td>Elevation (feet): 50</td>
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**County Summary:**  
Sacramento

**Detailed Location:**  
MAPPED TO COORDINATES FROM CDFW NEST RECORDS FROM 2003. TWO ACTIVE NEST SITES RECORDED.

**Sources:**  
## Occurrence Report

**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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<th>Map Index Number:</th>
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<td>EO Index:</td>
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<td>Element Code:</td>
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<td>Occurrence Last Updated:</td>
<td>2013-05-14</td>
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### Scientific Name: Buteo swainsoni

- **Common Name:** Swainson's hawk
- **Listing Status:**
  - Federal: None
  - State: Threatened
- **CNDDB Element Ranks:**
  - Global: G5
  - State: S3

### General Habitat:

- BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

### Micro Habitat:

- REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

### Last Date Observed: 2003-07-02

### Owner/Manager: UNKNOWN

### Presence: Presumed Extant

### Location:

WEST SIDE OF WATERMAN RD, AT MOSHER RD INTERSECTION, SOUTHEAST ELK GROVE.

### Detailed Location:

MAPPED TO COORDINATES GIVEN FOR CDFW NEST RECORD FROM 2003.

### Ecological:

NEST IN 60' EUCALYPTUS SURROUNDED BY RESIDENTIAL LAND USE.

### Threats:


### General:

ACTIVE NEST OBSERVED 13 MAY 2003; 2 FEATHERED YOUNG OBSERVED ON 2 JUL, FLEDGING SUCCESS UNKNOWN.

### PLSS:

- T06N, R06E, Sec. 07 (M)
- Accuracy: 80 meters
- Area (acres): 0

### UTM:

- Zone-10 N4250545 E643820
- Latitude/Longitude: 38.39157 / -121.35315
- Elevation (feet): 50

### Sources:

**Map Index Number:** 88790  
**EO Index:** 89805  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 2253  
**Occurrence Last Updated:** 2013-04-15

**Scientific Name:** Buteo swainsoni  
**Common Name:** Swainson's hawk

**Listing Status:**  
Federal: None  
State: Threatened

**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

**Micro Habitat:**  
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Presence:** Presumed Extant  
**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.

**Threats:**  
AERIAL PHOTOS SHOW DEVELOPMENT HAS REDUCED FORAGING HABITAT IN THE VICINITY; UNKNOWN IF NEST TREE STILL STANDS (2013).

**General:**  
NESTING PAIR OBSERVED ON 6 JUN 1989; NESTING SUCCESS UNKNOWN.

**PLSS:** T07N, R05E, Sec. 26 (M)  
**Accuracy:** 1/5 mile

**UTM:** Zone-10 N4254808 E639862  
**Latitude/Longitude:** 38.43059 / -121.39761

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Buteo swainsoni*

**Common Name:** Swainson's hawk

**Listing Status:** Federal: None  
State: Threatened

**CNDDDB Element Ranks:** Global: G5  
State: S3

**General Habitat:**
BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.

**Micro Habitat:**
REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Last Date Observed:** 2003-07-10
**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Unknown

**Trend:** Unknown

**Presence:** Presumed Extant

**Location:** ABOUT 0.4 MILES WNW OF BOND ROAD AT BRADSHAW ROAD IN NORTHEAST ELK GROVE.

**Detailed Location:** MAPPED TO PROVIDED COORDINATES FOR "BOND RD/BRADSHAW -ELK GROVE."

**Ecological:**
NEST TREE WAS A 70' EUCALYPTUS THAT WAS CUT DOWN BETWEEN SEPTEMBER AND NOVEMBER 2003 (PER AERIAL PHOTOS). THE ENTIRE LOT WAS SUBSEQUENTLY CLEARED AND DEVELOPED AS A SCHOOL GROUNDS. SURROUNDING LAND USE RESIDENTIAL.

**Threats:**
NEST TREE REMOVAL.

**General:**
ACTIVE NEST OBSERVED IN 2003, BUT WAS VACANT BY 10 JUL.

**PLSS:** T07N, R06E, Sec. 29 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4254303 E644706  
**Latitude/Longitude:** 38.42527 / -121.34224  
**Elevation (feet):** 55

**County Summary:** Sacramento

**Quad Summary:** Elk Grove (3812143)

**Sources:**
**Map Index Number:** 32459  
**EO Index:** 66106  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 31  
**Occurrence Last Updated:** 2006-08-23  

**Scientific Name:** *Buteo regalis*  
**Common Name:** ferruginous hawk  

**Listing Status:**  
- **Federal:** None  
- **State:** None  

**CNDDB Element Ranks:**  
- **Global:** G4  
- **State:** S3S4  

**General Habitat:**  
OPEN GRASSLANDS, SAGEBRUSH FLATS, DESERT SCRUB, LOW FOOTHILLS AND FRINGES OF PINYON AND JUNIPER HABITATS.  
**Micro Habitat:**  
EATS MOSTLY LAGOMORPHS, GROUND SQUIRRELS, AND MICE. POPULATION TRENDS MAY FOLLOW LAGOMORPH POPULATION CYCLES.  

**Last Date Observed:** 1991-02-14  
**Last Survey Date:** 1991-02-14  
**Owner/Manager:** PVT-GRANITE CONSTRUCTION CO  
**Presence:** Presumed Extant  
**Location:**  
SW OF MATHER AFB; BETWEEN KIEFER BLVD, BRADSHAW ROAD, JACKSON ROAD AND EXCELSIOR ROAD.  
**Detailed Location:**  
GRAZED ANNUAL NON-NATIVE GRASSLAND.  
**Ecological:**  
POSSIBLE THREAT IS PROPOSED AGGREGATE MINING.  
**Threats:**  

**PLSS:** T08N, R06E, Sec. 21 (M)  
**Accuracy:** nonspecific area  
**UTM:** Zone-10 N4266114 E646979  
**Latitude/Longitude:** 38.53130 / -121.31374  
**Elevation (feet):** 70  
**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)  

**Sources:**  
- VAN90F0011 VANBELDER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR BUTOE REGALIS (WINTERING SITE) 1990-12-17  
- VAN91F0006 VANBELDER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR BUTOE REGALIS (WINTERING SITE) 1991-01-02  
- VAN91F0007 VANBELDER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR BUTOE REGALIS (WINTERING SITE) 1991-01-08  
- VAN91F0008 VANBELDER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR BUTOE REGALIS (WINTERING SITE) 1991-01-15  
- VAN91F0009 VANBELDER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR BUTOE REGALIS (WINTERING SITE) 1991-01-22  
- VAN91F0010 VANBELDER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR BUTOE REGALIS (WINTERING SITE) 1991-02-14
### Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** Buteo regalis  
**Common Name:** ferruginous hawk

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G4  
- **State:** S3S4

**General Habitat:** OPEN GRASSLANDS, SAGEBRUSH FLATS, DESERT SCRUB, LOW FOOTHILLS AND FRINGES OF PINYON AND JUNIPER HABITATS.

**Micro Habitat:** EATS MOSTLY LAGOMORPHS, GROUND SQUIRRELS, AND MICE. POPULATION TRENDS MAY FOLLOW LAGOMORPH POPULATION CYCLES.

**Last Date Observed:** 2003-09-25  
**Last Survey Date:** 2003-09-25  
**Owner/Manager:** SRCSD-BUFFERLANDS  
**Presence:** Presumed Extant

**Location:** 0.3 MILES 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.

**Threats:** AGRICULTURE LAND TO NORTH SLATED FOR CONSTRUCTION OF COSUMNES RIVER BLVD EXTENSION AND HOUSING.

**General:** 1 ADULT, WINTERING ON 25 SEP 2003. SEEN ON LEVEE.

**PLSS:** T07N, R04E, Sec. 13 (M)  
**UTM:** Zone-10 N4257639 E631861  
**Accuracy:** 1/10 mile  
**Latitude/Longitude:** 38.45732 / -121.48871  
**Area (acres):** 0  
**Elevation (feet):** 15

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**
CON03F0002  CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR BUTEO REGALIS 2003-09-25
Map Index Number: 71226 | EO Index: 72132
---|---
Key Quad: Florin (3812144) | Element Code: ABNKC19120
Occurrence Number: 74 | Occurrence Last Updated: 2008-04-30

**Scientific Name:** Buteo regalis  | **Common Name:** ferruginous hawk
**Listing Status:**  
- Federal: None  
- State: None
**Rare Plant Rank:**
- CDFW WL-Watch List
- IUCN LC-Least Concern
- USFWS BCC-Birds of Conservation Concern
**CNDDB Element Ranks:**  
- Global: G4  
- State: S3S4

**General Habitat:** OPEN GRASSLANDS, SAGEBRUSH FLATS, DESERT SCRUB, LOW FOOTHILLS AND FRINGES OF PINYON AND JUNIPER HABITATS.

**Micro Habitat:** EATS MOSTLY LAGOMORPHS, GROUND SQUIRRELS, AND MICE. POPULATION TRENDS MAY FOLLOW LAGOMORPH POPULATION CYCLES.

**Last Date Observed:** 2003-09-22  | **Occurrence Type:** Natural/Native occurrence
**Last Survey Date:** 2003-09-22  | **Occurrence Rank:** Good
**Owner/Manager:** SRCSD  | **Trend:** Unknown
**Presence:** Presumed Extant

**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 WILDLIFE; EAST: ANNUAL GRASSLANDS WITH VERNAL POOLS & SEASONAL WETLANDS; WEST: SEASONAL WETLANDS, RIPARIAN FORESTS & GRASSLANDS.

**Threats:** LOSS OF ADJACENT OPEN SPACE AND AGRICULTURE LAND.

**General:** 1 ADULT, WINTERING ON 22 SEP 2003. OBSERVED FLYING OVER SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT.

**PLSS:** T07N, R05E, Sec. 19 (M)  | **Accuracy:** 1/10 mile
**UTM:** Zone-10 N4256644 E633915  | **Area (acres):** 0
**Latitude/Longitude:** 38.44805 / -121.46538  | **Elevation (feet):** 15

**County Summary:** Sacramento  | **Quad Summary:** Florin (3812144)

**Sources:**
CON03F0001  |  CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR BUTEO REGALIS 2003-09-22
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 32459
Key Quad: Carmichael (3812153)
Occurrence Number: 135
EO Index: 74753
Element Code: ABNKC22010
Occurrence Last Updated: 2009-03-18

Scientific Name: *Aquila chrysaetos*
Common Name: golden eagle

Listing Status: Federal: None
State: None

Rare Plant Rank:
Other Lists: BLM_S-Sensitive
CDF_S-Sensitive
CDFW_FP-Fully Protected
CDFW_WL-Watch List
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

CNDDB Element Ranks:
Global: G5
State: S3

General Habitat:
ROLLING FOOTHILLS, MOUNTAIN AREAS, SAGE-JUNIPER FLATS, & DESERT.

Micro Habitat:
CLIFF-WALLED CANYONS PROVIDE NESTING HABITAT IN MOST PARTS OF RANGE; ALSO, LARGE TREES IN OPEN AREAS.

Last Date Observed: 1991-02-14
Last Survey Date: 1991-02-14
Owner/Manager: PVT-GRANITE CONSTRUCTION CO
Presence: Presumed Extant

Location:
SW OF MATHER AFB; BETWEEN KIEFER BLVD, BRADSHAW ROAD, JACKSON ROAD AND EXCELSIOR ROAD.

Detailed Location:
MAPPED VERY GENERALLY IN SECTIONS 21 AND 22; NEED MORE SPECIFIC LOCATION INFORMATION.

Ecological:
GRAZED ANNUAL NON-NATIVE GRASSLAND. LARGE PREY BASE FOR RAPTORS.

Threats:
PROPOSED AGGREGATE MINING.

General:

PLSS: T08N, R06E, Sec. 21 (M)
Accuracy: nonspecific area
Area (acres): 1,493

UTM: Zone-10 N4266114 E646979
Latitude/Longitude: 38.53130 / -121.31374
Elevation (feet): 70

County Summary: Sacramento
Quad Summary: Carmichael (3812153)

Sources:
VAN90F0013 VANBELDER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR AQUILA CHRYSATEOS (WINTERING SITE) 1990-12-17
VAN91F0011 VANBELDER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR AQUILA CHRYSATEOS (WINTERING SITE) 1991-01-08
VAN91F0012 VANBELDER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR AQUILA CHRYSATEOS (WINTERING SITE) 1991-02-14
**Occurrence Report**

California Department of Fish and Wildlife  
California Natural Diversity Database

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<td>Detailed Location:</td>
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<td>SEASONAL WETLANDS W/ GRASSLANDS TO WEST &amp; RIPARIAN FOREST ALONG LAGUNA CREEK TO THE EAST. WASTWATER TREATMENT PONDS TO EAST OF OBSERVATION HARBOR HUNDREDS/THOUSANDS OF SHOREBIRDS; MERLINS SEEN HUNTING THERE IN THE PAST.</td>
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**Sources:**

CON04F0020  CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR FALCO COLUMBARIUS 2004-12-13
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<td>CON04F0022 CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR FALCO COLUMBARIUS 2004-01-12</td>
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| General Habitat: | SEACOAST, TIDAL ESTUARIES, OPEN WOODLANDS, SAVANNAHS, EDGES OF GRASSLANDS & DESERTS, FARMS & RANCHES. |
| Micro Habitat: | CLUMPS OF TREES OR WINDBREAKS ARE REQUIRED FOR ROOSTING IN OPEN COUNTRY. |

| Last Date Observed: | 2004-02-17 | Occurrence Type: | Natural/Native occurrence |
| Last Survey Date: | 2004-02-17 | Occurrence Rank: | Good |
| Owner/Manager: | SRCSD-BUFFERLANDS | Trend: | Unknown |
| Presence: | Presumed Extant |

**Location:**
SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT, NEAR LAGUNA CRK, 2.8 MILES ESE OF BENCHMARK 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.

**Threats:**
THREATENED BY LOSS OF HABITAT ("LOSS OF OPEN SPACE IN SURROUNDING LANDS").

**General:**
1 OVER-WINTERING ADULT OBSERVED ON 17 FEB 2004.

**PLSS:**
T07N, R05E, Sec. 20 (M)  Accuracy: 80 meters  Area (acres): 0

**UTM:**
Zone-10 N4256687 E634819  Latitude/Longitude: 38.44829 / -121.45501  Elevation (feet): 15

**County Summary:**
Sacramento

**Quad Summary:**
Florin (3812144)

**Sources:**
CON04F0021 CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR FALCO COLUMBARIUS 2004-02-17
**Occurrences Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Falco columbarius*  
**Common Name:** merlin  
**Listing Status:**  
- Federal: None  
- State: None  
**CNDDB Element Ranks:**  
- Global: G5  
- State: S3S4  

**General Habitat:**  
SEACOAST, TIDAL ESTUARIES, OPEN WOODLANDS, SAVANNAHS, EDGES OF GRASSLANDS & DESERTS, FARMS & RANCHES.  

**Micro Habitat:**  
CLUMPS OF TREES OR WINDBREAKS ARE REQUIRED FOR ROOSTING IN OPEN COUNTRY.  

**Last Date Observed:** 2004-03-20  
**Last Survey Date:** 2004-03-20  
**Owner/Manager:** SRCSD-BUFFERLANDS  
**Presence:** Presumed Extant  
**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.  
**Threats:**  
THREATENED BY LOSS OF HABITAT ("LOSS OF OPEN SPACE IN SURROUNDING LANDS").  
**General:**  
1 OVER-WINTERING MALE ADULT (F. C. SUCKLEY!) OBSERVED PERCHED ON SMALL OAK ON 20 MAR 2004.  
**PLSS:**  
T07N, R05E, Sec. 20 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**UTM:**  
Zone-10 N4255608 E635429  
**Latitude/Longitude:** 38.43849 / -121.44823  
**Elevation (feet):** 20  
**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)  

**Sources:**  
CON04F0024 CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR FALCO COLUMBIARUS 2004-03-20
**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

| Map Index Number: | 71868 | EO Index: | 72739 |
| Key Quad: | Florin (3812144) | Element Code: | ABNKD06030 |
| Occurrence Number: | 22 | Occurrence Last Updated: | 2008-08-01 |

**Scientific Name:** *Falco columbarius*  
**Common Name:** merlin

**Listing Status:**  
Federal: None  
State: None

**CNDDDB Element Ranks:**  
Global: G5  
State: S3S4

**Occurrence Report**

**General Habitat:**  
SEACOAST, TIDAL ESTUARIES, OPEN WOODLANDS, SAVANNAHS, EDGES OF GRASSLANDS & DESERTS, FARMS & RANCHES.

**Micro Habitat:**  
CLUMPS OF TREES OR WINDBREAKS ARE REQUIRED FOR ROOSTING IN OPEN COUNTRY.

**Last Date Observed:** 2004-03-22  
**Occurrence Type:** Natural/Native occurrence

**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.

**Threats:**  
THREATENED BY LOSS OF HABITAT (“LOSS OF OPEN SPACE IN SURROUNDING LANDS”).

**General:**  
1 OVER-WINTERING FEMALE ADULT OBSERVED ON 22 MAR 2004.

**PLSS:** T07N, R05E, Sec. 30 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4255049 E632696  
**Latitude/Longitude:** 38.43386 / -121.47964  
**Elevation (feet):** 10

**County Summary:**  
Sacramento  
**Quad Summary:**  
Florin (3812144)

**Sources:**  
CON04F0023  
CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR FALCO COLUMBARIUS 2004-03-22
### California Natural Diversity Database

#### Occurrence Report

**Map Index Number:** 11194  
**EO Index:** 25585  
**Element Code:** ABNRB02022  
**Occurrence Last Updated:** 1989-08-10

<table>
<thead>
<tr>
<th>Key Quad:</th>
<th>Clarksburg (3812145)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occurrence Number:</td>
<td>95</td>
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</tbody>
</table>

**Scientific Name:** *Coccyzus americanus occidentalis*  
**Common Name:** western yellow-billed cuckoo

**Listing Status:**  
- **Federal:** Threatened  
- **State:** Endangered

**CNDDB Element Ranks:**  
- **Global:** G5T3Q  
- **State:** S1

**General Habitat:**  
RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-Bottoms of LARGER RIVER SYSTEMS.

**Micro Habitat:**  
NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, W/ LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.

**Last Date Observed:** 1896-06-05  
**Occurrence Type:** Natural/Native occurrence

**Location:** CLARKSBURG.  
**Detailed Location:**

**Ecological:**  
**Threats:**

**General:**  
MVZ SPECIMEN FROM THIS LOCALITY INDICATES THAT CUCKOOS ONCE OCCURRED IN THE SACRAMENTO-SAN JOAQUIN DELTA.

**PLSS:** T07N, R04E, Sec. 34 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4253208 E627993  
**Latitude/Longitude:** 38.41796 / -121.53385  
**Elevation (feet):** 5

**County Summary:** Sacramento, Yolo  
**Quad Summary:** Clarksburg (3812145)

** Owners/Manager:** PVT  
**Presence:** Extirpated  
**Occurrence Rank:** None  
**Trend:** Unknown

**Other Lists:**  
- BLM_S-Sensitive  
- NABCI_RWL-Red Watch List  
- USFS_S-Sensitive  
- USFWS_BCC-Birds of Conservation Concern

**Sources:**  
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 90034
Key Quad: Sacramento East (3812154)
Occurrence Number: 194

EO Index: 96966
Element Code: ABNRB02022
Occurrence Last Updated: 2015-04-03

**Scientific Name:** Coccyzus americanus occidentalis
**Common Name:** western yellow-billed cuckoo

Listing Status:
- Federal: Threatened
- State: Endangered

CNDDDB Element Ranks:
- Global: G5T3Q
- State: S1

General Habitat:
RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-Bottoms of LARGER RIVER SYSTEMS.

Micro Habitat:
NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, W/ LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.

Last Date Observed: 1877-07-XX
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1877-07-XX
Occurrence Rank: None

Owner/Manager: UNKNOWN
Trend: Unknown

Presence: Extirpated

Location: SACRAMENTO.

Detailed Location:
1877 EXPEDITION CONDUCTED IN "VICINITY OF SACRAMENTO CITY...WHERE VEGETATION WAS NOURISHED BY THE PRESENCE OF WATER." MAPPED GENERALLY CENTERED ON SACRAMENTO.

Ecological:

Threats:
DEVELOPMENT HAS ELIMINATED HABITAT IN THE AREA. THOUGHT TO HAVE BEEN EXTIRPATED IN SACRAMENTO AND YOLO COUNTIES.

General:
FOUND BREEDING IN VICINITY OF SACRAMENTO BETWEEN 6 JUN AND 4 JUL 1877.

PLSS: T08N, R04E, Sec. 01 (M)
Accuracy: 5 miles
Area (acres): 0

UTM: Zone-10 N4270865 E631254
Latitude/Longitude: 38.57656 / -121.49319
Elevation (feet): 20

County Summary: Sacramento, Yolo
Quad Summary: Sacramento East (3812154), Sacramento West (3812155), Rio Linda (3812164), Taylor Monument (3812165)

Sources:
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<td>Occurrence Last Updated:</td>
<td>2011-02-17</td>
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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

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<th>Listing Status:</th>
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<td>BLM_S-Sensitive</td>
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| Other Lists: | CDFW_SSC-Species of Special Concern  
|               | IUCN_LC-Least Concern  
|               | USFWS_BCC-Birds of Conservation Concern |

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

<table>
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<th>Last Date Observed:</th>
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<tr>
<td>Last Survey Date:</td>
<td>2000-10-19</td>
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<tr>
<td>Owner/Manager:</td>
<td>UNKNOWN</td>
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<tr>
<td>Presence:</td>
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<tr>
<td>Location:</td>
<td>IMMEDIATELY SW OF THE JUNCTION OF HOWE AVE &amp; FAIR OAKS BLVD, SACRAMENTO.</td>
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<tr>
<td>Detailed Location:</td>
<td>THE SITE IS NOW COMPLETELY DEVELOPED WITH OFFICE BUILDINGS, LANDSCAPING AND MANICURED LAWNS. THERE IS NO REMAINING HABITAT FOR BURROWING OWLS.</td>
</tr>
</tbody>
</table>

**Ecological:**

1974: THREATENED BY CONSTRUCTION AND MOTORCYCLISTS.

**General:**

SEVERAL COLONIES OBSERVED IN GROUND BURROWS IN VICINITY DURING 1974: 2 BURROWS DESTROYED & 1 BURROW ABANDONED DURING CONSTRUCTION OF PARKING LOT, 1 FEMALE DIED; 1 OWL KILLED BY MOTORCYCLIST; 1 BURROW FOUND AT THIS LOCATION.

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<th>PLSS:</th>
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<tr>
<td>Sacramenento East (3812154)</td>
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</table>

**Sources:**

1. MCG00F0001  
   MCGRIFF, D. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2000-10-19

2. VIN74R0001  
   VINCENTY, J.A. - A STUDY OF FACTORS AFFECTING NESTING RAPTOR POPULATIONS IN URBAN AREAS, SACRAMENTO COUNTY, CALIFORNIA. (WMB ADM RPT., NO.74-5) 1974-08-XX
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

<table>
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<td>EO Index:</td>
<td>25459</td>
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<td>Element Code:</td>
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<td>Occurrence Last Updated:</td>
<td>2011-02-17</td>
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</table>

**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:** Federal: None  
State: None

**CNDDDB Element Ranks:** Global: G4  
State: S3

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 1974-02-XX

**Owner/Manager:** CSU-SACRAMENTO, UNKNOWN

**Location:** SACRAMENTO STATE COLLEGE (NOW CSUS) & ADJACENT LEVEE AREAS ALONG THE AMERICAN RIVER, SACRAMENTO.

**Detailed Location:** LEVEE BURROWS WERE ON THE WEST SIDE OF THE LEVEE ON THE WEST BANK OF THE AMERICAN RIVER.

**Ecological:** OF THE 16 BURROWS OBSERVED IN THE AREA IN 1974, 2 BURROWS WERE DESTROYED & 1 BURROW ABANDONED DURING CONSTRUCTION OF PARKING LOT, 1 FEMALE DIED; 1 OWL KILLED BY MOTORCYCLISTS WHO DELIBERATELY DESTROYED A BURROW WITH THEIR WHEELS.

**Threats:** THREATENED BY CONSTRUCTION AND MOTORCYCLISTS.


**PLSS:** T08N, R05E, Sec. 10 (M)  
**Accuracy:** nonspecific area

**UTM:** Zone-10 N4269084 E637326  
**Latitude/Longitude:** 38.55960 / -121.42387

**Area (acres):** 343  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:**
- BOE83U0001 BOEKELHEIDE, B. - BURROWING OWL NEST SITE LOCATIONS 1983-XX-XX
- VIN74R0001 VINCENTY, J.A. - A STUDY OF FACTORS AFFECTING NESTING RAPTOR POPULATIONS IN URBAN AREAS, SACRAMENTO COUNTY, CALIFORNIA. (WMB ADM RPT., NO.74-5) 1974-08-XX
Map Index Number: 11296
EO Index: 19498
Key Quad: Rio Linda (3812164)
Element Code: ABNSB10010
Occurrence Number: 62
Occurrence Last Updated: 2012-06-11

Scientific Name: Athene cunicularia
Common Name: burrowing owl

Listing Status: Federal: None
State: None

Rare Plant Rank:
Other Lists: BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

CNDDDB Element Ranks: Global: G4 State: S3

General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 2012-05-30
Last Survey Date: 2012-05-30
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Fair
Trend: Stable

Presence: Presumed Extant

Location:
ELKHORN BLVD JUST W OF E LEVEE RD, & ABOUT 0.1 MI N TO 0.2 MI S OF ELKHORN BLVD FROM 0.3-0.6 MI E OF E LEVEE RD.

Detailed Location:
W FEATURE: EXTENSIVE BURROW NETWORK, WITH AT LEAST 2 TO 3 FAMILY GROUPS OBSERVED SOUTH OF ELKHORN BLVD. NORTH OF ELKHORN BLVD, THE BURROWS ARE FOUND ON THE BANKS OF AN IRRIGATION DITCH. BU= BURROW.

Ecological:
HABITAT CONSISTS OF ARID ANNUAL GRASSLAND ON A 2-12' SLOPE (BLUFF); RESIDENTIAL DEVELOPMENT FOUND ALONG THE WEST SIDE OF THIS SITE. ALSO DESCRIBED AS "PASTURE/GRASSLAND/GRAVEL LOT."

Threats:
DEVELOPMENT, AND SRCSD 2007 UPPER NW INTERCEPTOR PROJECT DURING BREEDING SEASON; BURROWS CLOSED IN 2007 FOR PROJECT.

General:

PLSS: T10N, R04E, Sec. 36 (M)
Accuracy: specific area
Area (acres): 36

UTM: Zone-10 N4282824 E631196
Latitude/Longitude: 38.68430 / -121.49160
Elevation (feet): 25

County Summary:
Sacramento
Quad Summary:
Rio Linda (3812164)
## Sources:

<table>
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<tr>
<th>Source Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CON07F0008</td>
<td>CONARD, C. (SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (WINTER BURROW SITE) 2007-01-09</td>
</tr>
<tr>
<td>CON07F0010</td>
<td>CONARD, C. (SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (WINTER BURROW SITE) 2007-01-25</td>
</tr>
<tr>
<td>CON12U0001</td>
<td>CONARD, C. - EMAIL TO CENTRAL VALLEY BIRD CLUB REGARDING NESTING BURROWING OWLS NEAR ELKHORN BLVD, SACRAMENTO, AND ARRIVAL OF CALIF. LEAST TERN NEAR ELK GROVE, 2012-05-30</td>
</tr>
<tr>
<td>JON09F0009</td>
<td>JONES, R. (SACRAMENTO AREA SEWER DISTRICT) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 2009-12-10</td>
</tr>
<tr>
<td>LAZ05U0001</td>
<td>LAZIER, C. (SACRAMENTO AUDUBON) - MEMO DESCRIBING THE LOCATION OF ATHENE CUNICULARIA (BURROW SITE), 2005-06-03</td>
</tr>
<tr>
<td>VEN88F0002</td>
<td>VENNARD, M. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 1988-10-01</td>
</tr>
<tr>
<td>WAR03F0006</td>
<td>WARENYCIJA, D. &amp; L. HOLMES (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2003-05-05</td>
</tr>
<tr>
<td>WAR93F0001</td>
<td>WARENYCIJA, D. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 1993-07-18</td>
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<tr>
<td>YOR93F0001</td>
<td>YORK, R. (CALIFORNIA ENERGY COMMISSION) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 1993-03-15</td>
</tr>
</tbody>
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## Occurrence Report
### California Department of Fish and Wildlife
#### California Natural Diversity Database

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<tr>
<td>Occurrence Last Updated:</td>
<td>1990-11-19</td>
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</tbody>
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### Scientific Name: *Athene cunicularia*
### Common Name: Burrowing Owl

### Listing Status:
- **Federal:** None
- **State:** None

### CNNDDB Element Ranks:
- **Global:** G4
- **State:** S3

### General Habitat:
Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation.

### Micro Habitat:
Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.

### Last Date Observed: 1989-07-15
### Last Survey Date: 1989-07-15
### Presence: Presumed Extant
### Location:
Adjacent to west gate, Mather AFB, Rancho Cordova.

### Detailed Location:
1 adult with four young observed at mid-day in a vacant lot.

### Ecological:
Habitat is close-cropped, unwatered turf.

### Threats:
No obvious threats, unless use of lot area changes.

### General:
- **PLSS:** T08N, R06E, Sec. 03 (M)
- **Accuracy:** 80 meters
- **UTM:** Zone-10 N4270273 E647543
- **Accuracy:** 80 meters
- **Latitude/Longitude:** 38.56867 / -121.30639
- **Elevation (feet):** 80
- **Area (acres):** 0

### County Summary:
Sacramento

### Quad Summary:
Carmichael (3812153)

### Sources:
JOH89F0004  JOHNSON, D.L. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1989-07-15
**Occurrence Report**  
*California Department of Fish and Wildlife*  
*California Natural Diversity Database*

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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
- Federal: None  
- State: None

**CNNDDB Element Ranks:**  
- Global: G4  
- State: S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**  
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 1989-04-28  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1989-04-28  
**Occurrence Rank:** Good

**Owner/Manager:** DOD-MATHER AFB  
**Trend:** Stable

**Presence:** Presumed Extant  

**Location:**  
BLDG 7001, MATHER AFB, RANCHO CORDOVA.

**Detailed Location:**  
BURROW IS LOCATED INSIDE A TRANSFORMER FENCE, UNDER A CONCRETE SLAB, ON THE NE SIDE.

**Ecological:**

**Threats:**  
FENCE OFFERS PROTECTION TO THE BURROW SITE; ANY CHANGE IN LAND USE WOULD DISTURB THE BURROW.

**General:**

ONLY ONE ADULT OBSERVED.

**PLSS:** T08N, R06E, Sec. 10 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4269261 E646800  
**Latitude/Longitude:** 38.55968 / -121.31513  
**Elevation (feet):** 75

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
HAR89F0001  
HARRIS, S. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1989-04-28
## Occurrence Report
### California Department of Fish and Wildlife
#### California Natural Diversity Database

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<th>Map Index Number:</th>
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<th>Scientific Name:</th>
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<th>General Habitat:</th>
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<tr>
<td>OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS &amp; SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.</td>
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<td>SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.</td>
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<tr>
<td>FLIGHT-LINE SIDE OF BLDG 7014, MATHER AFB, RANCHO CORDOVA.</td>
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<tr>
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<tbody>
<tr>
<td>BURROW LOCATED AT 940TH CURB, ON FIRST STREET, BETWEEN TELEPHONE POLES #7108 AND 7109, IN AN OPEN FIELD BETWEEN FIRST STREET AND THE FLIGHT LINE.</td>
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<table>
<thead>
<tr>
<th>Ecological:</th>
</tr>
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<tbody>
<tr>
<td>Threats: CONSTRUCTION GOING ON NEARBY; NEW DEVELOPMENT COULD DISPLACE THE OWL.</td>
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<th>General:</th>
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<tr>
<td>ONLY ONE ADULT OBSERVED AT BURROW.</td>
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<tr>
<td>Carmichael (3812153)</td>
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<tr>
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<tr>
<td>HAR89F0002 HARRIS, S. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1989-04-28</td>
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Sacramento County Summary

PLSS: T08N, R06E, Sec. 10 (M)

Accuracy: 80 meters

UTM: Zone-10 N4269481 E647259

Latitude/Longitude: 38.56159 / -121.30982

Elevation (feet): 80
Map Index Number: 17162
EO Index: 12226
Key Quad: Carmichael (3812153)
Element Code: ABNSB10010
Occurrence Number: 95
Occurrence Last Updated: 1991-04-04
Scientific Name: Athene cunicularia
Common Name: burrowing owl
Listing Status: Federal: None
State: None
CNDDDB Element Ranks: Global: G4
State: S3
General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.
Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 1989-04-28
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1989-04-28
Occurrence Rank: Fair
Owner/Manager: DOD-MATHER AFB
Trend: Stable
Presence: Presumed Extant
Location:
BLDG 7014, ON NEELY WAY, MATHER AFB, RANCHO CORDOVA.
Detailed Location:
BURROW IS LOCATED SOUTH OF TELEPHONE POLE #7028, NEAR A PINE TREE AND ACROSS FROM A STORM DRAIN, NEAR THE STREET IN AN INDUSTRIAL AREA.

Ecological:
Threats:
POSSIBLE THREATS FROM SURROUNDING INDUSTRIAL AREA ACTIVITIES.
General:
2 ADULTS OBSERVED; A FAMILY OF BURROWING OWLS HAS BEEN OBSERVED HERE IN THE PAST.

PLSS: T08N, R06E, Sec. 10 (M) Accuracy: 80 meters Area (acres): 0
UTM: Zone-10 N4269425 E647139 Latitude/Longitude: 38.56110 / -121.31120 Elevation (feet): 80
County Summary: Sacramento Quad Summary: Carmichael (3812153)

Sources:
HAR89F0003 HARRIS, S. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1989-04-28
# Occurrence Report
## California Department of Fish and Wildlife
### California Natural Diversity Database

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<td>Occurrence Last Updated:</td>
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### Scientific Name: *Athene cunicularia*

**Common Name:** burrowing owl

### Listing Status:

- **Federal:** None
- **State:** None

### CNDDB Element Ranks:

- **Global:** G4
- **State:** S3

### General Habitat:

OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

### Micro Habitat:

SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

### Last Date Observed:

1989-04-28

### Last Survey Date:

1989-04-28

### Owner/Manager:

DOD-MATHER AFB

### Presence:

Presumed Extant

### Location:

BX PARKING LOT, AT "B" AVE AND FRANCIS ST, MATHER AFB, RANCHO CORDOVA.

### Detailed Location:

OWLS UTILIZE THE CEMENT STORM DRAIN AT THE NORTH END OF THE BX PARKING LOT AS A BURROW.

### Ecological:

**Threats:**

MAIN THREAT AT THIS LOCATION IS DISTURBANCE FROM TOO MUCH TRAFFIC; OWLS USUALLY MIGRATE TO OTHER AREAS LATER IN SPRING.

**General:**

THERE IS ADJACENT OPEN SPACE WHICH PROVIDES FOOD AT THIS TIME.

### PLSS:

**Accuracy:** 80 meters

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### Latitude/Longitude:

38.56874 / -121.29583

### Area (acres): 0

### Elevation (feet): 90

### County Summary:

Sacramento

### Quad Summary:

Carmichael (3812153)

### Sources:

HAR89F0005  HARRIS, S. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1989-04-28
Map Index Number: 17367
EO Index: 9705
Key Quad: Taylor Monument (3812165)
Element Code: ABNSB10010
Occurrence Number: 122
Occurrence Last Updated: 2003-08-21

Scientific Name: Athene cunicularia
Common Name: burrowing owl

Listing Status: Federal: None
State: None

CNDDDB Element Ranks: Global: G4
State: S3

General Habitat: OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.
Micro Habitat: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 1991-01-18
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2003-05-05
Occurrence Rank: None

Owner/Manager: PVT
Trend: Unknown

Presence: Possibly Extirpated

Location:
0.9 MI NE OF THE INTERSECTION OF SAN JUAN ROAD AND EL CENTRO ROAD, APPROXIMATELY 4 MI SE OF SACRAMENTO METRO AIRPORT.

Detailed Location:
JAN 1991: OWLS LOCATED ALONG DRAINAGE DITCH.

Ecological:
OWLS ARE USING GROUND SQUIRREL BURROWS SURROUNDED BY NON-NATIVE GRASSLAND TO THE EAST AND (IN 1991) FALLOW AGRICULTURAL FIELDS TO THE WEST.

Threats:
FALLOW FIELDS TO THE WEST HAVE BEEN DEVELOPED (RESIDENTIAL DEVELOPMENT).

General:
18 JAN 1991: A MINIMUM OF 8 ADULT OWLS OBSERVED OCCUPYING BURROW SITES; OTHER BURROWS WERE PRESENT THAT ALSO APPEARED ACTIVE. OWLS NOT OBSERVED ON 5 MAY 2003.

PLSS: T09N, R04E, Sec. 15 (M) Accuracy: 1/5 mile Area (acres): 0
UTM: Zone-10 N4277578 E628033 Latitude/Longitude: 38.63751 / -121.52893 Elevation (feet): 20

County Summary: Sacramento
Quad Summary: Taylor Monument (3812165)

Sources:
TOW91F0001 TOWERS, S. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA BURROW SITE 1991-01-18
WARE03F0004 WARENHCIA, D. & L. HOLMES (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2003-05-05
Map Index Number: 20688
Key Quad: Sacramento East (3812154)
Occurrence Number: 127
EO Index: 9327
Element Code: ABNSB10010
Occurrence Last Updated: 2010-02-16

Scientific Name: Athene cunicularia
Common Name: burrowing owl

Listing Status: Federal: None
State: None

CNDDDB Element Ranks:
Global: G4
State: S3

General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 2006-06-18
Last Survey Date: 2006-06-18
Owner/Manager: PVT, DOD-SACRAMENTO ARMY DEPOT
Presence: Presumed Extant

Location:
S PERIPHERY OF SAC ARMY DEPOT FROM SANTA CRUZ ST (W) TO GALENA AVE (E), NEAR MIDWAY AVE BTWN KWAJALEIN ST & GALENA AVE.

Detailed Location:
MOST BURROWS ARE LOCATED ALONG BERMS EDGING THE PERIPHERY OF THE ARMY DEPOT.

Ecological:
1990 & 2003: ARTIFICIAL BERMS AND LEVEES PLANTED IN INTRODUCED GRASSLAND. 2006: IDLE OR FALLOW FIELD.

Threats:
THREATENED BY POTENTIAL CLOSURE OF ARMY DEPOT AND CONVERSION TO DEVELOPMENT.

General:
BURROW OBS IN NE & NW FEATURES IN 1990. OWLS OBS AT 11 BURROW SITES (THROUGHOUT OCC) IN APRIL & JUN 2003; YOUNG PRODUCED AT AT LEAST 5 OF THOSE SITES. 1 ADULT OBS IN SE FEATURE ON 18 JUN 2006.

PLSS: T08N, R05E, Sec. 26 (M)
Accuracy: specific area
Area (acres): 56

UTM: Zone-10 N4264219 E639821
Latitude/Longitude: 38.51539 / -121.39621
Elevation (feet): 40

County Summary:
Sacramento
Sacramento East (3812154)

Sources:
KOF90F0001 KOFORD, E.J. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1990-XX-XX
USA03R0001 U.S. ARMY RESERVE ENVIRONMENTAL DIVISION - BURROWING OWL HABITAT ASSESSMENT, BURROW SURVEY AND CENSUS - B.T. COLLINS USAR CENTER AND AMSA 98(G), SACRAMENTO, CA. 2003-07-25
### Scientific Name: **Athene cunicularia**

### Common Name: **burrowing owl**

### Listing Status:
- **Federal:** None
- **State:** None

### Status Rank:
- **Global:** G4
- **State:** S3

### Other Lists:
- BLM_S-Sensitive
- CDFW_SSC-Species of Special Concern
- IUCN_LC-Least Concern
- USFWS_BCC-Birds of Conservation Concern

### General Habitat:
- OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

### Micro Habitat:
- SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

### Last Date Observed: 1994-09-13

### Ecological:
- HABITAT ADJACENT TO BURROW SITE IS GRASSLAND. SURROUNDING AREA TO WEST CONSISTS OF A WASTEWATER TREATMENT PLANT.

### Threats:
- THREAT INCLUDES EXCAVATION OF SOME BURROWS.

### General:

### 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.

### PLSS:
- **T07N, R05E, Sec. 20 (M)**

### Accuracy:
- **specific area**

### Area (acres):
- **20**

### UTM:
- **Zone-10 N4256685 E634393**

### Latitude/Longitude:
- **38.44835 / -121.45989**

### Elevation (feet):
- **15**

### County Summary:
- **Sacramento**

### Quad Summary:
- **Florin (3812144)**

### Sources:
- KOF92F0001: KOFORD, E.J. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1992-02-19
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

<table>
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<tr>
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**Scientific Name:** *Athene cunicularia*  
**Common Name:** Burrowing Owl

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G4  
- **State:** S3

**General Habitat:**  
**Micro Habitat:**
- Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation.  
- Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.

**Last Date Observed:** 1993-02-04  
**Last Survey Date:** 2003-05-05

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:** Just WNW of 6th and "U" Streets, Rio Linda.

**Detailed Location:**  
Three sets of burrows at this site; one set located adjacent to WPRR tracks, one adjacent to some vernal pools, and one adjacent to 6th and "U" Streets.

**Ecological:**  
Habitat is open grassland with cut soil banks.

**Threats:**  
Possible threat from a proposed energy facility.

**General:**  
One adult observed roosting in a debris pile near a burrow site in 1992; two adults observed at a burrow adjacent to vernal pools in 1993. Owls not observed in general area on 5 May 2003 - date of site visit likely to early.

**PLSS:** T10N, R05E, Sec. 19 (M)  
**Accuracy:** 2/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4285192 E632083  
**Latitude/Longitude:** 38.70551 / -121.48096  
**Elevation (feet):** 40

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**
- KOF92F0002 KOFORD, E.J. - Field Survey Form for *Athene Cunicularia* 1992-02-27
- WAR03F0005 WARENENCYA, D. & L. HOLMES (California Department of Fish and Wildlife) - Field Survey Form for *Athene Cunicularia* (Burrow Site) 2003-05-05
- YOR93F0002 YORK, R. - Field Survey Form for *Athene Cunicularia* (Burrow Site) 1993-02-04
**Map Index Number:** 25473  
**EO Index:** 6907  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 210  
**Occurrence Last Updated:** 2010-02-17

**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDDB Element Ranks:**  
- **Global:** G4  
- **State:** S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**  
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2009-XX-XX  
**Last Survey Date:** 2009-XX-XX  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Good  
**Owner/Manager:** COSUMNES RIVER COLLEGE  
**Trend:** Unknown  
**Presence:** Presumed Extant

**Location:**  
BETWEEN CENTER PKY & BRUCEVILLE RD JUST S OF COSUMNES RIVER BLVD, COSUMNES RIVER COLLEGE, SACRAMENTO.

**Detailed Location:**  
MAPPED TO LOCATIONS MARKED ON PROVIDED MAP (GUS) & TO PROVIDED COORDINATES (WIL, CON). 2002 PERCH LOCATION NOT MAPPED. MOST OF THE BURROWS ARE LOCATED ON THE BERMS SURROUNDING THE TRACK AND FOOTBALL FIELD.

**Ecological:**  
HABITAT SURROUNDING THE BURROWS CONSISTS OF INTRODUCED, ANNUAL GRASSLAND. DEVELOPMENT OF KAISER SOUTH & ADJ FIELDS LIKELY LEAD TO DECLINE/EXTIRPATION OF NEARBY UNION HOUSE CREEK (AKA BEACON CREEK) POPULATION.

**Threats:**  
POSSIBLE DISTURBANCE/THREAT FROM JOGGER'S PETS. DEVELOPMENT.

**General:**  

**PLSS:** T07N, R05E, Sec. 15 (M)  
**Accuracy:** specific area  
**Area (acres):** 32

**UTM:** Zone-10 N4257588 E637811  
**Latitude/Longitude:** 38.45596 / -121.42056  
**Elevation (feet):** 30

**County Summary:**  
Sacramento  
Florin (3812144)

**Sources:**  
CONARD, C. - BURROWING OWL RECORDS FROM C. CONARD IN THE VICINITY OF THE SACRAMENTO CO. HCP FROM 2007 - 2010. 2010-XX-XX  
FULLEN, K. (U.S. DEPARTMENT OF AGRICULTURE) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2002-03-25  
GUSE, K. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 1994-03-11  
### Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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<td>Micro Habitat:</td>
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<td>Presence:</td>
<td>Presumed Extant</td>
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<tr>
<th>Location:</th>
<th>VICINITY OF MORRISON, ELDER &amp; FLORIN CRKS, W OF FRANKLIN BLVD, S OF WEYMOUTH LN &amp; N OF DEER CROSS WAY, SOUTH SACRAMENTO.</th>
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<tbody>
<tr>
<td>Detailed Location:</td>
<td>MAPPED TO PROVIDED COORDINATES (LOW, CON, WIL, JON) &amp; 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 &quot;COMMUNITY GARDENS.&quot;</td>
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<th>Ecological:</th>
<th>CHANNELIZED STREAM LEVEES WITH ANNUAL GRASSES OR NO VEG. SURROUNDED BY FIELDS &amp; RESIDENTIAL DEVELOPEMENT. SITE QUALITY MARKED AS FAIR TO POOR. 2007: LEVEE CONSTRUCTION FROM RR TO FRANKLIN BLVD PLANNED IN SUMMER, CAUSING BURROW CLOSURES.</th>
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<th>Threats:</th>
<th>THREATENED BY LEVEE &quot;IMPROVEMENTS&quot; (OWL DISPLACEMENT), DEVELOPMENT, FERAL DOGS, AND PEOPLE WALKING ON LEVEES.</th>
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<th>County Summary:</th>
<th>Sacramento Florin (3812144)</th>
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<tr>
<th>Sources:</th>
<th>BAR05F0007 BARCLAY, J. (ALBION ENVIRONMENTAL, INC.) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2005-10-03</th>
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<tr>
<td></td>
<td>CON06F0001 CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2006-01-19</td>
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<td>CON06F0002 CONARD, C. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2006-01-19</td>
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<td>JON02F0011 JONES, R. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 2002-02-01</td>
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<td>LOW01F0001 LOWE, J. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2001-09-20</td>
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<td>LOW01F0002 LOWE, J. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2001-09-20</td>
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<td>NOS95F0001 NOSAL, T. &amp; J. NOSAL - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1995-05-16</td>
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### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Athene cunicularia*

**Common Name:** Burrowing Owl

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDDB Element Ranks:**
- **Global:** G4
- **State:** S3

**General Habitat:**
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2001-06-22

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2003-05-05

**Occurrence Rank:** Fair

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
APPROXIMATELY 4 MILES WEST OF RIO LINDA.

**Detailed Location:**
0.70 MILES NORTH OF ELKHORN BLVD AND 75 FT WEST OF SR 99.

**Ecological:**
SURROUNDING LAND COMPRISED OF RICE CROPS. BURROWS ADJACENT TO CEMENT DRAINAGE CANAL.

**Threats:**

**General:**
2 ADULTS AND 2 JUVENILES OBSERVED. THREE BURROWS WITH WHITEWASH, PELLET CASTINGS AND PREY REMAINS OBSERVED. NO OWLS WERE OBSERVED ON 5 MAY 2003 - DATE OF SITE VISIT LIKELY TO EARLY.

**PLSS:** T10N, R04E, Sec. 28 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4284037 E626925

**Latitude/Longitude:** 38.69586 /-121.54047

**Elevation (feet):** 20

**County Summary:**
Sacramento

**Quad Summary:**
Taylor Monument (3812165)

**Sources:**

BEL01F0002
BELT, L. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 2001-06-22

WAR03F0003
WARENYCIA, D. & L. HOLMES (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2003-05-05
<table>
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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
- Federal: None  
- State: None

**CNDDDB Element Ranks:**  
- Global: G4  
- State: S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**  
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2002-06-28  
**Last Survey Date:** 2007-XX-XX

**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** None  
**Trend:** Unknown

**Location:**  
NORTHWEST CORNER OF SACRAMENTO EXECUTIVE AIRPORT, JUST EAST OF SR 160 (AKA FREEPORT BLVD), SACRAMENTO.

**Detailed Location:**  
MAPPED TO 2002 PROVIDED COORDINATES; 60 FT NORTH OF CD&G HANGER.

**Ecological:**  
HABITAT CONSISTS OF FIELD WITH AVENA FATUA, LOLIUM MULTIFLORUM AND YELLOW STAR THISTLE. FREQUENTLY MOWED FIELD. SUBSTRATE: SAN JOAQUIN SILT LOAM. 0% SLOPE. SURROUNDING LAND CONSISTS OF AN AIRPORT.

**Threats:**  
PROPOSED FOR DEVELOPMENT IN 2002. SIDEWALK PROJECT LEAD TO BURROW CLOSURES, AND OWLS HAD NOT RETURNED AS OF 2007.

**General:**  
5 BREEDING ADULTS OBS ON 28 JUN 2002. 4 OWLS OBS FROM HERE TO S END OF SW-NE RUNWAY ON 26 OCT 2004. NONE DETECTED SINCE 2006 DESPITE HIGH SEARCH EFFORT, AS OF 2007 REPORT; BURROWS CLOSED DURING SIDEWALK PROJECT & HAVEN'T RETURNED.

**PLSS:** T08N, R04E, Sec. 25 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4264493 E630903  
**Latitude/Longitude:** 38.51921 / -121.49841  
**Elevation (feet):** 15

**County Summary:**  
Sacramento  
**Quad Summary:**  
Sacramento East (3812154)

**Sources:**  
STA02F0005 STACKHOUSE, E.L. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 2002-06-28
Map Index Number: 32459
EO Index: 48663
Key Quad: Carmichael (3812153)
Element Code: ABNSB10010
Occurrence Number: 487
Occurrence Last Updated: 2002-08-23

Scientific Name: Athene cunicularia
Common Name: burrowing owl

Listing Status: Federal: None
State: None

Rare Plant Rank:
Other Lists: BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

CNDDB Element Ranks: Global: G4
State: S3

General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 1991-02-13
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1991-02-13
Occurrence Rank: Excellent

Owner/Manager: PVT
Trend: Unknown

Presence: Presumed Extant

Location:
SW OF FORMER MATHER AFB; BETWEEN KIEFER BLVD, BRADSHAW ROAD, JACKSON ROAD, AND EXCELSIOR ROAD.

Detailed Location:
SECTIONS 21 AND 22.

Ecological:
HABITAT CONSISTS OF GRAZED ANNUAL GRASSLAND.

Threats:
THREAT CONSISTS OF PROPOSED AGGREGATE MINING.

General:
1 INDIVIDUAL OBSERVED ON 8 JAN 1991. 2 INDIVIDUALS OBSERVED ON 28 JAN 1991. 1 INDIVIDUAL OBSERVED ON 13 FEB. 16 ACTIVE BURROWS OBSERVED ON ALL THREE DATES.

PLSS: T08N, R06E, Sec. 21 (M)
Accuracy: nonspecific area
Area (acres): 1,493

UTM: Zone-10 N4266114 E646979
Latitude/Longitude: 38.53130 / -121.31374
Elevation (feet): 70

County Summary: Sacramento
Quad Summary: Carmichael (3812153)

Sources:
VAN91F0003 VANBELCHER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1991-01-08
VAN91F0004 VANBELCHER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1991-01-28
VAN91F0005 VANBELCHER, E. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1991-02-13
### Scientific Name: **Athene cunicularia**

### Common Name: **burrowing owl**

### Listing Status:
- **Federal:** None
- **State:** None

### CNDDDB Element Ranks:
- **Global:** G4
- **State:** S3

### General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

### Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

### Last Date Observed:
1974-02-XX

### General Habitat Details:
- **PLSS:** T08N, R05E, Sec. 04 (M)
- **Accuracy:** nonspecific area
- **Area (acres):** 26
- **UTM:** Zone-10 N4271035 E636302
- **Latitude/Longitude:** 38.57733 / -121.43523
- **Elevation (feet):** 25

### Detailed Location:
CAS RECORD LOCALITY STATED AS "VICINITY OF SACRAMENTO."

### Ecological:
OF THE 16 BURROWS OBSERVED IN THE AREA IN 1974, 2 BURROWS WERE DESTROYED & 1 BURROW ABANDONED DURING CONSTRUCTION OF PARKING LOT, 1 FEMALE DIED; 1 OWL KILLED BY MOTORCYCLISTS WHO DELIBERATELY DESTROYED A BURROW WITH THEIR WHEELS.

### Threats:
THREATENED BY CONSTRUCTION AND MOTORCYCLISTS.

### General:
CAS EGG SPECIMEN #210380 COLLECTED BY F. G. COOMES ON 27 APR 1907. 2 BURROWS OBSERVED IN AREA DURING 1974 NEST SURVEY.

### Sources:
- **CAS20S0001**
  CALIFORNIA ACADEMY OF SCIENCES - 16 EGG SPECIMEN RECORDS FOR ATHENE CUNICULARIA FROM THE CALIFORNIA ACADEMY OF SCIENCES FROM 22 JUN 1880 - 8 MAY 1920. 1920-05-08
- **VIN74R0001**
  VINCENY, J.A. - A STUDY OF FACTORS AFFECTING NESTING RAPTOR POPULATIONS IN URBAN AREAS, SACRAMENTO COUNTY, CALIFORNIA. (WMB ADM RPT., NO.74-5) 1974-08-XX
### Scientific Name

**Athene cunicularia**

**Common Name:** burrowing owl

### Listing Status

- **Federal:** None
- **State:** None

### CNDDDB Element Ranks

- **Global:** G4
- **State:** S3

### General Habitat

OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

### Micro Habitat

SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

### Last Date Observed

1997-03-06

### Occurrence Type

Natural/Native occurrence

### Presence

Possibly Extirpated

### Location

ADJACENT TO THE DEEP WATER SHIP CHANNEL, 0.9 MILE SE OF GREENS LAKE, EAST SIDE OF YOLO BYPASS.

### Detailed Location

BURROW WAS LOCATED 170' FEET SOUTH OF A LONE POWER POLE CONTAINING A "POSTED NO TRESPASSING" SIGN.

### Ecological

HABITAT CONSISTS OF A SMALL BENCH ON THE LAND (EAST) SIDE OF SLOPE OF THE LEVEE; LEVEE SLOPE WAS VEGETATED BY ANNUAL GRASSES AND WEEDS AND ALSO SUPPORTED GROUND SQUIRRELS.

### Threats

THREATENED BY ROAD/LEVEE MAINTENANCE ACTIVITIES.

### General

BURROWING OWL OBSERVED AT ITS BURROW ON 4 AND 6 MAR 1997; OWL WAS NOT OBSERVED ON A 12 MAR 1997 REVISIT, AND GRADING ACTIVITIES MAY HAVE CAUSED ABANDONMENT.

### PLSS

- **T08N, R04E, Sec. 07 (M)**
- **Zone-10 N4267995 E623423**
- **Accuracy:** 1/10 mile
- **Latitude/Longitude:** 38.55183 / -121.58357
- **Elevation (feet):** 10
- **Area (acres):** 0

### Sources

BAX97U0001 BAXTER, R. (U.S. ARMY CORPS OF ENGINEERS) - MEMO TO DFG DESCRIBING A BURROWING OWL (PLUS BURROW) OBSERVATION ON RECLAMATION DISTRICT 900, LEVEE UNIT 2 PROPERTY. 1997-03-19
**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

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**General Habitat:**
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

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<td>Presumed Extant</td>
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**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.

**Threats:**
THREATENED BY DEVELOPMENT.

**General:**
4 ADULTS OBSERVED AT THIS ACTIVE BURROW SITE ON 10 JUN 2002.

**PLSS:** T07N, R05E, Sec. 14 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4257756 E639071  
**Latitude/Longitude:** 38.45728 / -121.40609  
**Elevation (feet):** 20

**County Summary:** Sacramento

**Quad Summary:** Florin (3812144)

**Sources:**
WOO02F0002 WOODWARD, R.A. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2002-06-10
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:**  *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G4
- **State:** S3

**General Habitat:**
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2010-02-01

**Owner/Manager:** SRCSD-BUFFERLANDS

**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 ~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.

**Threats:**
THREATENED BY CLOSE PROXIMITY TO SIMS ROAD AND THE POTENTIAL FOR VEHICLE STRIKES.

**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 OCCASIONALLY AT S FEATURE) FROM 4 SEP ’09 TO 1 FEB ’10; NONE OBS 20 APR TO 4 SEP ’09.

**PLSS:** T07N, R05E, Sec. 20 (M)  
**Accuracy:** specific area  
**Area (acres):** 16

**UTM:** Zone-10 N4255587 E635134  
**Latitude/Longitude:** 38.43834 / -121.45161  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**
- HUD02F0001 HUDDLESTON, R. (CH2M HILL) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2002-09-03
- HUD02F0002 HUDDLESTON, R. (CH2M HILL) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2002-09-03
Map Index Number: 51256
Key Quad: Sacramento East (3812154)
Occurrence Number: 569
EO Index: 51256
Element Code: ABNSB10010
Occurrence Last Updated: 2004-02-17

Scientific Name: Athene cunicularia
Common Name: burrowing owl

Listing Status: Federal: None
State: None

CNDDDB Element Ranks: Global: G4
State: S3

General Habitat: OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.
Micro Habitat: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 1901-05-08
Last Survey Date: 1901-05-08
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location: HAGGINWOOD. VICINITY OF ARCADE CREEK, BUSINESS I-80 AND HAGGIN OAKS GOLF COURSE.

Detailed Location: COLLECTION FROM "HAGGIN'S RANCH, 5 MILES NORTH OF SACRAMENTO". THIS IS NOW THE HAGGINWOOD NEIGHBORHOOD OF SACRAMENTO.

Ecological:  
Threats:  
General: MVZ EGG SET #893 COLLECTED 8 MAY 1901 BY R. H. ELLIOTT.

PLSS: T09N, R05E, Sec. 21 (M)  Accuracy: 1 mile
UTM: Zone-10 N4276060 E636699  Latitude/Longitude: 38.62254 / -121.42968  Elevation (feet): 45

Sources:  
MVZ03S0005  MUSEUM OF VERTEBRATE ZOOLOGY (UNIVERSITY OF CALIFORNIA, BERKELEY) - PRINTOUT OF MVZ SPECIMEN DATABASE FOR ATHENE CUNICULARIA EGG SETS. 2003-XX-XX
Map Index Number: 51441
EO Index: 51441
Key Quad: Rio Linda (3812164)
Occurrence Number: 590
Occurrence Last Updated: 2010-02-16

Scientific Name: *Athene cunicularia*
Common Name: burrowing owl

Listing Status: Federal: None
Rare Plant Rank: None
State: None
Other Lists: BLM_S-Sensitive
CNDB Element Ranks: Global: G4
CDFW_SSC-Species of Special Concern
State: S3
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 2006-07-14
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2006-07-14
Occurrence Rank: Fair
Owner/Manager: UNKNOWN
Trend: Unknown
Presence: Presumed Extant

Location:
VICINITY OF CANAL ABOUT 0.75 TO 1 MI NW OF ELKHORN BLVD AT SORENTO RD, AMERICAN BASIN, WEST OF RIO LINDA.

Detailed Location:
MAPPED TO PROVIDED COORDINATES. 2003: SE FEATURE; SEVERAL LARGE BURROWS ON CANAL BANK. 2006: NW FEATURE.

Ecological:
2003: NO VEGETATION AT THE SITE, RICE AND PASTURE IN SURROUNDING AREA. 2006: IDLE OR FALLOW FIELD.

Threats:
DEVELOPMENT LISTED BY HOWE AS A POTENTIAL THREAT.

General:
4 ADULTS OBSERVED AT BURROWS IN SE FEATURE ON 23 APR 2003. 1 ADULT OBS AT NW FEATURE ON 14 JUL 2006 DURING THE STATEWIDE SURVEY.

PLSS: T10N, R04E, Sec. 25 (M) Accuracy: specific area Area (acres): 10
UTM: Zone-10 N4283828 E630852 Latitude/Longitude: 38.69340 / -121.49536 Elevation (feet): 15

County Summary:
Sacramento

Quad Summary:
Rio Linda (3812164)

Sources:
HOW03F0001 HOWE, J. (ANALYTICAL ENVIRONMENTAL SERVICES) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2003-04-23
**Occurrence Report**

California Department of Fish and Wildlife  
California Natural Diversity Database

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**Sources:**  
PHI03F0001  
PHILLIPS, M. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2003-XX-XX

---

**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
Federal: None  
State: None

**Rare Plant Rank:**  
BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_LC-Least Concern
USFWS_BCC-Birds of Conservation Concern

**CNDDDB Element Ranks:**  
Global: G4  
State: S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**  
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2003-07-25

**Location:**  
WEST BANK OF THE NATOMAS EAST MAIN DRAINAGE CANAL, JUST NORTH OF DEL PASO ROAD, SACRAMENTO.

**Detailed Location:**  
BURROW SITE IS LOCATED NEXT TO A RUSTY MANHOLE COVER, 50-60 FEET NORTH OF DEL PASO ROAD.

**Ecological:**  
HABITAT CONSISTS OF A MANMADE LEVEE FOR THE DRAINAGE CANAL; SURROUNDED BY ENCROACHING DEVELOPMENT.

**Threats:**  
THREATENED BY ONGOING DEVELOPMENT.

**General:**  
8 INDIVIDUALS (ADULTS AND JUVENILES) OBSERVED AT THIS SITE ON 25 JUL 2003.

**PLSS:**  
T09N, R05E, Sec. 07 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:**  
Zone-10 N4279649 E632607  
**Latitude/Longitude:** 38.65549 / -121.47598  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

---

**Presence:** Presumed Extant

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Occurrence Type:** Natural/Native occurrence

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**Map Index Number:** 51947  
**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 624  
**Occurrence Last Updated:** 2003-07-31

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**Map Index Number:** 51947  
**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 624  
**Occurrence Last Updated:** 2003-07-31

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**Map Index Number:** 51947  
**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 624  
**Occurrence Last Updated:** 2003-07-31
# Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDDB Element Ranks:**  
- **Global:** G4  
- **State:** S3

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2007-06-28  
**Last Survey Date:** 2007-06-28  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**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.

**Threats:**  
THREATENED BY URBAN DEVELOPMENT AND CANAL MAINTENANCE.

**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.

**PLSS:** T07N, R04E, Sec. 12 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 34

**UTM:** Zone-10 N4259134 E631395  
**Latitude/Longitude:** 38.47086 / -121.49378  
**Elevation (feet):** 10

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
- JONES, R. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2002-06-06  
- JONES, R. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2004-02-10  
- MUSEUM OF VERTEBRATE ZOOLOGY (UNIVERSITY OF CALIFORNIA, BERKELEY) - 20 EGG SPECIMEN RECORDS FOR ATHENE CUNICULARIA FROM THE MUSEUM OF VERTEBRATE ZOOLOGY FROM 25 APR 1879 - 10 MAY 1924. 1924-05-10  
**Map Index Number:** 55870  
**EO Index:** 55886  
**Key Quad:** Florin (3812144)  
**Element Code:** ABNSB10010  
**Occurrence Number:** 696  
**Occurrence Last Updated:** 2010-02-10

**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G4  
**State:** S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**  
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2007-07-11  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Good

**Owner/Manager:** SACRAMENTO CITY SCHOOL DIST  
**Trend:** Unknown

**Presence:** Presumed Extant

**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/PRACTICE FIELD; BURROW IS ON THE SCHOOL SIDE OF THE CHAIN LINK FENCE THAT SEPARATES THE SCHOOL FROM THE RR & FLORIN RD. S: RAILROAD EMBANKMENT.

**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.

**Threats:**  
POTENTIAL THREAT OF DISTURBANCE BY HIGH SCHOOL STUDENTS.

**General:**  

**PLSS:** T07N, R05E, Sec. 06 (M)  
**Accuracy:** specific area  
**Area (acres):** 11

**UTM:** Zone-10 N 4261841 E 633415  
**Latitude/Longitude:** 38.49494 / -121.47011  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Florin (3812144)**

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<td>WOO04F0001</td>
<td>WOODWARD, R. (CALIFORNIA DEPARTMENT OF PARKS AND RECREATION) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2004-06-15</td>
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Report Printed on Tuesday, September 15, 2015

Information Expires 3/1/2016
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**California Department of Fish and Wildlife**

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**Scientific Name:** Athene cunicularia  
**Common Name:** burrowing owl

**Listing Status:**  
- Federal: None  
- State: None

**CNDBB Element Ranks:**  
- Global: G4  
- State: S3

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2007-06-02  
**Last Survey Date:** 2007-06-02

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:** ABOUT 0.5 MI STRETCH OF THE NATOMAS EAST DRAINAGE CANAL JUST N OF THE SEWAGE PONDS, EAST SIDE OF OLD NATOMAS AIRPORT.

**Detailed Location:** IN 2007 THE BURROWS ON CONSTRUCTION SIDE CLOSED WITH ONE-WAY DOORS. OWLS MOVED TO GROUND SQUIRREL BURROWS ON THE WEST (WET) SIDE OF THE LEVEE WHICH IS THE OPPOSITE SIDE OF THE CANAL; THESE WILL BE MONITORED DURING THE CONSTRUCTION SEASON.

**Ecological:** THE 2006 BURROW SITE IS LOCATED ON BANK FILL, ON ~30% SLOPE; DOMINANT PLANTS INCLUDE HORDEUM MURINUM SSP. LEPORINUM, GERANIUM DISSECTUM, AVENA FATUA, AND VULPIA MYUROS. SOILS ARE NON-NATIVE, AS EVIDENCE OF PAST DISTURBANCE IS PRESENT.

**Threats:** THREATENED BY HUMAN DISTURBANCE, NON-NATIVE PREDATORS, PESTICIDES, WATER POLLUTION, & CONSTRUCTION BY SRCSD (2007).

**General:** 2 ADULTS OBSERVED AT 1 NESTING BURROW ON 27 APR 2006. 4 OBSERVED AT 4 SITES (1 AT EACH) IN JAN AND FEB 2007. 1 ADULT AT ONE SITE & A PAIR WITH 6 JUVENILES AT ANOTHER SITE ON 2 JUN 2007.

**PLSS:** T09N, R04E, Sec. 14 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 33

**UTM:** Zone-10 N4277583 E629944  
**Latitude/Longitude:** 38.63727 / -121.50697  
**Elevation (feet):** 10

**County Summary:** Sacramento  
**Quad Summary:** Taylor Monument (3812165)

**Sources:**
- CON07F0001 CONARD, C. (SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (WINTER BURROW SITE) 2007-01-03
- CON07F0002 CONARD, C. (SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (WINTER BURROW SITE) 2007-01-03
- CON07F0011 CONARD, C. (SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (WINTER BURROW SITE) 2007-02-02
- CON07F0012 CONARD, C. (SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (WINTER BURROW SITE) 2007-01-30
- MIL06F0001 MILLER, A. (ENVIRONMENTAL SCIENCE ASSOCIATES) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2006-04-27
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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G4  
- State: S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**  
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2006-06-12  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2006-06-12  
**Occurrence Rank:** Excellent

**Owner/Manager:** SAC INTERNATIONAL AIRPORT  
**Trend:** Unknown

**Location:**  
FAR WEST END OF DELTA ROAD (TOPO), ABOUT 0.4 MI WEST OF EARBART DRIVE, NORTH END OF SACRAMENTO INTERNATIONAL AIRPORT.

**Detailed Location:**  
BURROWS ARE LOCATED BETWEEN A CONCRETE-LINED IRRIGATION CANAL AND AN AIRPORT SERVICE ROAD (GRAVELLED), AT THE NORTH END OF THE AIRPORT.

**Ecological:**  
HABITAT CONSISTS OF DRY NON-NATIVE GRASSLAND/BERM AREA. SITE CONSISTS OF SANDY SOIL, WITH MULTIPLE BURROWS ALONG THE CANAL. AN ACTIVE GROUND SQUIRREL POPULATION IS PRESENT.

**Threats:**  
THREATENED BY AIRPORT LANDSCAPE, VEGETATION, AND SERVICE ROAD MAINTENANCE ACTIVITIES.

**General:**  
2 ADULTS AND 1 JUVENILE OBSERVATED OUTSIDE THE NESTING BURROWS ON 12 JUN 2006. STATEWIDE SURVEY DATA LIKELY OBTAINED FROM CNDDB.

**PLSS:** T10N, R03E, Sec. 24 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4284592 E621983  
**Latitude/Longitude:** 38.70155 / -121.59718  
**Elevation (feet):** 20

**County Summary:**  
Sacramento  
Taylor Monument (3812165)

**Sources:**  
- OKA06F0001 OKAMURA-JOHNSON, S. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2006-06-12  
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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
Federal: None  
State: None

**CNDDDB Element Ranks:**  
Global: G4  
State: S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**  
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2007-06-28  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-06-28  
**Occurrence Rank:** Good

**Owner/Manager:** SAC COUNTY FLOOD CONTROL  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
WEST OF E LEVEE RD FROM JUST NORTH OF I-80 TO NE CORNER OF CALTRANS YARD JUST S OF I-80, NATOMAS AREA OF SACRAMENTO.

**Detailed Location:**  
MAPPED TO PROVIDED COORDINATES, 2006: BURROW WAS IN A FLOOD CONTROL LEVEE, NEAR TOP ON WEST SIDE (SE PART OF FEATURE); OWLS WERE SEEN PERCHED ON CALTRANS YARD FENCE.

**Ecological:**  
2006: HABITAT SURROUNDING BURROW SITE CONSISTS OF ANNUAL GRASSLAND.

**Threats:**  
PROXIMITY TO ROADS (POTENTIAL FOR VEHICLE COLLISIONS).

**General:**  
2 OWLS & A BURROW OBSERVED AT SOUTH END OF FEATURE ON 1 JUL 2006; 1 OWL WAS LIGHT & TAWNY-LOOKING. 2 ADULTS WITH 2 JUVENILES OBS AT NORTH END OF FEATURE ON 9 JUN 2007. 4 JUVENILES OBS IN CENTER OF FEATURE ON 28 JUN 2007.

**PLSS:** T09N, R05E, Sec. 07 (M)  
**Accuracy:** specific area  
**Area (acres):** 11

**UTM:** Zone-10 N4278067 E632800  
**Latitude/Longitude:** 38.64121 / -121.47407  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**
- AIR06F0001  
  AIROLA, D. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2006-07-01
- WIL09D0003  
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Map Index Number:** 69288  
**EO Index:** 70074  
**Key Quad:** Sacramento West (3812155)  
**Occurrence Number:** 934  
**Occurrence Last Updated:** 2007-07-13

**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
**Federal:** None  
**State:** None

**Rare Plant Rank:**  
**BLM_S-Sensitive**  
**CDFW_SSC-Species of Special Concern**  
**IUCN_LC-Least Concern**  
**USFWS_BCC-Birds of Conservation Concern**

**CNDDDB Element Ranks:**  
**Global:** G4  
**State:** S3

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.  
**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2007-01-04  
**Occurrence Type:** Natural/Native occurrence

**General:**  
1 ADULT OBS JAN 2007. PRIOR TO START OF CONSTRUCTION, EXCLUSION DEVICES WERE INSTALLED IN ACTIVE BRUROW & 18 ADJACENT BURROWS. SITE WAS MONITORED 3 TIMES/WK FOR 3 WKS FOR TOTAL OF 120HRS. NO EVIDENCE OF OWLS AFTER 4 WKS, BURROWS COLLAPSED.

**PLSS:** T09N, R04E, Sec. 33 (M)  
**UTM:** Zone-10 N4272278 E626456  
**County Summary:** Sacramento West (3812155)

**Sources:**  
EAS07F0001  
EASLEY, J. (SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2007-01-04
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**California Natural Diversity Database**

| Map Index Number: | 69475 |
| Key Quad: | Florin (3812144) |
| Occurrence Number: | 970 |
| EO Index: | 70254 |
| Element Code: | ABNSB10010 |
| Occurrence Last Updated: | 2010-02-17 |

**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
Federal: None  
State: None

**CNDDDB Element Ranks:**  
Global: G4  
State: S3

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2006-XX-XX  
**Last Survey Date:** 2009-XX-XX  
**Owner/Manager:** SRCSD-BUFFERLANDS  
**Presence:** Presumed Extant

**Location:**  
ALONG BEACON CREEK LEVEE, BETWEEN MORRISON CREEK & FRANKLIN BOULEVARD, NORTH END OF SACRAMENTO TREATMENT PLANT PROPERTY.

**Detailed Location:**  

**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.

**Threats:**  
NON-NATIVE PLANTS. LEVEE MAINTENANCE. COSUMNES RIVER BLVD/LIGHT RAIL EXPANSION.

**General:**  

**PLSS:** T07N, R05E, Sec. 17 (M)  
**Accuracy:** nonspecific area

**UTM:** Zone-10 N4256230 E634623  
**Latitude/Longitude:** 38.46222 / -121.45696

**County Summary:**  
Sacramento  
Florin (3812144)

**Sources:**

- CULL, R. (SUSTAIN ENVIRONMENTAL, INC.) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITES) 2005-10-13
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G4  
- **State:** S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.  
**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2007-06-29  
**Occurrence Type:** Natural/Native occurrence

**Location:** WITHIN THE PARKING LOT COMPLEX AT ARCO ARENA, SACRAMENTO.

**Detailed Location:**  
BURROW SITES WERE LOCATED ON A GRASSY KNOLL ADJACENT TO PARKING LOT H, AS WELL AS IN SMALL ISLANDS OF VEGETATION WITH THE PARKING LOTS.

**Ecological:**  
HABITAT CONSISTS OF A GRASSY KNOLL CONTAINING BURROWS CONSTRUCTED BY GROUND SQUIRRELS THAT ARE BEING USED BY BUOW'S FOR NESTING.

**Threats:**  
- **General:** 20 INDIVIDUALS (UNABLE TO DISTINGUISH JUVENILES FROM ADULTS) OBSERVED ON 2 JUN 2007; 4 JUVENILES AND ~16 ADULTS OBSERVED ON 29 JUN 2007.

**PLSS:** T09N, R04E, Sec. 11 (M)  
**UTM:** Zone-10 N4279038 E628835  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**Latitude/Longitude:** 38.65054 / -121.51943  
**Elevation (feet):** 19

**County Summary:**  
Sacramento  
Taylor Monument (3812165)

**Sources:**  
COS07F0001  
COSTELLA, T. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2007-06-29
## Scientific Name: Athene cunicularia

**Common Name:** burrowing owl

### Listing Status:
- **Federal:** None
- **State:** None

### CNDDB Element Ranks:
- **Global:** G4
- **State:** S3

### General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

### Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

### Last Date Observed:
2007-06-09

### Location:
NATOMAS EAST DRAINAGE CANAL, FROM ABOUT 0.2 MI N TO ABOUT 0.4 MI S OF DEL PASO RD ABOUT 1.4 MI E OF I-5, SACRAMENTO.

### Detailed Location:
MAPPED TO PROVIDED COORDINATES. JAN & FEB BURROWS CONSISTED OF GROUND SQUIRREL BURROWS ON W SIDE OF CANAL & EAST (OR WET) SIDE OF LEVEE (NON-CONSTRUCTION SIDE). JUNE DETECTIONS WERE ON E SIDE OF THE CANAL.

### Ecological:
MAN-MADE LEVEES ALONG A CANAL, WITH HOUSES AND BUSINESSES IMMEDIATELY ADJACENT TO THE CANAL ON BOTH SIDES. THE AREA IS REGULARLY USED BY FISHERMEN, JOGGERS AND PEOPLE WALKING THEIR DOGS.

### Threats:

### General:
3 BUOW AT 3 BURROWS IN N FEATURE IN JAN 2007; OWL LATER FOUND DEAD AT 1 SITE & BURROW COLLAPSED AT ANOTHER. 1 BUOW AT 1 BURROW IN CENTER FEATURE IN FEB 2007. 1 PAIR IN N FEATURE & 1 PAIR WITH 1 JUVENILE IN S FEATURE IN JUN 2007.

### PLSS:
T09N, R04E, Sec. 11 (M)

### Accuracy:
Specific area

### Area (acres):
26

### UTM:
Zone-10 N4279561 E629899

### Latitude/Longitude:
38.65510 / -121.50712

### Elevation (feet):
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### Presence:
Presumed Extant

### Trend:
Unknown

### Occurrence Type:
Natural/Native occurrence

### Owner/Manager:
UNKNOWN
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**Scientific Name:** Athene cunicularia  
**Common Name:** burrowing owl

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDDB Element Ranks:**  
- **Global:** G4  
- **State:** S3

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.  
**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2007-01-04  
**Last Survey Date:** 2007-01-04  
**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant  
**Location:** NATOMAS EAST DRAINAGE CANAL, NORTH AND SOUTH OF CLUB CENTER DRIVE, SACRAMENTO.

**Detailed Location:** THE BURROWS ON THE CONSTRUCTION SIDE WERE CLOSED WITH ONE-WAY DOORS. THE 4 SITES ARE GROUND SQUIRREL BURROWS ON THE WEST (OR WET) SIDE OF THE LEVEE WHICH IS THE OPPOSITE SIDE OF THE CANAL AND WILL BE MONITORED DURING THE CONSTRUCTION SEASON.

**Ecological:** HOUSES AND BUSINESSES ARE IMMEDIATELY ADJACENT TO THE CANAL ON EITHER SIDE OF THE LEVEES.

**Threats:** THREATENED BY THE CONSTRUCTION OF THE UPPER NW INTERCEPTOR PROJECT BY THE SRCSD DURING THE 2007 BREEDING SEASON.

**General:** 2 BIRDS OBSERVED AT GROUND SQUIRREL BURROWS ON 4 & 6 JAN 2007. SURVEYS ON 5 FEB FOUND 1 OWL MOVED NORTH, CLOSER TO BRIDGECROSS DR & NO DETECTION OF THE OTHER OWL.

**PLSS:** T10N, R04E, Sec. 35 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 19

**UTM:** Zone-10 N4281305 E629858  
**Latitude/Longitude:** 38.67081 / -121.50726  
**Elevation (feet):** 10

**County Summary:** Sacramento  
**Quad Summary:** Taylor Monument (3812165)

**Sources:**
- CON07F0006 CONARD, C. (SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (WINTER BURROW SITE) 2007-01-04
- CON07F0007 CONARD, C. (SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT BUFFERLANDS) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (WINTER BURROW SITE) 2007-01-06
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 70969

**EO Index:** 71888

**Key Quad:** Elk Grove (3812143)

**Occurrence Number:** 1024

**Occurrence Last Updated:** 2008-02-28

---

**Scientific Name:** *Athene cunicularia*

**Common Name:** burrowing owl

---

**Listing Status:**

- **Federal:** None
- **State:** None

**CNDDDB Element Ranks:**

- **Global:** G4
- **State:** S3

---

**General Habitat:**

OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**

SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

---

**Last Date Observed:** 2003-10-XX

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2003-10-XX

**Occurrence Rank:** Unknown

**Owner/Manager:** ENVIRO STEWARDSHIP FOUNDATION

**Trend:** Unknown

**Presence:** Presumed Extant

---

**Location:**

0.36 MI EAST OF THE INTERSECTION OF EXCELSIOR RD AND GERBER RD.

---

**Detailed Location:**

Ecological:

**Threats:**

**General:**

A SINGLE OWL WAS OBSERVED USING A NETWORK OF GROUND SQUIRREL BURROWS WITHIN THE PROJECT AREA.

---

**PLSS:** T07N, R06E, Sec. 11 (M)

**Accuracy:** 1/10 mile

**Area (acres):** 0

---

**UTM:** Zone-10 N4260593 E649060

**Latitude/Longitude:** 38.48122 / -121.29105

**Elevation (feet):** 100

---

**County Summary:**

Sacramento

Elk Grove (3812143)

---

**Sources:**

ECO05R0011 ECO CORP CONSULTING, INC. - OPERATIONS AND MANAGEMENT PLAN FOR THE KLOTZ PROPERTY OPEN SPACE PRESERVE, SACRAMENTO COUNTY, CA. 2005-08-09
**Athene cunicularia**

**burrowing owl**

**Federal:** None  
**State:** None

**Global:** G4  
**State:** S3

**OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.**

**SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.**

**2 BUOW SEEN NEAR BURROWS IN WHAT APPEARS TO BE AN OLD LEVEE NORTH OF ELKHORN BLVD. THERE IS ALSO A LARGE BANK WITH BURROWS ABOUT 300 FT SOUTH OF ELKHORN BLVD.**

**THREATENED BY HOUSING DEVELOPMENTS IN NATOMAS BASIN.**
Map Index Number: 70979
Key Quad: Taylor Monument (3812165)
Occurrence Number: 1026
EO Index: 71894
Element Code: ABNSB10010
Occurrence Last Updated: 2010-02-16

Scientific Name: Athene cunicularia
Common Name: burrowing owl

Listing Status:
  Federal: None
  State: None

CNDDB Element Ranks:
  Global: G4
  State: S3

General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 2006-06-14
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2006-06-14
Occurrence Rank: Unknown

Owner/Manager: NATOMAS BASIN CONS-SILVA
Trend: Unknown

Presence: Presumed Extant

Location:
ABOUT 0.2 MI N OF W END OF SHADONEY AVE, ABOUT 1.6 - 1.7 MI NW OF W ELVERTA RD AT SORENTO RD, 4.2 MI NW OF RIO LINDA PO.
Detailed Location:
MAPPED TO PROVIDED COORDINATES.

Ecological:

Threats:

General:
1 ADULT OBS AT NW FEATURE ON 3 JUN 2006 DURING STATEWIDE SURVEY. THE CARCASS OF A BUOW WAS FOUND IN FRONT OF A BURROW IN SE FEATURE ON 14 JUN 2006; IT WAS KILLED AND EATEN BY AN UNKNOWN PREDATOR.

PLSS: T10N, R04E, Sec. 11 (M)  Accuracy: specific area
UTM: Zone-10 N4288140 E629814  Area (acres): 10
Latitude/Longitude: 38.73240 / -121.50649  Elevation (feet): 25

County Summary: Taylor Monument (3812165)

Sources:
ROB06U0001 ROBERTS, J. (NATOMAS BASIN CONSERVANCY) - EMAIL FROM JOHN ROBERTS TO JENNY MARR CONCERNING "A LOSS OF BURROWING OWL ON SILVA TRACT" 2006-06-14
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<tr>
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<td>72588</td>
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<td>Occurrence Last Updated:</td>
<td>2010-02-16</td>
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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
Federal: None  
State: None

**CNDDDB Element Ranks:**  
Global: G4  
State: S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.  
**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2007-06-20  
**Last Survey Date:** 2007-06-20  
**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**  
ADJACENT TO ONRAMP FROM NORTH-BOUND TRUXEL ROAD TO WEST-BOUND I-80, NATOMAS.

**Detailed Location:**  
PEA: DESCRIBED AS "THE TRUXEL TO WEST BOUND 80 ON RAMP." WIL: COORDS PROVIDED. MAPPED TO WIL COORDINATES.

**Ecological:**  
ADJACENT TO HEAVILY USED HIGHWAY ONRAMP.

**Threats:**  
VEHICLE COLLISIONS.

**General:**  
PEARCE WAS NOTIFIED IN MAY 2007 THAT A FAMILY OF BURROWING OWLS HAD RETURNED TO NEST AT THIS LOCATION "FOR THE FOURTH YEAR." 1 ADULT WAS OBS AT THIS BURROW DURING THE STATEWIDE SURVEY ON 20 JUN 2007.

**PLSS:** T09N, R04E, Sec. 13 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4277256 E630552  
**Latitude/Longitude:** 38.63424 / -121.50005  
**Elevation (feet):** 10

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**

- PEA07U0001 PEARCE, J. (CENTRAL VALLEY BIRD CLUB) - EMAIL POSTING ON THE CV BIRDS LISTSERV RE: BURROWING OWLS NESTING AT THE TRUXEL ROAD ON-RAMP TO WESTBOUND I-80 2007-05-04

## Scientific Name: *Athene cunicularia*

### Common Name: Burrowing Owl

### Listing Status:
- Little or None Federal
- None State

### CNDDDB Element Ranks:
- Global: G4
- State: S3

### General Habitat:
Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.

### Presence: Presumed Extant

### Detailed Location:
Described as "old drive-in theater east of RR between 51st & 47th" and "abandoned drive-in between railroad & Franklin Blvd." Mapped to undeveloped parcels containing old theater as per aerial photos, up to 47th Ave as per theater address.

### Ecological:
Idle or fallow field. Old site of a drive in theater that was torn down in 1989. Parcels have remained undeveloped since then. Otherwise contained within a developed area. Site used by a homeless camp as per 2004 visit.

### Threats:
Fitzer noted breeding pairs at this loc (1989-2004). Mentzer noted that "at one time" (1989-2004) there were 10+ pairs in the area. None found during fall 2004 survey by Conard. 1 pair with 2+ juv estimated on 11 Jul 2006.

### PLSS: T08N, R05E, Sec. 31 (M)
- Accuracy: Nonspecific area
- Area (acres): 31

### UTM: Zone-10 N4263192 E633178
- Latitude/Longitude: 38.50715 / -121.47257
- Elevation (feet): 20

### Sources:
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<td>Listing Status:</td>
<td>Rare Plant Rank: BLM_S-Sensitive</td>
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<tr>
<td>Federal: None</td>
<td>Other Lists: CDFW_SSC-Species of Special Concern</td>
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<td>Global: G4</td>
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<th>General Habitat: OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS &amp; SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.</th>
<th>Micro Habitat: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.</th>
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<th>Last Date Observed: 2007-07-XX</th>
<th>Occurrence Type: Natural/Native occurrence</th>
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<td>Last Survey Date: 2007-07-XX</td>
<td>Occurrence Rank: Unknown</td>
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<tr>
<td>Owner/Manager: USFWS-STONE LAKES NWR</td>
<td>Trend: Unknown</td>
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<td>Presence: Presumed Extant</td>
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<th>Location: ABOUT 0.16 MI WEST OF FRANKLIN BLVD AT RR, &amp; ABOUT 0.9 MI N OF FRANKLIN (TOWN), STONE LAKES NWR.</th>
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<tr>
<td>Detailed Location: MAPPED TO PROVIDED COORINATES. DESCRIBED AS WEST SIDE OF FRANKLIN BLVD, NORTH OF HOOD-FRANKLIN RD AND TOWN OF FRANKLIN.</td>
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<tr>
<td>Ecological: NATURAL GRASSLAND.</td>
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<th>Threats:</th>
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<tr>
<td>General:</td>
<td>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 &amp; ONLY IN THE NON-BREEDING SEASON.</td>
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<th>PLSS: T06N, R05E, Sec. 08 (M)</th>
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<td>UTM: Zone-10 N4250354 E634863</td>
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<th>County Summary: Sacramento</th>
<th>Quad Summary: Florin (3812144)</th>
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<tr>
<th>Sources:</th>
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<tbody>
<tr>
<td>CON10U0001</td>
<td>CONARD, C. - BURROWING OWL RECORDS FROM C. CONARD IN THE VICINITY OF THE SACRAMENTO CO. HCP FROM 2007 - 2010. 2010-XX-XX</td>
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</table>
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 78071

**Key Quad:** Florin (3812144)

**Occurrence Number:** 1258

**EO Index:** 78953

**Element Code:** ABNSB10010

**Occurrence Last Updated:** 2010-02-09

**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
Federal: None  
State: None

**Rare Plant Rank:** BLM_S-Sensitive  
CDFW_SSC-Species of Special Concern  
IUCN_LC-Least Concern  
USFWS_BCC-Birds of Conservation Concern

**CNDDB Element Ranks:**  
Global: G4  
State: S3

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2007-07-07

**Last Survey Date:** 2007-07-07

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**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.

**Threats:** DEVELOPMENT.

**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.

**PLSS:** T07N, R05E, Sec. 35 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4254007 E639942  
**Latitude/Longitude:** 38.42337 / -121.39686  
**Elevation (feet):** 40

**County Summary:**  
Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**


CON10U0001 CONARD, C. - BURROWING OWL RECORDS FROM C. CONARD IN THE VICINITY OF THE SACRAMENTO CO. HCP FROM 2007 - 2010. 2010-XX-XX

**Map Index Number:** 78091  
**EO Index:** 78972

**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 1263

**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
**Federal:** None  
**State:** None

**Scientific Name:**  
**Common Name:** burrowing owl

**CNNDDB Element Ranks:**  
**Global:** G4  
**State:** S3

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.  
**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 198X-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 198X-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** DOD-MATHER PRESERVE  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:** EAGLES NEST ROAD ABOUT 0.3 MI SOUTH OF WOODRING DR, MATHER AIR FORCE BASE, SOUTH OF RANCHO CORDOVA.

**Detailed Location:** MAPPED TO PROVIDED COORDINATES. ALSO DESCRIBED AS "EAGLES NEST ROAD SOUTH OF MATHER OFF JACKSON HIGHWAY."

**Ecological:**  
**Threats:** POISON PUT OUT FOR GROUND SQUIRRELS.

**General:**  
C. LAZIER OF SAC AUDUBON NOTED SEEING BUOW IN BURROWS & ON THE FENCE LINE IN THE 1980S, BUT THEY DISAPPEARED SUDDENLY WITH THE GROUND SQUIRRELS, POSSIBLY FROM POISON MEANT FOR THE SQUIRRELS. HASN'T BEEN LOOKED INTO FURTHER.

**PLSS:** T08N, R06E, Sec. 13 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4267398 E651526  
**Latitude/Longitude:** 38.54210 / -121.26131  
**Elevation (feet):** 140

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
Map Index Number: 78122
Key Quad: Rio Linda (3812164)
Occurrence Number: 1267
EO Index: 79010
Element Code: ABNSB10010
Occurrence Last Updated: 2010-02-11

Scientific Name: Athene cunicularia
Common Name: burrowing owl

Listing Status:
- Federal: None
- State: None

CNDDDB Element Ranks:
- Global: G4
- State: S3

General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 2007-06-12
Last Survey Date: 2007-06-12
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
ALONG IRRIGATION CANAL ABOUT 0.2 TO 0.5 MI SOUTH OF W ELVERTA RD & 0.7 MI EAST OF ERNEST RD, SW OF RIO LINDA.

Detailed Location:
MAPPED TO PROVIDED COORDINATES.

Ecological:
IRRIGATION CANAL BANK.

Threats:

General:
2 BURROWS WITH 3 ADULTS AT N FEATURE, 1 BURROW WITH 2 ADULTS AT CENTER FETAURE, & 1 BURROW WITH 2 ADULTS AT S FEATURE ON 12 JUN 2007 DURING STATEWIDE SURVEY.

PLSS:
T10N, R04E, Sec. 24 (M)

Accuracy:
specific area
Area (acres): 15

UTM:
Zone-10 N4285580 E630561

Latitude/Longitude: 38.70922 / -121.49838
Elevation (feet): 20

County Summary:
Sacramento
Rio Linda (3812164)

Sources:
WIL09D0003 WILKERSON, R. & R. SIEGEL - DATABASE AND DATA DICTIONARY FOR IBP'S 2006-2007 STATEWIDE BURROWING OWL SURVEY.
2009-09-29
Map Index Number: 78126
Key Quad: Rio Linda (3812164)
Occurrence Number: 1268
EO Index: 79014
Element Code: ABNSB10010
Occurrence Last Updated: 2010-02-16

Scientific Name: *Athene cunicularia*  
Common Name: burrowing owl

Listing Status:  
Federal: None  
State: None

CNDDB Element Ranks:  
Global: G4  
State: S3

General Habitat: OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

Micro Habitat: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 2007-06-06
Last Survey Date: 2007-06-06
Owner/Manager: STERLING SILVER STABLES
Presence: Presumed Extant

Location: ABOUT 0.5 MI NW OF LOCUST ROAD AT LOS GARCIA LN AND ABOUT 1.7 MI NNW OF ELVERTA POST OFFICE.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: PASTURE (FOR HORSE & COWS).

Threats:

General:

1 PAIR OBS ON 6 JUN 2007.

PLSS: T10N, R05E, Sec. 07 (M)  
Accuracy: 80 meters

UTM: Zone-10 N4288877 E632734  
Latitude/Longitude: 38.73860 / -121.47276

County Summary: Quad Summary:

Placer  
Rio Linda (3812164)

Sources:

WIL09D0003  
WILKERSON, R. & R. SIEGEL - DATABASE AND DATA DICTIONARY FOR IBP'S 2006-2007 STATEWIDE BURROWING OWL SURVEY.  
2009-09-29
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNNDDB Element Ranks:**  
- **Global:** G4  
- **State:** S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**  
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2003-03-07  
**Occurrence Type:** Natural/Native occurrence

**Owner/Manager:** DOD-SACRAMENTO ARMY DEPOT  
**Presence:** Presumed Extant

**Location:**  
NW SACRAMENTO ARMY DEPOT, ABOUT 0.15 TO 0.5 MI SE OF FRUITRIDGE RD AT POWER INN RD, SACRAMENTO.

**Detailed Location:**  
MAPPED TO PROVIDED COORDINATES AND MAP POINTS.

**Ecological:**  
GRASSLAND & BERM ON PERIPHERY OF DEPOT. ADJACENT TO LANDSCAPED LAWN AREA & ANNUAL GRASSLAND. LIGHT INDUSTRIAL IN VICINITY. SITE QUALITY MARKED AS "GOOD" IN 1990 AND "FAIR" IN 2003.

**Threats:**  
POSSIBLE THREAT FROM DEVELOPEMENT OF INDUSTRIAL PARK.

**General:**  
4 ACTIVE BURROWS OBS IN S OF N FEATURE (X2) & IN S FEATURE (X1) IN 1990. 4 OWLS & AT LEAST ONE ACTIVE BURROW OBS AT N END OF N FEATURE ON 7 MAR 2003.

**PLSS:** T08N, R05E, Sec. 26 (M)  
**Accuracy:** specific area  
**Area (acres):** 20

**UTM:** Zone-10 N4264910 E639049  
**Latitude/Longitude:** 38.52172 / -121.40491  
**Elevation (feet):** 40

**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:**
- HUD03F0001  
  HUDDLESTON, R. (CH2M HILL) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2003-03-07
- KOF90F0001  
  KOFORD, E.J. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 1990-XX-XX
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<td>Element Code: ABNSB10010</td>
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<tr>
<td>Occurrence Number: 1271</td>
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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
- Federal: None  
- State: None

**CNDDDB Element Ranks:**  
- Global: G4  
- State: S3

**General Habitat:** OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:** SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

**Last Date Observed:** 2004-07-XX  
**Last Survey Date:** 2004-07-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:** ALONG MATHER BLVD BETWEEN FEMOYER ST AND DOUGLAS RD, RANCHO CORDOVA.

**Detailed Location:** MAPPED TO START AND END COORDINATES AND DESCRIPTION "MATHER BLVD...ALONG FENCE LINE THIS SUMMER."

**Ecological:** AREA IS BORDERED BY THE OPEN SPACE OF MATHER AIR FORCE BASE TO THE SOUTH AND WEST, AND BY LANDS SLATED FOR HOUSING DEVELOPMENT (CITY OF RANCHO CORDOVA) TO THE NORTH AND EAST (GRADING VISIBLE IN AERIAL IMAGES 2003+).

**Threats:**  
**General:** 5 OWLS WERE OBSERVED ALONG THE FENCE LINE OF THIS SECTION OF ROAD IN JUL 2004 AND PRESUMED TO BE NESTING IN VICINITY.

**PLSS:** T08N, R06E, Sec. 12 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 74

**UTM:** Zone-10 N4270141 E650415  
**Latitude/Longitude:** 38.56700 / -121.27346  
**Elevation (feet):** 100

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
Map Index Number: 81423
EO Index: 82401
Key Quad: Carmichael (3812153)
Element Code: ABNSB10010
Occurrence Number: 1633
Occurrence Last Updated: 2011-01-24

Scientific Name: Athene cunicularia
Common Name: burrowing owl

Listing Status:
Federal: None
State: None

CNDDDB Element Ranks:
Global: G4
State: S3

General Habitat:
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

Micro Habitat:
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Last Date Observed: 2010-09-20
Last Survey Date: 2010-09-20

Owner/Manager: PVT

Location:
E SIDE OF S WATT AVE, 0.2 ROAD MILES S OF ITS INTERSECTION WITH ELDER CREEK RD, ABOUT 1 MI NNE OF FLORIN PO.

Detailed Location:
MOUND IS LOCATED LESS THAN 100 FT OF EAST-WEST TRANSMISSION LINES AND TRANSMISSION LINE CORRIDOR.

Ecological:
HABITAT DESCRIBED AS A MOUND OF DIRT WITH 2 BURROWS LOCATED IN A 1/4 ACRE PASTURE. PASTURE HEAVILY GRAZED BY 2 BURROWS - THERE IS ONLY SPARSE GROUND COVER. BURROWS ARE BEHIND PRIVATE RESIDENCE WITH TRANSMISSION LINES NEARBY.

Threats:
POSSIBLY THREATENED BY FUTURE DEVELOPMENT.

General:
2 ADULTS AND 1 POSSIBLE JUVENILE OBSERVED PERCHED AT BURROWS DURING DAILY COMMUTE AUG - SEP. ABUNDANT WHITEWASH AT BURROWS.

PLSS: T08N, R06E, Sec. 31 (M)  Accuracy: 80 meters
UTM: Zone-10 N4263453 E642049  Latitude/Longitude: 38.50813 / -121.37081
County Summary: Sacramento  Quad Summary: Carmichael (3812153)

Sources:
KOF10F0001  KOFORD, E. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 2010-09-20
## Occurrence Report
### California Department of Fish and Wildlife
#### California Natural Diversity Database

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**Scientific Name:** *Athene cunicularia*  
**Common Name:** burrowing owl

**Listing Status:**  
- Federal: None  
- State: None

**CNDB Element Ranks:**  
- Global: G4  
- State: S3

**General Habitat:**  
OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.

**Micro Habitat:**  
SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

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<td>PVT</td>
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<td>Presence:</td>
<td>Presumed Extant</td>
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**Location:**  
W SIDE OF E COMMERCE WAY, ABOUT 0.5 MI SE OF DEL PASO RD AT I-5, JUST W OF ARCO ARENA (POWER BALANCE PAVILION).

**Detailed Location:**  
UNFINISHED HIGH-DENSITY HOUSING DEVELOPMENT SITE JUST WEST OF ARCO ARENA, NEAR THE CORNER OF BENEFIT WAY AND E COMMERCE WAY; INFRASTRUCTURE SET (UNDERGROUND UTILITIES, FOUNDATIONS), BUT NO STRUCTURES YET (2012).

**Ecological:**  
TILLED EARTH WITH WEEDS. MAN-MADE HOLES FOR UTILITY CABLES USED AS BURROWS. SEVERAL JACKRABBITS BUT NO GROUND SQUIRRELS OBSERVED. SURROUNDING FIELDS APPEARED DISKED; OWLS MAY EVENTUALLY BE EXTIRPATED HERE (2012). FUTURE MONITORING NEEDED.

**Threats:**  
DEVELOPMENT WILL EVENTUALLY BE COMPLETED AND THE BURROWING OWLS WILL BE EVICTED. POSSIBLY THREATENED BY DOMESTIC PETS.

**General:**  
ABOUT 12 OBSERVED IN OR NEAR BURROWS & GIVING WARNING CALLS JUL 2012. 4 ADULTS & 7 RECENTLY FLEDGED JUVENILES (ABOUT 3 FAMILY GROUPS) WERE OBSERVED BY BURROWS WITH FEATHERS & WHITEWASH; OLDER OWLS EXHIBITED SENTINEL BEHAVIOR 17 AUG 2012.

**PLSS:**  
T09N, R04E, Sec. 10 (M)  
UTM: Zone-10 N4279133 E628192

**Accuracy:** specific area  
**Latitude/Longitude:** 38.65149 / -121.52680  
**Area (acres):** 12  
**Elevation (feet):** 20

**Sources:**  
ACORD, B. ET AL. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-CALIFORNIA NATURAL DIVERSITY DATABASE) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 2012-08-17

BUFTON, L. - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 2012-07-21
Map Index Number: 48738

Key Quad: Rio Linda (3812164)

Occurrence Number: 11

Scientific Name: Progne subis

Common Name: purple martin

Listing Status: Federal: None

State: None

CNDDB Element Ranks: Global: G5

State: S3

General Habitat:
INHABITS WOODLANDS, LOW ELEVATION CONIFEROUS FOREST OF DOUGLAS-FIR, PONDEROSA PINE, & MONTEREY PINE.

Micro Habitat:
NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.

Last Date Observed: 2007-03-11

Owner/Manager: CALTRANS

Location:
JUST NORTH OF ARCADE CREEK, WHERE I-80 Crosses Roseville Road, SACRAMENTO.

Detailed Location:
DRAIN HOLES OF I-80 ARE USED AS NESTING AREA. SITE IS LOCATED ADJACENT TO LIGHT RAIL STATION.

Ecological:

Threats:

General:

PLSS: T09N, R05E, Sec. 14 (M)

Accuracy: 1/10 mile

Area (acres): 0

UTM: Zone-10 N4277758 E638665

Latitude/Longitude: 38.63753 / -121.40677

Elevation (feet): 50

County Summary:
Sacramento

Rio Linda (3812164)

Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Sources:

AIR03A0001 AIROLA, D.A. & J. GRANTHAM - PURPLE MARTIN POPULATION STATUS, NESTING HABITAT CHARACTERISTICS, AND MANAGEMENT IN SACRAMENTO, CALIFORNIA (WESTERN BIRDS VOL. 34, NO. 4, PP. 235-251), 2003-XX-XX

AIR07U0001 AIROLA, D. - EMAIL POSTED TO THE CENTRAL VALLEY BIRDS LISTSERV RE: PURPLE MARTIN AND BURROWING OWL NEST LOCATIONS ALONG THE I-80 CORRIDOR IN SACRAMENTO 2007-03-11

LEE03A0001 LEEMAN, T., D. AIROLA & D. KOPP - STATUS OF BREEDING PURPLE MARTINS IN SACRAMENTO IN 2003 (CVBC BULLETIN VOL. 6, NO. 4, P. 61-68), 2003-XX-XX

MEN02F0001 MENTZER, J. (EDAW, INC.) - FIELD SURVEY FORM FOR PROGNE SUBIS 2002-XX-XX
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**Scientific Name:** Progne subis  
**Common Name:** purple martin

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S3

**General Habitat:**  
Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, & Monterey pine.

**Micro Habitat:**  
Nests in old woodpecker cavities mostly, also in human-made structures. Nest often located in tall, isolated tree/snag.

**Last Date Observed:** 2003-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2003-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Location:**  
Marconi Avenue Overpass of Auburn Boulevard & Union Pacific & Sacramento Light Rail Tracks, Sacramento.

**Detailed Location:**  
Birds are nesting in weep holes in freeway & street overpasses. Weep holes are vertical holes constructed into the underside of some hollow box girder elevated freeways, overpasses & bridges to relieve air pressure & drain condensation.

**Ecological:**  
New breeding location in 2003; high number of second year males observed, which is consistent with typical pioneering behavior of second year birds.

**Threats:**

**General:**  
Sites monitored every 4-8 days from mid-May to early Aug 2003; 1 pair observed nesting.

**PLSS:**  
T09N, R05E, Sec. 22 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:**  
Zone-10 N4276092 E637304  
**Latitude/Longitude:** 38.62273 / -121.42273  
**Elevation (feet):** 50

**County Summary:**  
Sacramento - Sacramento East (3812154)

**Sources:**

LEE03A0001 LEEMAN, T., D. AIROLA & D. KOPP - STATUS OF BREEDING PURPLE MARTINS IN SACRAMENTO IN 2003 (CVBC BULLETIN VOL. 6, NO. 4, P. 61-68), 2003-XX-XX
### Scientific Name: Progne subis

**Common Name:** purple martin

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
INHABITS WOODLANDS, LOW ELEVATION CONIFEROUS FOREST OF DOUGLAS-FIR, PONDEROSA PINE, & MONTEREY PINE.

**Micro Habitat:**
NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.

**Last Date Observed:** 2003-XX-XX

**Occurrence Type:** Natural/Native occurrence

**Occurrence Type:** Unknown

**Trend:** Unknown

**Location:**
EL CAMINO OVERPASS OF UNION PACIFIC AND LIGHT RAIL TRACKS, SACRAMENTO.

**Detailed Location:**
SITE FIRST DOCUMENTED IN 2003 BUT ASSUMED TO HAVE BEEN OCCUPIED IN PRIOR YEARS BASED ON THE PRESENCE OF OVER 90% OF PAIRS WITH ASY MALES.

**Ecological:**
BIRDS ARE NESTING IN WEEP HOLES IN FREEWAY & STREET OVERPASSES. WEEP HOLES ARE VERTICAL HOLES CONSTRUCTED INTO THE UNDERSIDE OF SOME HOLLOW BOX GIRDER ELEVATED FREEWAYS, OVERPASSES & BRIDGES TO RELIEVE AIR PRESSURE & DRAIN CONDENSATION.

**Threats:**

**General:**
SITES MONITORED EVERY 4-8 DAYS FROM MID-MAY TO EARLY AUG 2003; 15 PAIRS OBSERVED NESTING.

**PLSS:** T09N, R05E, Sec. 28 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N 4274765 E 636207

**Latitude/Longitude:** 38.61095 / -121.43559

**Elevation (feet):** 45

**County Summary:** Sacramento

**Quad Summary:** Sacramento East (3812154)

**Sources:**
### Progne subis

**Common Name:** purple martin

**Scientific Name:** *Progne subis*

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
INHABITS WOODLANDS, LOW ELEVATION CONIFEROUS FOREST OF DOUGLAS-FIR, PONDEROSA PINE, & MONTEREY PINE.

**Micro Habitat:**
NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.

**Last Date Observed:** 2003-XX-XX

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Unknown

**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
HWY 50 AT REDDING ROAD & UNION PACIFIC & LIGHT RAIL TRACKS, BETWEEN 65TH STREET AND HOWE AVENUE, SACRAMENTO.

**Detailed Location:**
NEW SITE IN 2003; HIGH NUMBER OF SECOND YEAR MALES OBSERVED, WHICH IS CONSISTENT WITH TYPICAL PIONEERING BEHAVIOR OF SECOND YEAR BIRDS.

**Ecological:**
BIRDS ARE NESTING IN WEEP HOLES IN FREEWAY & STREET OVERPASSES. WEEP HOLES ARE VERTICAL HOLES CONSTRUCTED INTO THE UNDERSIDE OF SOME HOLLOW BOX GIRDER ELEVATED FREEWAYS, OVERPASSES & BRIDGES TO RELIEVE AIR PRESSURE & DRAIN CONDENSATION.

**Threats:**
SITES MONITORED EVERY 4-8 DAYS FROM MID-MAY TO EARLY AUG 2003; 3 PAIRS OBSERVED NESTING.

**PLSS:**
- T08N, R05E, Sec. 15 (M)

**Accuracy:**
- specific area

**Area (acres):** 11

**UTM:**
- Zone-10 N4268114 E637474

**Latitude/Longitude:**
- 38.55083 / -121.42235

**Elevation (feet):** 40

**County Summary:**
Sacramento

**Quad Summary:**
Sacramento East (3812154)

**Sources:**

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<td><strong>General Habitat:</strong></td>
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<td><strong>Micro Habitat:</strong></td>
<td>NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.</td>
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<td><strong>Location:</strong></td>
<td>HIGHWAY 50 FROM 34TH STREET TO STOCKTON BOULEVARD, SACRAMENTO.</td>
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<td><strong>Detailed Location:</strong></td>
<td>35TH STREET SITE.</td>
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<td><strong>Ecological:</strong></td>
<td>BIRDS ARE NESTING IN WEEP HOLES IN FREEWAY &amp; STREET OVERPASSES. WEEP HOLES ARE VERTICAL HOLES CONSTRUCTED INTO THE UNDERSIDE OF SOME HOLLOW BOX GIRDER ELEVATED FREEWAYS, OVERPASSES &amp; BRIDGES TO RELIEVE AIR PRESSURE &amp; DRAIN CONDENSATION.</td>
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<tr>
<td><strong>Threats:</strong></td>
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**Sources:**

AIR03A0001: AIROLA, D.A. & J. GRANTHAM - PURPLE MARTIN POPULATION STATUS, NESTING HABITAT CHARACTERISTICS, AND MANAGEMENT IN SACRAMENTO, CALIFORNIA (WESTERN BIRDS VOL. 34, NO. 4, PP. 235-251), 2003-XX-XX

LEE03A0001: LEEMAN, T., D. AIROLA & D. KOPP - STATUS OF BREEDING PURPLE MARTINS IN SACRAMENTO IN 2003 (CVBC BULLETIN VOL. 6, NO. 4, P. 61-68), 2003-XX-XX
### Scientific Name

*Progne subis*

### Common Name

purple martin

### Listing Status

- **Federal:** None
- **State:** None

### Rare Plant Rank:

- **Global:** G5
- **State:** S3

### Other Lists:

- CDFW_SSC-Species of Special Concern
- IUCN_LC-Least Concern

### General Habitat:

INHABITS WOODLANDS, LOW ELEVATION CONIFEROUS FOREST OF DOUGLAS-FIR, PONDEROSA PINE, & MONTEREY PINE.

### Micro Habitat:

NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.

### Last Date Observed:

2003-XX-XX

### Last Survey Date:

2003-XX-XX

### Presence:

Presumed Extant

### Location:

CAPITAL CITY FREEWAY (BUSINESS I-80), BETWEEN "R" AND "S" STREETS, SACRAMENTO.

### Detailed Location:

BIRDS ARE NESTING IN WEEP HOLES IN FREEWAY & STREET OVERPASSES. WEEP HOLES ARE VERTICAL HOLES CONSTRUCTED INTO THE UNDERSIDE OF SOME HOLLOW BOX GIRDER ELEVATED FREEWAYS, OVERPASSES & BRIDGES TO RELIEVE AIR PRESSURE & DRAIN CONDENSATION.

### Threats:

SITE WAS SURVEYED IN 1992, BUT NO MARTINS WERE FOUND. 14 ADULTS ESTIMATED IN 2002. SITES MONITORED EVERY 4-8 DAYS FROM MID-MAY TO EARLY AUG 2003; 14 PAIRS OBSERVED NESTING.

### PLSS:

- **T08N, R05E, Sec. 07 (M)**
- Accuracy: 80 meters

### UTM:

- Zone-10 N4269487 E633191
- Latitude/Longitude: 38.56385 / -121.47122
- Accuracy: 80 meters

### Area (acres): 0

### Elevation (feet): 26

### Sources:

- AIR03A0001: AIROLA, D.A. & J. GRANTHAM - PURPLE MARTIN POPULATION STATUS, NESTING HABITAT CHARACTERISTICS, AND MANAGEMENT IN SACRAMENTO, CALIFORNIA (WESTERN BIRDS VOL. 34, NO. 4, PP. 235-251), 2003-XX-XX
- LEE03A0001: LEEMAN, T., D. AIROLA & D. KOPP - STATUS OF BREEDING PURPLE MARTINS IN SACRAMENTO IN 2003 (CVBC BULLETIN VOL. 6, NO. 4, P. 61-68), 2003-XX-XX
### Occurrence Report
#### California Department of Fish and Wildlife
**California Natural Diversity Database**

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**Scientific Name:** Progne subis  
**Common Name:** purple martin

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**CNDDB Element Ranks:**  
Global: G5  
State: S3

**General Habitat:**  
INHABITS WOODLANDS, LOW ELEVATION CONIFEROUS FOREST OF DOUGLAS-FIR, PONDEROSA PINE, & MONTEREY PINE.

**Micro Habitat:**  
NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.

**Last Date Observed:** 2003-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2003-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** CALTRANS  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
EASTBOUND HWY 50 OFFRAMP TO SOUTHBOUND HWY 99 AND NORTHBOUND HWY 99 OFFRAMP TO EASTBOUND HWY 50, SACRAMENTO.

**Detailed Location:** BROADWAY SITE.

**Ecological:**  
BIRDS ARE NESTING IN WEEP HOLES IN FREEWAY & STREET OVERPASSES. WEEP HOLES ARE VERTICAL HOLES CONSTRUCTED INTO THE UNDERSIDE OF SOME HOLLOW BOX GIRDER ELEVATED FREEWAYS, OVERPASSES & BRIDGES TO RELIEVE AIR PRESSURE & DRAIN CONDENSATION.

**Threats:**  
**General:**  

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**County Summary:**  
Sacramento  
Sacramento East (3812154)

**Sources:**
- AIR03A0001  
  AIROLA, D.A. & J. GRANTHAM - PURPLE MARTIN POPULATION STATUS, NESTING HABITAT CHARACTERISTICS, AND MANAGEMENT IN SACRAMENTO, CALIFORNIA (WESTERN BIRDS VOL. 34, NO. 4, PP. 235-251), 2003-XX-XX
- LEE03A0001  
  LEEMAN, T., D. AIROLA & D. KOPP - STATUS OF BREEDING PURPLE MARTINS IN SACRAMENTO IN 2003 (CVBC BULLETIN VOL. 6, NO. 4, P. 61-68), 2003-XX-XX

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Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch  
Report Printed on Tuesday, September 15, 2015

Information Expires 3/1/2016
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<td>Progne subis</td>
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<td>Micro Habitat:</td>
<td>NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.</td>
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<td>Location:</td>
<td>SUTTERVILLE ROAD OVER THE UNION PACIFIC RAIL YARD, WEST OF HIGHWAY 99, SACRAMENTO.</td>
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<td>Detailed Location:</td>
<td>BIRDS ARE NESTING IN WEEP HOLES IN FREEWAY &amp; STREET OVERPASSES. WEEP HOLES ARE VERTICAL HOLES CONSTRUCTED INTO THE UNDERSIDE OF SOME HOLLOW BOX GIRDER ELEVATED FREEWAYS, OVERPASSES &amp; BRIDGES TO RELIEVE AIR PRESSURE &amp; DRAIN CONDENSATION.</td>
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<tr>
<td>Threats:</td>
<td>SITE WAS SURVEYED IN 1992, BUT NO MARTINS FOUND. 4 ADULTS ESTIMATED IN 2002. SITES MONITORED EVERY 4-8 DAYS FROM MID-MAY TO EARLY AUG 2003; 6 PAIRS OBSERVED NESTING.</td>
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**Sources:**


**Sources:**

AIR03A0001  

LEE03A0001  
**Map Index Number:** 54703  
**Key Quad:** Sacramento West (3812155)  
**Occurrence Number:** 25  
**EO Index:** 54703  
**Element Code:** ABPAU01010  
**Occurrence Last Updated:** 2007-11-01

**Scientific Name:** Progne subis  
**Common Name:** purple martin

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDDB Element Ranks:**  
**Global:** G5  
**State:** S3

**General Habitat:**  
INHABITS WOODLANDS, LOW ELEVATION CONIFEROUS FOREST OF DOUGLAS-FIR, PONDEROSA PINE, & MONTEREY PINE.

**Micro Habitat:**  
NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.

**Last Date Observed:** 2003-XX-XX  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Location:**  
I-5 AT I STREET & I STREET BRIDGE RAMP ABOVE THE CALIFORNIA STATE RAILROAD MUSEUM PARKING LOT, SACRAMENTO.

**Detailed Location:**  
BIRDS ARE NESTING IN WEEP HOLES IN FREEWAY & STREET OVERPASSES. WEEP HOLES ARE VERTICAL HOLES CONSTRUCTED INTO THE UNDERSIDE OF SOME HOLLOW BOX GIRDER ELEVATED FREeways, OVERPASSES & BRIDGES TO RELIEVE AIR PRESSURE & DRAIN CONDENSATION.

**Ecological:**

**Threats:**

**General:**  

**PLSS:** T09N, R04E, Sec. 35 (M)  
**Accuracy:** specific area  
**Area (acres):** 14

**UTM:** Zone-10 N4271777 E630346  
**Latitude/Longitude:** 38.58491 / -121.50344  
**Elevation (feet):** 24

**County Summary:**  
Sacramento  
Sacramento West (3812155)

**SOURCES:**

AIR03A0001  
AIROLA, D.A. & J. GRANTHAM - PURPLE MARTIN POPULATION STATUS, NESTING HABITAT CHARACTERISTICS, AND MANAGEMENT IN SACRAMENTO, CALIFORNIA (WESTERN BIRDS VOL. 34, NO. 4, PP. 235-251), 2003-XX-XX

LEE03A0001  
LEEMAN, T., D. AIROLA & D. KOPP - STATUS OF BREEDING PURPLE MARTINS IN SACRAMENTO IN 2003 (CVBC BULLETIN VOL. 6, NO. 4, P. 61-68), 2003-XX-XX
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Map Index Number:** 11013  
**EO Index:** 6822  
**Key Quad:** Citrus Heights (3812163)  
**Occurrence Number:** 76  
**Occurrence Last Updated:** 2012-11-20  
**Element Code:** ABPAU08010

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**Scientific Name:** Riparia riparia  
**Common Name:** bank swallow

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**Listing Status:**  
**Federal:** None  
**State:** Threatened  
**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S2

---

**General Habitat:**  
COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT.

**Micro Habitat:**  
REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE.

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**Last Date Observed:** 2002-04-14  
**Occurrence Type:** Natural/Native occurrence

---

**Owner/Manager:** SAC COUNTY  
**Trend:** Stable

---

**Presence:** Presumed Extant  
**Occurrence Rank:** Good

---

**Location:**  
NORTH SIDE OF THE AMERICAN RIVER, JUST DOWNSTREAM FROM THE SAN JUAN RAPIDS, AMERICAN RIVER PARKWAY, FAIR OAKS.

**Detailed Location:**  
MAPPED TO 1989 MAPS. 1920 SPECIMEN LOCALITY GIVEN AS "SAN JUAN" AND 1985 RECORD STATED AS "SAN JUAN RAPIDS, AM RIVER PKWAY," EXACT LOCATIONS UNK. SAN JUAN RAPIDS IS AT THE S END OF SAN JUAN AVE. SAN JUAN LAND GRANT WAS N SIDE OF RIVER.

**Ecological:**  
HABITAT CONSISTED OF A VERTICAL BLUFF, CONTAINING 40-50 NEST HOLES (1989); SEVERAL LARGE COTTONWOODS RISE UP FROM THE RIVER'S EDGE IN CLOSE PROXIMITY TO THE NEST SITE. SITE LIKELY OPPOSITE ROSSMOOR BAR.

**Threats:**  
POSSIBLE THREAT FROM HUMANS, AS SITE IS JUST BELOW SOME PRIVATE RESIDENCES.

**General:**  

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**PLSS:**  
T09N, R06E, Sec. 14 (M)  
Accuracy: specific area  
Area (acres): 26

**UTM:**  
Zone-10 N4277133 E648536  
Latitude/Longitude: 38.63030 / -121.29354  
Elevation (feet): 100

---

**County Summary:**  
Sacramento  
Citrus Heights (3812163)

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**Sources:**  
JOHNSON, D. - EMAIL TO CENTRAL VALLEY BIRD CLUB LIST SERVE REGARDING BANK SWALLOWS NESTING NEAR ROSSMOOR BAR, AMERICAN RIVER, CA. 2002-04-14  
JOHNSON, D.L. - FIELD SURVEY FORM FOR RIPARIA RIPARIA (NESTING COLONY) 1989-05-06  
TRUEDESALE, F. (CALIFORNIA ACADEMY OF SCIENCES) - CAS EGG SET COLLECTION #8557 FOR RIPARIA RIPARIA FROM "SAN JUAN, SACRAMENTO CO." COLLECTED BY F. TRUEDESALE ON 7 MAY 1920. 1920-05-07  
WARENYCIA, D. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR RIPARIA RIPARIA (NESTING COLONY) 1989-04-15
### Scientific Name: Riparia riparia

**Common Name:** bank swallow

**Listing Status:**
- Federal: None
- State: Threatened

**CNNDDB Element Ranks:**
- Global: G5
- State: S2

**General Habitat:**
COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT.

**Micro Habitat:**
REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE.

**Last Date Observed:** 1986-06-01

**Owner/Manager:** SAC COUNTY

**Presence:** Presumed Extant

**Last Survey Date:**
- 1986-06-01

**Location:**
SOUTH SIDE OF AMERICAN RIVER UPSTREAM FROM CAL EXPO, NEAR BUSINESS 80 BRIDGE.

**Detailed Location:**

**Threats:**
THREATENED BY DESTRUCTION OF SUITABLE HABITAT BY INSTALLATION OF RIPRAP.

**General:**
42 BURROWS WITH 30 BIRDS; VISIBLE FROM THE BUSINESS 80 BRIDGE (NOT A RECOMMENDED VIEWING LOCATION!).

**PLSS:**
- T09N, R05E, Sec. 33 (M)

**Accuracy:**
nonspecific area

**Area (acres):** 30

**UTM:**
- Zone 10 N4271808 E635575

**Latitude/Longitude:** 38.58441 / -121.44342

**Elevation (feet):** 30

**County Summary:**
Sacramento

**Quad Summary:**
Sacramento East (3812154)

**Sources:**
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Riparia riparia*

**Common Name:** bank swallow

**Listing Status:**
- Federal: None
- State: Threatened

**CNDDB Element Ranks:**
- Global: G5
- State: S2

**General Habitat:**
COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT.

**Micro Habitat:**
REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE.

**Last Date Observed:** 1990-04-27

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Good

**Owner/Manager:** SAC COUNTY

**Presence:** Presumed Extant

**Location:**
SOUTH SIDE OF THE AMERICAN RIVER, 0.6 MILE UPSTREAM FROM THE SUNRISE BLVD BRIDGE, AMERICAN RIVER PARKWAY, FAIR OAKS.

**Detailed Location:**
MAPPED TO PROVIDED MAP. 1920 SPECIMEN LOCALITY GIVEN AS "SAN JUAN;" EXACT LOCATION UNKNOWN. UPPER SUNRISE AREA OF AMERICAN RIVER PARKWAY.

**Ecological:**
A RECENTLY-ERODED SANDY BLUFF (1990), 12-15 FT HIGH; NEARBY VEGETATION INCLUDED A BROAD BAND OF DECIDUOUS RIPARIAN FOREST & A NARROW BAND OF GRASS/THISTLE. LOCATED ALONG THE AMERICAN RIVER PARKWAY WITH LOTS OF RECREATION (CYCLING, RAFTING).

**Threats:**
MAIN THREAT TO THE SITE IS FROM HUMAN RECREATION.

**General:**

**PLSS:**
- T09N, R07E, Sec. 18 (M)

**UTM:**
- Zone-10 N4277978 E651546

**County Summary:**
- Sacramento

**Specific Location:**
Citrus Heights (3812163)

**Accuracy:**
- specific area

**Area (acres):** 17

**Latitude/Longitude:**
- 38.63740 / -121.25878

**Elevation (feet):** 75

**Sources:**

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<tr>
<td>MOH89F0004</td>
<td>MOHR, B. - FIELD SURVEY FORM FOR RIPARIA RIPARIA (NESTING COLONY) 1989-06-XX</td>
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<tr>
<td>SOG90F0003</td>
<td>SOGGE, M. &amp; L. KOSH - FIELD SURVEY FORM FOR RIPARIA RIPARIA (NESTING COLONY) 1990-04-27</td>
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<td>TRU20S0001</td>
<td>TRUESDALE, F. (CALIFORNIA ACADEMY OF SCIENCES) - CAS EGG SET COLLECTION #8557 FOR RIPARIA RIPARIA FROM &quot;SAN JUAN, SACRAMENTO CO.&quot; COLLECTED BY F. TRUESDALE ON 7 MAY 1920. 1920-05-07</td>
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**Occurrence Report**
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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| Scientific Name:          | Riparia riparia |
| Common Name:              | bank swallow    |

| Listing Status:           | Federal: None |
|                          | State: Threatened |

| CNDDB Element Ranks:      | Global: G5      |
|                          | State: S2       |

| General Habitat:          | COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT. |
| Micro Habitat:            | REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE. |

| Last Date Observed:       | 1995-06-12 |
| Last Survey Date:         | 1995-06-12 |
| Occurrence Type:          | Natural/Native occurrence |
| Occurrence Rank:          | Good |
| Trend:                    | Unknown |

| Owner/Manager:            | SAC COUNTY   |
| Presence:                 | Presumed Extant |
| Location:                 | AMERICAN RIVER, AT THE DOWNSTREAM END OF SUICIDE BEND, AMERICAN RIVER PARKWAY. |

| Detailed Location:        | MAPPED TO PROVIDED COORDINATES AND MAP FOR 1995. 1920 SPECIMEN LOCALITY GIVEN AS "SAN JUAN;" EXACT LOCATION UNKNOWN. |
| Ecological:               | HABITAT CONSISTED OF A VERTICAL, SW-FACING SANDY BANK SURROUNDED BY RIPARIAN WOODLAND. |
| Threats:                  | POSSIBLE THREATS INCLUDE HEAVY RECREATIONAL USE OF RIVER AND SURROUNDING AREA BY RAFTERS. |

| General:                  | 5 EGGS COLLECTED (CAS #8557) IN THE VICINITY OF SAN JUAN 7 MAY 1920. 10 ADULTS OBSERVED NESTING AND FORAGING ON 12 JUNE 1995. |

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| County Summary: Sacramento | Quad Summary: Carmichael (3812153) |

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**Report Printed on Tuesday, September 15, 2015**

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**Information Expires 3/1/2016**
**Map Index Number:** 83248

**Key Quad:** Sacramento West (3812155)

**Occurrence Number:** 328

**EO Index:** 84261

**Element Code:** ABPBW01114

**Occurrence Last Updated:** 2011-06-29

**Scientific Name:** *Vireo bellii pusillus*

**Common Name:** least Bell's vireo

**Listing Status:**
- **Federal:** Endangered
- **State:** Endangered

**CNDDDB Element Ranks:**
- **Global:** G5T2
- **State:** S2

**General Habitat:**
SUMMER RESIDENT OF SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.

**Micro Habitat:**
NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.

**Last Date Observed:** 2011-06-18

**Occurrence Type:** Natural/Native occurrence

**Occurrence Last Updated:** 2011-06-29

**Occurrence Rank:** Good

**Trend:** Unknown

**Owner/Manager:** DFG-YOLO BYPASS WA

**Presence:** Presumed Extant

**Location:**
ALONG SOUTH FORK PUTAH CREEK, PUTAH CREEK SINKS, 3.6 MILES SSE OF I-80 AT COUNTY RD 32B/32A, YOLO BYPASS WILDLIFE AREA.

**Detailed Location:**
ACCESS FROM PARKING LOT G. MAPPED TO PROVIDED COORDINATES.

**Ecological:**
HABITAT WAS DESCRIBED AS RIPARIAN SCRUB (SANDBAR WILLOW WAS DOMINANT; BLACK WILLOW, WILD ROSE, BLACKBERRY, WITH SCATTERED OREGON ASH, FREMONT'S COTTONWOOD) ADJACENT TO RIVERINE AND FRESHWATER MARSH. FIRST YOL LBVI TERRITORIES IN DECADES.

**Threats:**
BROWN-HEADED COWBIRDS WERE NUMEROUS AND ARE A KNOWN AND COMMON THREAT TO LEAST BELL'S VIREO.

**General:**
2 SEPARATE SINGING MALES WERE DETECTED BY MANY OBSERVERS FROM 17 APR TO 4 AUG 2010. THE FOLLOWING YEAR, THE PRESUMED SAME MALES WERE DETECTED BY MANY OBSERVERS FROM 7 MAY TO 18 JUN 2011. THE BIRDS WERE TERRITORIAL, BUT NEST FATE IS UNKNOWN.

**PLSS:** T08N, R03E, Sec. 26 (M)

**UTM:** Zone-10 N4263707 E620401

**Accuracy:** specific area

**Latitude/Longitude:** 38.51361 / -121.61898

**Area (acres):** 10

**Elevation (feet):** 15

**County Summary:**
Yolo

**Detailed Location:**
ALONG SOUTH FORK PUTAH CREEK, PUTAH CREEK SINKS, 3.6 MILES SSE OF I-80 AT COUNTY RD 32B/32A, YOLO BYPASS WILDLIFE AREA.

**Detailed Location:**
ACCESS FROM PARKING LOT G. MAPPED TO PROVIDED COORDINATES.

**Ecological:**
HABITAT WAS DESCRIBED AS RIPARIAN SCRUB (SANDBAR WILLOW WAS DOMINANT; BLACK WILLOW, WILD ROSE, BLACKBERRY, WITH SCATTERED OREGON ASH, FREMONT'S COTTONWOOD) ADJACENT TO RIVERINE AND FRESHWATER MARSH. FIRST YOL LBVI TERRITORIES IN DECADES.

**Threats:**
BROWN-HEADED COWBIRDS WERE NUMEROUS AND ARE A KNOWN AND COMMON THREAT TO LEAST BELL'S VIREO.

**General:**
2 SEPARATE SINGING MALES WERE DETECTED BY MANY OBSERVERS FROM 17 APR TO 4 AUG 2010. THE FOLLOWING YEAR, THE PRESUMED SAME MALES WERE DETECTED BY MANY OBSERVERS FROM 7 MAY TO 18 JUN 2011. THE BIRDS WERE TERRITORIAL, BUT NEST FATE IS UNKNOWN.

**PLSS:** T08N, R03E, Sec. 26 (M)

**UTM:** Zone-10 N4263707 E620401

**Accuracy:** specific area

**Latitude/Longitude:** 38.51361 / -121.61898

**Area (acres):** 10

**Elevation (feet):** 15

**County Summary:**
Yolo

**Detailed Location:**
ALONG SOUTH FORK PUTAH CREEK, PUTAH CREEK SINKS, 3.6 MILES SSE OF I-80 AT COUNTY RD 32B/32A, YOLO BYPASS WILDLIFE AREA.

**Detailed Location:**
ACCESS FROM PARKING LOT G. MAPPED TO PROVIDED COORDINATES.

**Ecological:**
HABITAT WAS DESCRIBED AS RIPARIAN SCRUB (SANDBAR WILLOW WAS DOMINANT; BLACK WILLOW, WILD ROSE, BLACKBERRY, WITH SCATTERED OREGON ASH, FREMONT'S COTTONWOOD) ADJACENT TO RIVERINE AND FRESHWATER MARSH. FIRST YOL LBVI TERRITORIES IN DECADES.

**Threats:**
BROWN-HEADED COWBIRDS WERE NUMEROUS AND ARE A KNOWN AND COMMON THREAT TO LEAST BELL'S VIREO.

**General:**
2 SEPARATE SINGING MALES WERE DETECTED BY MANY OBSERVERS FROM 17 APR TO 4 AUG 2010. THE FOLLOWING YEAR, THE PRESUMED SAME MALES WERE DETECTED BY MANY OBSERVERS FROM 7 MAY TO 18 JUN 2011. THE BIRDS WERE TERRITORIAL, BUT NEST FATE IS UNKNOWN.

**PLSS:** T08N, R03E, Sec. 26 (M)

**UTM:** Zone-10 N4263707 E620401

**Accuracy:** specific area

**Latitude/Longitude:** 38.51361 / -121.61898

**Area (acres):** 10

**Elevation (feet):** 15

**County Summary:**
Yolo

**Detailed Location:**
ALONG SOUTH FORK PUTAH CREEK, PUTAH CREEK SINKS, 3.6 MILES SSE OF I-80 AT COUNTY RD 32B/32A, YOLO BYPASS WILDLIFE AREA.

**Detailed Location:**
ACCESS FROM PARKING LOT G. MAPPED TO PROVIDED COORDINATES.

**Ecological:**
HABITAT WAS DESCRIBED AS RIPARIAN SCRUB (SANDBAR WILLOW WAS DOMINANT; BLACK WILLOW, WILD ROSE, BLACKBERRY, WITH SCATTERED OREGON ASH, FREMONT'S COTTONWOOD) ADJACENT TO RIVERINE AND FRESHWATER MARSH. FIRST YOL LBVI TERRITORIES IN DECADES.

**Threats:**
BROWN-HEADED COWBIRDS WERE NUMEROUS AND ARE A KNOWN AND COMMON THREAT TO LEAST BELL'S VIREO.

**General:**
2 SEPARATE SINGING MALES WERE DETECTED BY MANY OBSERVERS FROM 17 APR TO 4 AUG 2010. THE FOLLOWING YEAR, THE PRESUMED SAME MALES WERE DETECTED BY MANY OBSERVERS FROM 7 MAY TO 18 JUN 2011. THE BIRDS WERE TERRITORIAL, BUT NEST FATE IS UNKNOWN.

**PLSS:** T08N, R03E, Sec. 26 (M)

**UTM:** Zone-10 N4263707 E620401

**Accuracy:** specific area

**Latitude/Longitude:** 38.51361 / -121.61898

**Area (acres):** 10

**Elevation (feet):** 15

**County Summary:**
Yolo

**Detailed Location:**
ALONG SOUTH FORK PUTAH CREEK, PUTAH CREEK SINKS, 3.6 MILES SSE OF I-80 AT COUNTY RD 32B/32A, YOLO BYPASS WILDLIFE AREA.

**Detailed Location:**
ACCESS FROM PARKING LOT G. MAPPED TO PROVIDED COORDINATES.

**Ecological:**
HABITAT WAS DESCRIBED AS RIPARIAN SCRUB (SANDBAR WILLOW WAS DOMINANT; BLACK WILLOW, WILD ROSE, BLACKBERRY, WITH SCATTERED OREGON ASH, FREMONT'S COTTONWOOD) ADJACENT TO RIVERINE AND FRESHWATER MARSH. FIRST YOL LBVI TERRITORIES IN DECADES.

**Threats:**
BROWN-HEADED COWBIRDS WERE NUMEROUS AND ARE A KNOWN AND COMMON THREAT TO LEAST BELL'S VIREO.

**General:**
2 SEPARATE SINGING MALES WERE DETECTED BY MANY OBSERVERS FROM 17 APR TO 4 AUG 2010. THE FOLLOWING YEAR, THE PRESUMED SAME MALES WERE DETECTED BY MANY OBSERVERS FROM 7 MAY TO 18 JUN 2011. THE BIRDS WERE TERRITORIAL, BUT NEST FATE IS UNKNOWN.

**PLSS:** T08N, R03E, Sec. 26 (M)

**UTM:** Zone-10 N4263707 E620401

**Accuracy:** specific area

**Latitude/Longitude:** 38.51361 / -121.61898

**Area (acres):** 10

**Elevation (feet):** 15

**County Summary:**
Yolo

**Detailed Location:**
ALONG SOUTH FORK PUTAH CREEK, PUTAH CREEK SINKS, 3.6 MILES SSE OF I-80 AT COUNTY RD 32B/32A, YOLO BYPASS WILDLIFE AREA.

**Detailed Location:**
ACCESS FROM PARKING LOT G. MAPPED TO PROVIDED COORDINATES.

**Ecological:**
HABITAT WAS DESCRIBED AS RIPARIAN SCRUB (SANDBAR WILLOW WAS DOMINANT; BLACK WILLOW, WILD ROSE, BLACKBERRY, WITH SCATTERED OREGON ASH, FREMONT'S COTTONWOOD) ADJACENT TO RIVERINE AND FRESHWATER MARSH. FIRST YOL LBVI TERRITORIES IN DECADES.

**Threats:**
BROWN-HEADED COWBIRDS WERE NUMEROUS AND ARE A KNOWN AND COMMON THREAT TO LEAST BELL'S VIREO.

**General:**
2 SEPARATE SINGING MALES WERE DETECTED BY MANY OBSERVERS FROM 17 APR TO 4 AUG 2010. THE FOLLOWING YEAR, THE PRESUMED SAME MALES WERE DETECTED BY MANY OBSERVERS FROM 7 MAY TO 18 JUN 2011. THE BIRDS WERE TERRITORIAL, BUT NEST FATE IS UNKNOWN.
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Vireo bellii pusillus*  
**Common Name:** least Bell's vireo

**Listing Status:**  
**Federal:** Endangered  
**State:** Endangered

**CNDDDB Element Ranks:**  
**Global:** G5T2  
**State:** S2

**General Habitat:**  
SUMMER RESIDENT OF SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.

**Micro Habitat:**  
NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.

**Last Date Observed:** 1877-04-10  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1877-04-10  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:** WASHINGTON (=BRODERICK NEIGHBORHOOD OF WEST SACRAMENTO).

**Detailed Location:**  
EXACT LOCATION UNKNOWN. SPECIMEN LOCALE STATED AS "WASHINGTON, YOLO CO." PROBABLY COLLECTED FROM RIPARIAN VEGETATION ALONG THE SACRAMENTO RIVER.

**Ecological:**  
Threats:  
**General:**  
TWO ADULT MALES WERE COLLECTED ON 10 APR 1877 AND DEPOSITED AT CAS; COLLECTOR UNKNOWN.

**PLSS:** T09N, R04E, Sec. 34 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4272606 E628512  
**Latitude/Longitude:** 38.59265 / -121.52434  
**Elevation (feet):** 15

**County Summary:**  
Sacramento, Yolo  
Sacramento West (3812155)

**Sources:**  
ANO77S0001 ANONYMOUS (CALIFORNIA ACADEMY OF SCIENCES) - CAS #18503 AND CAS #18504 COLLECTED FROM WASHINGTON, YOLO CO. 1877-04-10
Map Index Number: 90027
Key Quad: Florin (3812144)
Occurrence Number: 77
EO Index: 91040
Element Code: ABPBXA3010
Occurrence Last Updated: 2013-08-13

Scientific Name: Melospiza melodia
Common Name: song sparrow ("Modesto" population)

Listing Status: Federal: None
State: None

Rare Plant Rank: Other Lists: CDFW_SSC-Species of Special Concern

CNDDB Element Ranks: Global: G5
State: S3?

General Habitat: Micro Habitat:

Last Date Observed: 2009-04-03
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2009-04-03
Occurrence Rank: Unknown

Owner/Manager: USFWS-STONE LAKES NWR
Trend: Unknown

Presence: Presumed Extant

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 "INDISTINGUISHBABLE FROM...HEERMANNII."

Threats:
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.

PLSS: T07N, R04E, Sec. 36 (M) Accuracy: nonspecific area Area (acres): 40
UTM: Zone-10 N4253852 E631486 Latitude/Longitude: 38.42326 / -121.49372 Elevation (feet): 5

County Summary: Quad Summary:
Sacramento Florin (3812144)

Sources:
DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
GRI23A0001 GRINNELL, J. (MUSEUM OF VERTEBRATE ZOOLOGY) - NOTES ON SOME BIRDS OBSERVED IN THE VICINITY OF COLUSA, CALIFORNIA. CONDOR 25(5):172-178. 1923-05-12
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<th>Location:</th>
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| 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." |

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<td>DWR11D0001</td>
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**Scientific Name:** Melospiza melodia  
**Common Name:** song sparrow ("Modesto" population)

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G5  
- State: S3?

**General Habitat:**  
- Micro Habitat:  

**Last Date Observed:** 2009-05-19  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2009-05-19  
**Occurrence Rank:** Unknown

**Owner/Manager:** USFWS-STONE LAKES NWR  
**Trend:** Unknown

**Presence:** Presumed Extant

**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."

**Threats:**  
**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.

**PLSS:** T07N, R04E, Sec. 26 (M)  
**Accuracy:** 1/10 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4254478 E630824  
**Latitude/Longitude:** 38.42899 / -121.50119  
**Elevation (feet):** 0

**County Summary:**  
Sacramento  
Florin (3812144), Clarksburg (3812145)

**Sources:**

- DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
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<td>Presence:</td>
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<td>Location:</td>
<td>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.</td>
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<td>Detailed Location:</td>
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<td>HABITAT DESCRIBED AS MARSH. GRINNELL (1923) DESCRIBED M. M. MAILLIARDI AS SLIGHTLY DIFFERENT FROM SSP. HEERMANNI; PATTEN (2009) STATED MAILLIARDI SPECIMENS WERE &quot;INDISTINGUISISHABLE FROM...HEERMANNII.&quot;</td>
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<td>Threats:</td>
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<td>3 DETECTED &amp; DETERMINED AS NESTING IN AREA 21 APR 2009. 1-8 SONG SPARROWS (ASSUMED TO BE OF &quot;MODESTO&quot; POPULATION) PERCHED IN THE AREA 3 APR-14 MAY 2009.</td>
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**Sources:**

- DWR11D0001 - CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 90032
Key Quad: Clarksburg (3812145)
Occurrence Number: 81

Scientific Name: Melospiza melodia
Common Name: song sparrow (“Modesto” population)

Listing Status:
Federal: None
State: None
Rare Plant Rank:
Other Lists: CDFW_SSC-Species of Special Concern

CNDDDB Element Ranks:
Global: G5
State: S3?

General Habitat:
Micro Habitat:

Last Date Observed: 2009-04-21
Last Survey Date: 2009-04-21
Owner/Manager: USFWS-STONE LAKES NWR
Presence: Presumed Extant

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."

Threats:
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.

PLSS: T06N, R04E, Sec. 02 (M)
Accuracy: 1/10 mile
Area (acres): 0

UTM: Zone-10 N4251721 E630546
Latitude/Longitude: 38.40419 / -121.50488
Elevation (feet): 10

County Summary:
Sacramento
Quad Summary:
Clarksburg (3812145)

Sources:
DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
GRI23A0001 GRINNELL, J. (MUSEUM OF VERTEBRATE ZOOLOGY) - NOTES ON SOME BIRDS OBSERVED IN THE VICINITY OF COLUSA, CALIFORNIA. CONDOR 25(5):172-176. 1923-05-12
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Melospiza melodia  
**Common Name:** song sparrow ("Modesto" population)

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G5  
- State: S3?

**General Habitat:**  
**Micro Habitat:**

**Last Date Observed:** 2009-05-20  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2009-05-20  
**Occurrence Rank:** Unknown

**Owner/Manager:** USFWS-STONE LAKES NWR  
**Trend:** Unknown

**Presence:** Presumed Extant

**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."

**Threats:**

**General:**

1 DETECTED AND DETERMINED TO BE NESTING IN AREA 20 MAY 2009.

**Accuracy:** 1/10 mile  
**Area (acres):** 0

**PLSS:** T06N, R04E, Sec. 11 (M)  
**Latitude/Longitude:** 38.37949 / -121.50989

**UTM:** Zone-10 N4248972 E630153  
**Elevation (feet):** 10

**County Summary:**  
Sacramento  
Clarksburg (3812145)

**Quad Summary:**

**Sources:**

- DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 90034  
**EO Index:** 91047  
**Key Quad:** Sacramento East (3812154)  
**Occurrence Number:** 83  
**Occurrence Last Updated:** 2013-08-13

**Scientific Name:** *Melospiza melodia*  
**Common Name:** song sparrow ("Modesto" population)

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G5  
**State:** S3?

**General Habitat:**  
**Micro Habitat:**

**Last Date Observed:** 1900-06-09  
**Last Survey Date:** 1900-06-09  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:** SACRAMENTO.

**Detailed Location:**

1877 EXPEDITION CONDUCTED AT "VICINITY OF SACRAMENTO CITY...WHERE VEGETATION WAS NOURISHED BY THE PRESENCE OF WATER" AND 1900 SPECIMEN COLLECTED AT "2 MI S SACRAMENTO;" EXACT LOCATIONS UNKNOWN. MAPPED GENERALLY CENTERED ON SACRAMENTO.

**Ecological:**

NEST "MADE OF DECAYED GRASSES, BITS OF TULE AND DEAD LEAVES. LINING OF FINER STUFF OF THE SAME."

**Threats:**

DEVELOPMENT HAS REPLACED MUCH OF THE WETLANDS AND OTHER SUITABLE HABITAT IN THE AREA.

**General:**

FOUND BREEDING AT SACRAMENTO BETWEEN 6 JUN-4 JUL 1877. 3 EGGS COLLECTED (MVZ EGG/NEST #1003) ON 9 JUN 1900 FROM "WHEAT AT EDGE OF FIELD, A FEW FEET FROM BRUSH AND WILLOWS ALONG A CANAL."

**PLSS:** T08N, R04E, Sec. 01 (M)  
**UTM:** Zone-10 N4270865 E631254  
**Accuracy:** 5 miles  
**Latitude/Longitude:** 38.57656 / -121.49319  
**Area (acres):** 0  
**Elevation (feet):** 20

**County Summary:**

Sacramento, Yolo  
Sacramento East (3812154), Sacramento West (3812155), Rio Linda (3812164), Taylor Monument (3812165)

**Sources:**

ELL00S0001  
**ELLiotT, R. (MUSEUM OF VERTEBRATE ZOOLoGy) - MVZ EGG/NEST #1003: MELOSPiZA MELODIA MAILLIARDI FROM SACRAMENTO 2 MI S, SACRAMENTO CO., CALIFORNIA 1900-06-09**

RID77A0001  
Map Index Number: 90035  
EO Index: 91048  
Key Quad: Sacramento West (3812155)  
Element Code: ABPBXA3010  
Occurrence Number: 84  
Occurrence Last Updated: 2013-08-13

Scientific Name: *Melospiza melodia*  
Common Name: song sparrow ("Modesto" population)

Listing Status:  
Federal: None  
State: None

Rare Plant Rank:  
Other Lists: CDFW_SSC-Species of Special Concern

CNDDB Element Ranks:  
Global: G5  
State: S3?

General Habitat:  
Micro Habitat: 

Last Date Observed: 2011-07-01  
Occurrence Type: Natural/Native occurrence  
Last Survey Date: 2011-07-01  
Occurrence Rank: Unknown  
Owner/Manager: DFG-YOLO BYPASS WA  
Trend: Unknown  
Presence: Presumed Extant

Location:  
ALONG SOUTH FORK PUTAH CREEK, ABOUT 2 MI E OF RD 106A, 2.9 MI WNW OF RIVERVIEW, 5.25 MI ENE OF I-5 AT FLORIN RD.

Detailed Location:  
MAPPED TO PROVIDED COORDINATES.

Ecological:  
RIPARIAN SCRUB AND RIVERINE IN YOLO BYPASS WA, SURROUNDED BY AGRICULTURAL CROPLAND. BROWN-HEADED COWBIRDS WERE ABUNDANT IN THE AREA.

Threats:  
POSSIBLY THREATENED BY BROWN-HEADED COWBIRDS.

General:  
2 ADULTS OBSERVED FEEDING 2 FLEDGLINGS ON 1 JUL 2011.

PLSS: T08N, R03E, Sec. 26 (M)  
Accuracy: 80 meters  
Area (acres): 0

UTM: Zone-10 N4263652 E621019  
Latitude/Longitude: 38.51303 / -121.61191  
Elevation (feet): 10

County Summary:  
Sacramento West (3812155)

SOURCES:  
WHI1F0015 WHISLER, E. - FIELD SURVEY FORM FOR MELOSPIZA MELODIA 2011-07-01
Melospiza melodia

song sparrow ("Modesto" population)

Federal: None
State: None

G5

Global: G5
State: S3?

Natural/Native occurrence

Unknown

Unknown

Presumed Extant

VICINITY OF CLARKSBURG; BOUNDED BY WINCHESTER LAKE (N), SACRAMENTO RIVER (E), ELK SLOUGH (S), AND MAIN CANAL (W).

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.

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.

1 COLLECTED (MVZ #46049) 30 DEC 1912. 5 COLLECTED (MVZ #51637-41) 7 & 8 SEP1927.

T07N, R04E, Sec. 33 (M) Accuracy: 1 mile
Zone-10 N4253196 E627168 Latitude/Longitude: 38.41797 / -121.54329

Sacramento, Yolo Clarksburg (3812145)

HAL12S0005 HALL, C. (MUSEUM OF VERTEBRATE ZOOLOGY) - MVZ BIRDS #46049: MELOSPIZA MELODIA MAILLIARDI FROM CLARKSBURG, SACRAMENTO CO., CALIFORNIA 1912-12-30
LAM27S0001 LAMB, C. (MUSEUM OF VERTEBRATE ZOOLOGY) - MVZ BIRDS #51637: MELOSPIZA MELODIA MAILLIARDI FROM 7.5 MI N COURTLAND, SACRAMENTO CO., CALIFORNIA 1927-09-07
LAM27S0002 LAMB, C. (MUSEUM OF VERTEBRATE ZOOLOGY) - MVZ BIRDS #51638: MELOSPIZA MELODIA MAILLIARDI FROM 6 MI N COURTLAND, SACRAMENTO CO., CALIFORNIA 1927-09-08
LAM27S0003 LAMB, C. (MUSEUM OF VERTEBRATE ZOOLOGY) - MVZ BIRDS #51639: MELOSPIZA MELODIA MAILLIARDI FROM 6 MI N COURTLAND, SACRAMENTO CO., CALIFORNIA 1927-09-08
LAM27S0004 LAMB, C. (MUSEUM OF VERTEBRATE ZOOLOGY) - MVZ BIRDS #51640: MELOSPIZA MELODIA MAILLIARDI FROM 6 MI N COURTLAND, SACRAMENTO CO., CALIFORNIA 1927-09-08
LAM27S0005 LAMB, C. (MUSEUM OF VERTEBRATE ZOOLOGY) - MVZ BIRDS #51641: MELOSPIZA MELODIA MAILLIARDI FROM 6 MI N COURTLAND, SACRAMENTO CO., CALIFORNIA 1927-09-09
**Map Index Number:** 11515  
**EO Index:** 7319  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 6  
**Occurrence Last Updated:** 2015-04-02

**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolor blackbird

**Listing Status:**  
**Federal:** None  
**State:** None

**CNNDDB Element Ranks:**  
**Global:** G2G3  
**State:** S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 1998-04-24  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Good  
**Trend:** Fluctuating

**Location:**  
NEAR STRAWBERRY CREEK, W OF ELK GROVE FLORIN RD, ABOUT 0.5 MI SW OF CALVIN RD INTXN, 0.7 MI NNW OF SHELDON RD INTXN.

**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).

**Threats:**  
THREATENED BY ENCROACHING DEVELOPMENT. REALIGNMENT OF STRAWBERRY CREEK DAMAGED THIS SITE.

**General:**  

**PLSS:** T07N, R05E, Sec. 24 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 51

**UTM:** Zone-10 N4256773 E641456  
**Latitude/Longitude:** 38.44805 / -121.37896  
**Elevation (feet):** 35

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>DAI91F0003</td>
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### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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### Scientific Name: *Agelaius tricolor*
### Common Name: Tricolored Blackbird

### Listing Status:
- **Federal:** None
- **State:** None

### CNDDB Element Ranks:
- **Global:** G2G3
- **State:** S1S2

### General Habitat:
Highly colonial species, most numerous in Central Valley & vicinity. Largerly endemic to California.

### Micro Habitat:
Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.

### Last Date Observed:
1981-05-11

### Last Survey Date:
2011-04-16

### Presence:
Possibly Extirpated

### 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 completely developed.

### Threats:
General:

### PLSS:
- **T07N, R05E, Sec. 14 (M)**
- **Accuracy:** 2/5 mile
- **Area (acres):** 0

### UTM:
- **Zone-10 N4257615 E639143**
- **Latitude/Longitude:** 38.45599 / -121.40529
- **Elevation (feet):** 25

### County Summary:
- **Sacramento**
- **Florin (3812144)**

### Sources:
- **SLO04R0001** Sloat, T. - South Sacramento Habitat Conservation Plan. Appendix A: Species Analysis Tricolored Blackbird 2004-XX-XX
- **TRI14D0001** Tricolored Blackbird Portal - ICE (University of California, Davis) - 1907-2014 Tricolored Blackbird Records from UC Davis Tricolored Blackbird Portal, Information Center for the Environment (ICE) 2014-XX-XX
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**Scientific Name:** *Agelaius tricolor*

**Common Name:** tricolored blackbird

**Listing Status:**
- Federal: None
- State: None

**CNDDB Element Ranks:**
- Global: G2G3
- State: S1S2

**General Habitat:**
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 1981-05-15

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Unknown

**Trend:** Unknown

**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 T6N, R5E, S15.

**Ecological:**
NESTING OCCURRED IN BLACKBERRY. SIZE OF COLONY APPROXIMATELY 0.25 ACRE.

**Threats:**

**General:**
APPROXIMATELY 100 ADULTS OBSERVED NESTING ON 15 MAY 1981.

**PLSS:**
- T06N, R05E, Sec. 15 (M)
- Accuracy: 3/5 mile
- Area (acres): 0

**UTM:**
- Zone-10 N4248330 E638229
- Latitude/Longitude: 38.37249 / -121.41758
- Elevation (feet): 25

**County Summary:**
Sacramento
- Bruceville (3812134), Florin (3812144)

**Sources:**
- HOS86R0001 HOSEA, R.C. - A POPULATION CENSUS OF THE TRICOLORED BLACKBIRD, AGELAIUS TRICOLOR (AUDUBON), IN FOUR COUNTIES IN THE NORTHERN CENTRAL VALLEY OF CALIFORNIA. M.A. THESIS, CSU-SACRAMENTO. 1986-08-14
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 11708  
**EO Index:** 24789  
**Element Code:** ABPBXB0020  
**Occurrence Last Updated:** 2015-05-01  
**Occurrence Number:** 13

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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G2G3  
- State: S1S2

---

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

---

**Last Date Observed:** 2005-06-04  
**Last Survey Date:** 2014-04-19  
**Owner/Manager:** PVT  
**Presence:** Possibly Extirpated

**Location:**  
~0.6 MI WSW OF EAGLES NEST RD & FLORIN RD INTERSECTION, 1.6 MI NE OF GERBER RD & EXCELSIOR RD INTXN, W OF SLOUGHHOUSE.

**Detailed Location:**  
MAPPED TO POND W/ APPARENT NESTING HABITAT NEAR 1981 LOCATION. 1981 LOCATION DESCRIBED AS "FLORIN RD 0.5 MI FROM EAGLES NEST RD. 2005-2014 LOCATION DESCRIBED AS "S SIDE OF FLORIN RD, BTWN EXCELSIOR RD & EAGLES NEST RD."

**Ecological:**  

**Threats:**

**General:**  

**PLSS:** T07N, R06E, Sec. 01 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0  
**UTM:** Zone-10 N4262119 E650702  
**Latitude/Longitude:** 38.49469 / -121.27189  
**Elevation (feet):** 100  
**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

---

**Sources:**

- SCHNEIDER, T. & M. BARTLETT - FIELD SURVEY FORM FOR *AGELAIUS TRICOLOR* (NESTING COLONY) 1992-06-16
- TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
Map Index Number: 11715
Key Quad: Carmichael (3812153)
Occurrence Number: 15

Scientific Name: Agelaius tricolor
Common Name: tricolored blackbird

Listing Status: Federal: None
State: None

CNDDB Element Ranks: Global: G2G3
State: S1S2

General Habitat: HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 1982-06-05
Last Survey Date: 2014-04-21
Presence: Extirpated

Location: VICINITY OF WHITE ROCK ROAD & FOLSOM SOUTH CANAL INTERSECTION, 1.3 MI S OF HWY 50 & SUNRISE BLVD INTXN, RANCHO CORDOVA.

Detailed Location: PROVIDED LOCATION DESCRIPTION WAS "WHITE ROCK RD AND FOLSOM SOUTH CANAL, 1.5 MI NE OF MATHER FIELD." 2011/2014 DATA COLLECTED AS PART OF TRIENNIAL STATEWIDE SURVEYS, DATA STORED IN UC DAVIS TRBL PORTAL.

Ecological: HABITAT IN 1982 SIMPLY DESCRIBED AS "THISTLES." NO NESTING SUBSTRATE VISIBLE IN 2011, "PLAGUED" BY HEAVY TRAFFIC. COLONY HAD BEEN AT THIS SITE FOR MANY YEARS BUT AREA WAS LEVELED & DISKED FOR DEVELOPMENT INTO A BUSINESS PARK.

Threats: DEVELOPMENT.

General: ABOUT 235 TO 270 BIRDS OBSERVED ON 5 JUN 1982; FLEDGLINGS OBSERVED. NONE OBSERVED ON 28 MAR 2011 AND 19 APR 2014.

Accuracy: 1/5 mile
Area (acres): 0
Elevation (feet): 115

Sacramento

Sources:
HOS86R0001 HOSEA, R.C. - A POPULATION CENSUS OF THE TRICOLORED BLACKBIRD, AGELAIUS TRICOLOR (AUDUBON), IN FOUR COUNTIES IN THE NORTHERN CENTRAL VALLEY OF CALIFORNIA. M.A. THESIS, CSU-SACRAMENTO. 1986-08-14
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**General Habitat:**
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 1982-06-07
**Last Survey Date:** 2014-04-20
**Owner/Manager:** PVT
**Presence:** Possibly Extirpated

**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 JUST E OF FEATURE.

**Threats:**
DEVELOPMENT.

**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.

**PLSS:** T07N, R05E, Sec. 26 (M)
**Accuracy:** 1/5 mile

**County Summary:**
Sacramento
**Quad Summary:**
Florin (3812144)

**Sources:**
HOS86R0001 HOSEA, R.C. - A POPULATION CENSUS OF THE TRICOLORED BLACKBIRD, AGELAIUS TRICOLOR (AUDUBON), IN FOUR COUNTIES IN THE NORTHERN CENTRAL VALLEY OF CALIFORNIA. M.A. THESIS, CSU-SACRAMENTO. 1986-08-14
SCH92F0019 SCHNEIDER, T. & M. BARTLETT - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-06-16
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 11521  
**Key Quad:** Elk Grove (3812143)  
**Occurrence Number:** 156

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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

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**Listing Status:**  
**Federal:** None  
**State:** None

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**CNDDDB Element Ranks:**  
**Global:** G2G3  
**State:** S1S2

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**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

---

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

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**Last Date Observed:** 1972-06-07  
**Occurrence Type:** Natural/Native occurrence

---

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

---

**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 CONSISTS OF CATTAILS AND BULRUSH.

---

**Threats:**  
ABOUT 10,000 INDIVIDUALS OBSERVED ON 7 JUN 1972; PROBABLY NESTING BUT NOT CONFIRMED (DEHAVEN UNPUB. FIELD DATA).

---

**PLSS:** T06N, R05E, Sec. 13 (M)  
**Accuracy:** 4/5 mile  
**Area (acres):** 0

---

**UTM:** Zone-10 N4248938 E641879  
**Latitude/Longitude:** 38.37739 / -121.37569  
**Elevation (feet):** 40

---

**County Summary:**  
Sacramento  
Galt (3812133), Bruceville (3812134), Elk Grove (3812143), Florin (3812144)

---

**SOURCES:**

- **BEE91R0001**  

- **DEHNDU0001**  

- **HOS86U0002**  
  HOSEA, R. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - COMPILATION, COUNTY BY COUNTY, OF TRICOLORED BLACKBIRD NESTING OBSERVATIONS 1986-XX-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11747
EO Index: 4369
Key Quad: Elk Grove (3812143)
Element Code: ABPXB0020
Occurrence Number: 157
Occurrence Last Updated: 2015-05-04

Scientific Name: *Agelaius tricolor*
Common Name: tricolored blackbird

Listing Status: Federal: None
State: None

CNDDDB Element Ranks:
Global: G2G3
State: S1S2

General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 1972-05-XX
Last Survey Date: 2014-04-20

Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
ABOUT 0.3 MI SE OF FLORIN RD & EAGLES NEST RD INTERSECTION, 0.7 MI WSW OF FLORIN RD AT SUNRISE BLVD, SW OF BLODGETT RES.

Detailed Location:
1972 LOCATION DESCRIBED ONLY AS "EAGLES NEST AT FLORIN ROADS." 1986-2014 COLONY LOCATIONS WERE "FLORIN RD JUST E OF INTERSECTION OF EAGLES NEST RD & "OFF OF EAGLES NEST RD, 0.2 MI S OF FLORIN RD, ~0.25 MI E OF EAGLES NEST RD."

Ecological:
NESTING SUBSTRATE WAS TULES & CATTAILS. DATA COLLECTED/STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL. DESCRIBED AS HISTORICAL LOCATION, FORMERLY CATTAIL MARSH, NOW QUARRY (2014). "ACTIVE SITES" REPORTED TO THE N ACROSS FLORIN RD.

Threats:
CONVERSION TO QUARRY.

General:
2,000 INDIVIDUALS OBSERVED IN 1972; NESTS W/ 1-4 EGGS & OLD NESTS (DEHAVEN). HUNDREDS OF PAIRS OBSERVED IN 1986 (MANOLIS); UNK IF COLONY FLEDGED YOUNG. 100 OBS IN 2008; NO NESTING OBS. NONE OBSERVED IN 2011. 500 OBS IN 2014; NO NESTING OBS.

PLSS:
T07N, R07E, Sec. 06 (M)
Accuracy: 1/5 mile
Area (acres): 0

UTM:
Zone-10 N4262158 E652168
Latitude/Longitude: 38.49479 / -121.25509
Elevation (feet): 110

County Summary:
Sacramento
Elk Grove (3812143)

Sources:
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
### Scientific Name: *Agelaius tricolor*

**Common Name:** tricolored blackbird

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDDB Element Ranks:**
- **Global:** G2G3
- **State:** S1S2

**General Habitat:**
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

### Last Date Observed:
- **1989-05-25**

### Occurrence Type:
**Natural/Native occurrence**

### Occurrence Rank:
**Unknown**

### Presence:
**Presumed Extant**

### Location:
JUST NW OF JACKSON RD & EAGLES NEST RD INTERSECTION, 1.5 MI WSW OF SUNRISE BLVD & KIEFER BLVD INTXN, WNW OF SLOUGHHOUSE.

### Detailed Location:
1972 LOCATION WAS "HWY 16 JUST E OF EAGLES NEST RD." 1989 LOCATION WAS "ONE QUARTER MILE W OF EAGLE'S NEST RD." DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL, SITE NAME "EAGLES NEST ROAD-WEST."

### Ecological:
NESTING IN BLACKBERRY THICKETS, CATTAILS, AND TULES. MUCH OF THE STRETCH OF EAGLE'S NEST RD NORTH OF HWY 16 WAS SURVEYED AND NO SUITABLE NESTING HABITAT OR BLACKBIRDS WERE OBSERVED.

### Threats:
POTENTIAL FOR LANDOWNERS TO ALTER USE OF LAND (1989).

### General:
NEST CONTAINING 1-4 EGGS OBSERVED IN MAY 1972 (DEHAVEN FIELD NOTES). ~1,000 OBSERVED ON 24-25 MAY 1989; OBS CARRYING FOOD/FEEDING YOUNG. 0 OBS APR OF 2008 & 2011. FORAGING FLOCK OF 45 BIRDS OBS ON 20 APR 2014. 0 OBS ON 17 APR 2015.

### PLSS:
- T08N, R06E, Sec. 25 (M)
- Accuracy: 3/5 mile
- Area (acres): 0

### UTM:
- Zone-10 N4264633 E650987
- Latitude/Longitude: 38.51729 / -121.26809
- Elevation (feet): 140

### County Summary:
Sacramento
- Carmichael (3812153)

### Sources:
- **DEHNDU0001** DEHAVEN, R.W. - PARTIAL LIST OF RECENT (1969-1974) TRICOLORED BLACKBIRD BREEDING COLONY LOCATIONS. XXXX-XX-XX
- **TRI14D0001** TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11126
Key Quad: Sacramento West (3812155)
Occurrence Number: 162
EO Index: 24678
Element Code: ABPBXB0020
Occurrence Last Updated: 2015-04-13

Scientific Name: Agelaius tricolor
Common Name: tricolored blackbird

Listing Status: Federal: None
State: None

CNDDB Element Ranks: Global: G2G3
State: S1S2

General Habitat: HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 1971-04-05
Last Survey Date: 2014-04-20
Owner/Manager: UNKNOWN
Presence: Possibly Extirpated

Location: VICINITY OF SACRAMENTO DEEP WATER SHIP CHANNEL & PORT OF SACRAMENTO, JUST S OF I-80 & BUSINESS 80 FWY, W OF SACRAMENTO.


Ecological: NESTING IN MUSTARD AND STAR THISTLE IN 1971. FORAGING IN 2014 WAS IN SANDBAR WILLOW STANDS. GENERAL HABITAT WAS MUSTARD, THISTLE, WILLOW, & GRASS. BREEDING COLONY OBS BTWN 1969-74 BY R. DEHAVEN; POSSIBLY REFERRING TO 1971 DETECTION.

Threats: General:
~1,500 OBSERVED ON 5 APR 1971; NESTS LOCATED IN 5FT THISTLE. SITE CHECKED BY SCHNEIDER AND BARTLETT IN 1992; NONE OBSERVED. ~750-2,000 OBS IN 2005; BREEDING UNKNOWN. NONE OBSERVED IN 2011. FORAGING FLOCK OF 80 BIRDS OBSERVED ON 20 APR 2014.

PLSS: T08N, R04E, Sec. 08 (M)
UTM: Zone-10 N4269062 E625366

Accuracy: nonspecific area
Latitude/Longitude: 38.56117 / -121.56108
Area (acres): 1,247
Elevation (feet): 10

County Summary: Yolo
Sacramento West (3812155)

Sources:
SCH92F0022 SCHNEIDER, T. & M. BARTLETT - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-06-25
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
### Map Index Number:
17173

### Key Quad:
Florin (3812144)

### Occurrence Number:
174

### Scientific Name:
*Agelaius tricolor*

### Common Name:
tricolored blackbird

### Listing Status:
- Federal: None
- State: None

### CNDDDB Element Ranks:
- Global: G2G3
- State: S1S2

### General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

### Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

### Last Date Observed:
1992-06-16

### Last Survey Date:
2014-04-19

### Presence:
Possibly Extirpated

### Location:
ALONG FRANKLIN HIGH RD, BETWEEN QUAIL RUN LN AND WHITELOCK PARKWAY, ABOUT 0.2 MILES 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 RUN 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.

### Threats:
POSSIBLE THREAT FROM GRAZING.

### 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.

### PLSS:
T06N, R05E, Sec. 10 (M) Accuracy: specific area Area (acres): 11

### UTM:
Zone-10 N4250542 E637792 Latitude/Longitude: 38.39249 / -121.42216 Elevation (feet): 25

### County Summary:
Sacramento Florin (3812144)

### Sources:
- HARV90F0001 HARVEY, D. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1990-05-29
- SCH92F0007 SCHNEIDER, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-06-16
- TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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<td>EO Index:</td>
<td>12053</td>
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<td>Occurrence Last Updated:</td>
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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
Federal: None  
State: None

**CNDBB Element Ranks:**  
Global: G2G3  
State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 2000-04-22  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Fluctuating

**Location:**  
"KNOX" COLONY SITE; ALONG BOTH SIDES OF KNOX ROAD, NORTH OF FLORIN ROAD, 7 MILES NNE OF ELK GROVE.

**Detailed Location:**  
MAPPED TO PROVIDED MAPS AND LOCATION DESCRIPTION OF "KNOX RD N OF FLORIN RD" & "ALONG EAST AND WEST SIDES OF KNOX RD."

**Ecological:**  
NESTING SUBSTRATE CONSISTS OF BLACKBERRIES ALONG A RESIDENTIAL ROAD; SURROUNDED BY PASTURELAND. CONSTRUCTION BEGAN SOMETIME BETWEEN 2008-2009.

**Threats:**  
POSSIBLY THREATENED BY DEVELOPMENT OF THE SURROUNDING AREA.

**General:**  

**PLSS:** T08N, R06E, Sec. 33 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 22

**UTM:** Zone-10 N4262470 E646776  
**Latitude/Longitude:** 38.49850 / -121.31683  
**Elevation (feet):** 75

**County Summary:**  
Sacramento  
Elk Grove (3812143), Carmichael (3812153)

**Sources:**
- COO97F0011: COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1997-06-XX  
- JOH90F0003: JOHNSON, D. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1990-05-20  
- MAN94F0006: MANOLIS, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23  
- SLO04R0001: SLOT, T. - SOUTH SACRAMENTO HABITAT CONSERVATION PLAN. APPENDIX A: SPECIES ANALYSIS TRICOLORED BLACKBIRD 2004-XX-XX  
- TRI14D0001: TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 17307
 EO Index: 12246
Key Quad: Carmichael (3812153)
 Element Code: ABPBXB0020
Occurrence Number: 182
 Occurrence Last Updated: 2015-04-22

Scientific Name: Agelaius tricolor
 Common Name: tricolored blackbird

Listing Status:
 Federal: None
 State: None

CNDDDB Element Ranks:
 Global: G2G3
 State: S1S2

General Habitat:
 HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat:
 REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 1989-06-04
 Last Survey Date: 2014-04-19
Owner/Manager: UNKNOWN
 Presence: Extirpated

Location:
 W OF FOLSOM-SOUTH CANAL, JUST S OF KILGORE RD & INTERNATIONAL DR INTXN, 0.5 MI NNE OF MATHER DR & ZINFANDEL DR INTXN.

Detailed Location:
 PROVIDED LOCATION DESCRIPTION FOR 1989 DETECTION WAS "W SIDE OF FOLSOM-SOUTH CANAL, S OF INTERSECTION OF KILGORE AND INTERNATIONAL RDS... GRAVEL CO. SITE." 2011 & 2014 SURVEYS CONDUCTED NEAR NW END OF FEATURE AS PART OF TRIENNIAL SURVEYS.

Ecological:
 HABITAT WAS COTTONWOOD-RIPARIAN, ENCLOSED WITHIN LEVEES. AERIAL PHOTOGRAPHY FROM 1998-2014 SHOWS THAT DEVELOPMENT BEGAN IN EARLY 2000'S CULIMINATING IN COMPLETE RESIDENTIAL DEVELOPMENT BY 2014.

Threats:
 1989: SITE IS UNDER AN IMMEDIATE THREAT DUE TO GRAVEL COMPANY ACTIVITY. DEVELOPMENT.

General:
 APPROXIMATELY 150 PAIRS OBSERVED; ADULTS SEEN CARRYING FOOD, COLONY SUCCESSFULLY FLEDGED YOUNG. NONE OBSERVED ON 28 MAR 2011 AND 19 APR 2014.

PLSS:
 T08N, R06E, Sec. 01 (M) Accuracy: nonspecific area
 UTM: Zone-10 N4271599 E650758 Latitude/Longitude: 38.58008 / -121.26921

County Summary:
 Sacramento Quad Summary:
 Carmichael (3812153)

Sources:
 JOH89F0005 JOHNSON, D. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR BREEDING COLONY SITE 1989-06-04
 TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Map Index Number:** 21578  
**EO Index:** 17765  
**Element Code:** ABPBXB0020  
**Occurrence Last Updated:** 1992-07-01

**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
- Federal: None  
- State: None

**CNNDDB Element Ranks:**  
- Global: G2G3  
- State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 1992-06-18  
**Occurrence Type:** Natural/Native occurrence  
**Presence:** Presumed Extant  
**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Location:**  
1.7 MI NE OF THE INTERSECTION OF I-5 & HWY 99, 6 MI NORTH OF SACRAMENTO.

**Detailed Location:**  
BIRDS NEST IN WILLOW TREES ALONG AN IRRIGATION DITCH; BLACKBERRY BUSHES GROW NEARBY.

**Ecological:**  
SURROUNDING HABITAT CONSISTS OF FARMLAND, MAINLY RICE FIELDS.

**Threats:**  
- General: 200 ADULTS OBSERVED NESTING.

**PLSS:** T10N, R04E, Sec. 35 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4282608 E629102  
**Latitude/Longitude:** 38.68267 / -121.51572  
**Elevation (feet):** 15

**County Summary:**  
Sacramento  
Taylor Monument (3812165)

**Sources:**  
SCH92F0010 SCHNEIDER, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-06-18
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<th>Map Index Number:</th>
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<td>EO Index:</td>
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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

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**CNDDB Element Ranks:**  
**Global:** G2G3  
**State:** S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

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**Location:**  
LAGUNA CREEK, NORTH & SOUTH OF SHELDON ROAD, ONE MI WEST 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.

**Threats:**  
LAND 0.5 MI SOUTH OF THIS SITE IS BEING DEVELOPED; RESIDENTIAL (1992).

**General:**  

**PLSS:**  
T07N, R05E, Sec. 28 (M)  
Accuracy: specific area  
Area (acres): 40

**UTM:**  
Zone-10 N4255389 E636471  
Latitude/Longitude: 38.43635 / -121.43634  
Elevation (feet): 20

**County Summary:**  
Sacramento  
Florin (3812144)

**Sources:**  
SCH92F0008 | SCHNEIDER, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-06-16  
SCH92F0009 | SCHNEIDER, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-06-18  
TRI14D0001 | TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Map Index Number:** 21808  
**Key Quad:** Elk Grove (3812143)  
**Occurrence Number:** 232  
**EO Index:** 4365  
**Element Code:** ABPBXB0020  
**Occurrence Last Updated:** 2015-04-06

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<th>Common Name:</th>
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<td>Listing Status:</td>
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<td>USFWS_BCC-Birds of Conservation Concern</td>
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**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

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**Location:**  
ALONG LAGUNA CREEK, JUST N AND S OF SHELDON RD, ABOUT 0.2 MI E OF WATERMAN RD, NE OF ELK GROVE.

**Detailed Location:**  
MAPPED TO PROVIDED COORDINATES AND LOCATION DESCRIPTION OF "LAGUNA CREEK AND SHELDON RD" & "INTERSECTION OF WATERMAN & SHELDON ROADS." DATA COLLECTED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME WAS "SHELDON ROAD AT WATERMAN #1 & #2."

**Ecological:**  

**Threats:**  
FORAGING HABITAT THREATENED BY RESIDENTIAL DEVELOPMENT.

**General:**  

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<th>PLSS:</th>
<th>T07N, R06E, Sec. 20 (M)</th>
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**County Summary:**  
Sacramento  
Elk Grove (3812143)

**SOURCES:**  
COO94F0005 COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-06-XX  
MAN94F0007 MANOLIS, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23  
ROS92F0001 ROSCOE, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-06-19  
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G2G3  
- State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

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<td>STRAWBERRY CREEK, JUST SOUTH OF CALVINE ROAD AND 0.5 MILE WEST OF ELK GROVE FLORIN ROAD, SOUTH OF SACRAMENTO.</td>
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**Ecological:**  
NESTING SUBSTRATE CONSISTS OF HIMILAYA BERRY BRAMBLES ON THE SOUTH BANK OF STRAWBERRY CREEK.

**Threats:**  
THREATENED BY PROPOSED DEVELOPMENT.

**General:**  
40 TRICOLORED'S OBSERVED NESTING WITH ABOUT 20 REDWINGED BLACKBIRDS; ADDITIONAL NESTS OBSERVED THAT APPEARED ABANDONED.

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<td>DAINS, V. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1991-05-22</td>
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<td>BUR94F0010</td>
<td>BURKE, C. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23</td>
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<td>COO94F0004</td>
<td>COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-06-XX</td>
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<td>TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX</td>
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**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 30620  
**EO Index:** 4368  
**Element Code:** ABPXB0020  
**Occurrence Last Updated:** 2015-04-08

**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G2G3  
**State:** S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 1996-05-19  
**Last Survey Date:** 2014-04-19

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
JUST W OF EAGLE NEST RD & LAGUNA CREEK INTERSECTION, 0.9 MI SSW OF FLORIN RD & EAGLE NEST RD INTERSECTION, E OF FLORIN.

**Detailed Location:**  
MAPPED TO PROVIDED LOCATION DESCRIPTION "LAGUNA CREEK DRAINAGE APPROX. 0.5 MI W OF EAGLES NEST RD." SEVERAL SURVEYS CONDUCTED AS PART OF TRIENNIAL STATEWIDE SURVEYS (UC DAVIS TCBB PORTAL), SITE NAME WAS "LAGUNA CREEK AT EAGLES NEST ROAD."

**Ecological:**  
NESTING SUBSTRATE CONSISTED OF BLACKBERRIES, TULES, AND WILLOWS; SURROUNDED BY GRASSLAND AND MOIST FIELDS PROVIDING FACTULATIVE WETLAND VEGETATION. FORAGING IN GRASSLANDS UP TO 2-3 MILES FROM COLONY.

**Threats:**

**General:**  

**PLSS:** T07N, R06E, Sec. 01 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 86

**UTM:** Zone-10 N4260900 E651251  
**Latitude/Longitude:** 38.48361 / -121.26587  
**Elevation (feet):** 90

**County Summary:**  
Sacramento  
Elk Grove (3812143)
Map Index Number: 30621
Key Quad: Elk Grove (3812143)
Occurrence Number: 299
Scientific Name: Agelaius tricolor
Common Name: tricolored blackbird
EO Index: 3755
Element Code: ABPBXB0020
Occurrence Last Updated: 2015-05-05
Listing Status: Federal: None
State: None
Rare Plant Rank: BLM_S-Sensitive
CNDDB Element Ranks: Global: G2G3
State: S1S2
Other Lists: CDFW_SSC-Species of Special Concern
IUCN_EN-Endangered
NABCI_RWL-Red Watch List
USFWS_BCC-Birds of Conservation Concern

General Habitat: HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 1999-05-11
Last Survey Date: 2014-04-19
Owner/Manager: UNKNOWN
Presence: Presumed Extant
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Good
Trend: Unknown

Location:
BOTH SIDES OF DILLARD RD, ABOUT 0.4 MI NNE OF HAGGIE RD & DAVIS RD INTERSECTION, 0.9 MI SE OF WILTON PO, E OF ELK GROVE.

Detailed Location:
MAPPED TO PROVIDED MAPS & LOCATION DESCRIPTIONS OF "S OF DILLARD RD BETWEEN DAVIS RD & THE CALIFORNIA TRACTION RR TO THE EAST" & "WILTON FIRE STATION." 1993-1994 DATA PRIMARILY FOR FIELDS S OF DILLARD RD. 1996-2014 DATA ADJ TO FIRE STATION.

Ecological:
NESTING SUBSTRATE CONSISTED OF BLACKBERRY THICKETS; SURROUNDED BY CATTLE PASTURE ASSOCIATED WITH A DAIRY OPERATION. 2 POSSIBLE COLONIES MAY BE MAPPED. SURVEYED IN 1997, HOWEVER, NO DETECTION DATA PROVIDED. FORAGING UP TO 3 MILES FROM SITE.

Threats:
DEVELOPMENT AND PROXIMITY OF THIS SITE TO AN ACTIVE DAIRY OPERATION MAY BE A POSSIBLE THREAT.

General:
~1,600 OBSERVED IN 1993. ~110 OBSERVED NESTING ION 23 APR 1994. ~1,000 BREEDING ADULTS OBSERVED ON 3 JUN 1996. ~350 BIRDS OBSERVED ON 11 MAY 1999; FEMALES INCUBATING. NONE OBSERVED ON 16 APR 2011 & 19 APR 2014 TRIENNIAL STATEWIDE.

PLSS: T06N, R07E, Sec. 06 (M) Accuracy: 1/5 mile Area (acres): 0
UTM: Zone-10 N4251567 E652141 Latitude/Longitude: 38.39939 / -121.25769 Elevation (feet): 75

County Summary: Elk Grove (3812143)

Sources:
BUR94F0013 BURKE, C. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23
COO97F0010 COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1997-06-XX
ROS96F0002 ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1996-06-03
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 30623
Key Quad: Elk Grove (3812143)
Occurrence Number: 300
EO Index: 4367
Element Code: ABPBXB0020
Occurrence Last Updated: 2015-04-07

Scientific Name: Agelaius tricolor
Common Name: tricolored blackbird

Listing Status: Federal: None
State: None

CNDDDB Element Ranks: Global: G2G3
State: S1S2

General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 2014-04-20
Last Survey Date: 2014-04-20
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
JUST NW OF CALVINE RD & BRADSHAW RD INTERSECTION, ~0.9 MI SE OF VINTAGE PARK DR & WATERMAN RD INTXN, NE OF ELK GROVE.

Detailed Location:
MAPPED TO PROVIDED COORDINATES. LARGE PORTION OF DATA COLLECTED AS PART OF TRIENNIAL STATEWIDE SURVEYS. DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; 2 COLONIES MAPPED, NAMED "CALVINE ROAD AT BRADSHAW ROAD" & "BRADSHAW CHRISTIAN."

Ecological:
NESTING SUBSTRATE CONSISTED OF BLACKBERRIES; SURROUNDED BY LIGHTLY GRAZED GRASSLAND. JUVENILES OBSERVED IN 1993-1994. OBSERVED FORAGING IN ADJACENT BASEBALL FIELDS, GRASSLANDS, AND WEEDY FIELDS IN 2014.

Threats:
General:

PLSS: T07N, R06E, Sec. 17 (M)
UTM: Zone-10 N4257848 E644786

Accuracy: 2/5 mile
Latitude/Longitude: 38.45719 / -121.34059
Elevation (feet): 60

Sacramento
Elk Grove (3812143)

Sources:
COO94F0008 COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-XX-XX
MAN94F0008 MANOLIS, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23
SLO04R0001 SLOAT, T. - SOUTH SACRAMENTO HABITAT CONSERVATION PLAN. APPENDIX A: SPECIES ANALYSIS TRICOLORED BLACKBIRD 2004-XX-XX
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
Map Index Number: 33742
Key Quad: Elk Grove (3812143)
Occurrence Number: 301

Scientific Name: *Agelaius tricolor*
Common Name: tricolored blackbird

Listing Status: Federal: None
State: None

CNDDB Element Ranks: Global: G2G3
State: S1S2

General Habitat: HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 1996-05-19
Last Survey Date: 2014-04-19
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
AREA ALONG GRANT LINE RD, BETWEEN BRADSHAW RD & WATERMAN RD, 1.5 MI NE OF INTERSECTION W/ HWY 99, ELK GROVE.

Detailed Location:
MAPIED TO PROVIDED MAPS AND LOCATION DESCRIPTION. 1999-2014 SURVEYS PART OF TRIENNIAL STATEWIDE SURVEYS, DATA IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAMES WERE "MOSHER ROAD" & "GRANT LINE ROAD AT BRADSHAW ROAD."

Ecological:
NESTING SUBSTRATE CONSISTS OF BLACKBERRIES; SURROUNDED BY PASTURELANDS, FIELDS, AND DAIRY FARM IN 1994. FORAGING OCCURRED ABOUT 2-3 MILES FROM COLONY.

Threats:
DEVELOPMENT.

General:

PLSS: T06N, R06E, Sec. 08 (M) Accuracy: nonspecific area
UTM: Zone-10 N4250801 E644795 Latitude/Longitude: 38.39371 / -121.34194 Elevation (feet): 50

County Summary: Elk Grove (3812143)

Sources:
COO92F0008 COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-05-XX
COO94F0003 COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-05-XX
MAN94F0009 MANOLIS, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23
SLO04R0001 SLOAT, T. - SOUTH SACRAMENTO HABITAT CONSERVATION PLAN. APPENDIX A: SPECIES ANALYSIS TRICOLORED BLACKBIRD 2004-XX-XX
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
Federal: None  
State: None

**CNDDB Element Ranks:**  
Global: G2G3  
State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

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**Location:**  
JUST WEST OF EAST LEVEE ROAD (NATOMAS DRAIN LEVEE ROAD), 0.2 MILE SOUTH OF THE SACRAMENTO COUNTY LINE, RIO LINDA.

**Detailed Location:**  
2000: BIRDS FOUND IN 5 SEPARATE BLACKBERRY CLUMPS.

**Ecological:**  
NESTING SUBSTRATE CONSISTS OF A BLACKBERRY HEDGE, WITH BIRDS FORAGING IN ADJACENT PASTURELANDS.

**Threats:**  
**General:**  
NESTING COLONY SITE IN 1993, 21 JANUARY & 3 FEBRUARY 1994: ~50 BIRDS OBS FORAGING IN ADJACENT PASTURES, BUT NONE WERE FOUND BY 22 APRIL 1994. 4 MAY 2000: 4000 OBS NESTING.

**PLSS:**  
T10N, R04E, Sec. 12 (M)  
Accuracy: nonspecific area  
Area (acres): 15

**UTM:**  
Zone-10 N4288237 E631108  
Latitude/Longitude: 38.73308 / -121.49159  
Elevation (feet): 25

**County Summary:**  
Sacramento  
Rio Linda (3812164)

**Sources:**  
DFG04U0002  

MAN94F0014  
MANOLIS, T. & C. BURKE - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-22
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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listed Status:**  
**Federal:** None  
**State:** None

**CNDDDB Element Ranks:**  
**Global:** G2G3  
**State:** S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 1994-04-23  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1994-04-23  
**Occurrence Rank:** None

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Possibly Extirpated  
**Location:** 1 MILE NE OF MATHER FIELD AND JUST SOUTH OF THE INTERSECTION OF INTERNATIONAL DRIVE AND ZINFANDEL DRIVE, RANCHO CORDOVA.

**Detailed Location:**  
1994: COLONY SITE WAS LOCATED IN A GRAVEL PIT (DREDGE TAILINGS).

**Ecological:**  
NESTING SUBSTRATE CONSISTED OF BLACKBERRIES. 2008 AERIAL PHOTO SHOWS THAT THIS AREA HAS BEEN COMPLETELY DEVELOPED.

**Threats:**  
**General:** BETWEEN 8,000-10,000 ADULTS OBSERVED NESTING ON 23 APRIL 1994.

**PLSS:**  
T09N, R06E, Sec. 35 (M)  
Accuracy: 1/5 mile

**UTM:**  
Zone-10 N4272116 E649145  
Latitude/Longitude: 38.58501 / -121.28761

**County Summary:**  
Sacramento  
Carmichael (3812153)

**Accuracy:** 1/5 mile  
**Area (acres):** 0  
**Elevation (feet):** 100

**Sources:**  
MAN94F0002 MANOLIS, T. & C. BURKE - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23
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**Scientific Name:** Agelaius tricolor  
**Common Name:** tricolored blackbird

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G2G3  
- State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 2000-04-22  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2014-04-19  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:** MORRISON CREEK, JUST E OF INTERSECTION W/ BRADSHAW RD, 0.3 MI SSE OF JACKSON RD & BRADSHAW RD INTXN, WALSH STATION.

**Detailed Location:**  
1994 LOCATION DESCRIPTION WAS "MORRISON CREEK DRAINAGE JUST SOUTH OF CREEK AND EAST OF BRADSHAW ROAD." 2000 LOCATION WAS "SE CORNER OF MORRISON CREEK AND BRADSHAW RD." DATA STORED IN UC DAVIS TRBL PORTAL, SITE NAME "MORRISON CREEK."

**Ecological:**  
NESTING SUBSTRATE CONSISTED OF BLACKBERRIES; COLONY OCCUPIES ~5 ACRES. UC DAVIS PORTAL NOTES THAT AREA IS TOTALLY URBANIZED, AERIAL IMAGERY FROM 2014 SHOWS CREEK IS STILL PRESENT AND SURROUNDED BY VEGETATION.

**Threats:**  
General: APPROXIMATELY 1,500-2,000 BIRDS OBSERVED ON 23 APRIL 1994; PROBABLE NESTING COLONY. APPROXIMATELY 4,200 BIRDS OBSERVED NESTING 22 APR 2000. NONE OBSERVED ON 15 APR 2011 AND 19 APR 2014 DURING TRIENNIAL STATEWIDE SURVEYS.

**PLSS:** T08N, R06E, Sec. 28 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 24

**UTM:** Zone-10 N4265300 E645154  
**Latitude/Longitude:** 38.52427 / -121.33484  
**Elevation (feet):** 60

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
MAN94F0003 MANOLIS, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23  
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
### General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

### Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

### Occurrence Details:

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### Location:
ALONG ELDER CREEK, ABOUT 0.4 MI WNW OF ELDER CREEK RD & EXCELSIOR RD INTERSECTION, 3 MI SE OF PERKINS POST OFFICE.

### Detailed Location:
MAPPED GENERALLY TO PROVIDED MAPS AND COORDINATES. FEATURE ENCOMPASSES 3 POSSIBLE COLONIES FROM UC DAVIS TRBL PORTAL; SITE NAMES WERE "ELDER CREEK," "ELDER CREEK RD #4," & "EXCELSIOR ROAD AT ELDER CREEK ROAD."

### Ecological:
NESTING SUBSTRATE CONSISTED OF MAINLY BLACKBERRIES AND WILD ROSE. HABITAT ALSO COMPOSED OF BULRUSH AND CATTAIL SURROUNDED BY HORSE PASTURE AND FALLOW FIELDS. TRBL COLONIES DESCRIBED AS OCCURRING IN "SAME FIELD" ADJACENT TO ELDER CREEK.

### Threats:
General:
-6,000 OBS IN 1992-94; BREEDING. 400 OBS NESTING IN 1996. 0 OBS IN 1997-98. 20-52 OBS IN 1999-2000. 700-2,500 OBS IN 2005; FLEDGLINGS OBS. 100 OBS IN 2008; INCUBATION INFERRED. 0 IN 2011. 800-1,500 OBS IN 2014; FEEDING NESTLINGS. 0 IN 2015.

### PLSS:
T08N, R06E, Sec. 27 (M)

### UTM:
Zone-10 N4264138 E647862

### Sources:
- COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1997-06-XX
- MANOLIS, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23
- SLOAT, T. - SOUTH SACRAMENTO HABITAT CONSERVATION PLAN. APPENDIX A: SPECIES ANALYSIS TRICOLORED BLACKBIRD 2004-XX-XX
- TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number: 30628**

**EO Index: 4281**

**Element Code: ABPBXB0020**

**Occurrence Last Updated: 2015-04-30**

---

**Scientific Name:** *Agelaius tricolor*

**Common Name:** tricolored blackbird

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G2G3
- **State:** S1S2

**General Habitat:**
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

---

**Last Date Observed:** 1994-06-XX

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1997-XX-XX

**Occurrence Rank:** Excellent

**Owner/Manager:** UNKNOWN

**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
*BRADSHAW/ELDER CREEK* COLONY SITE, WEST OF BRADSHAW ROAD, BETWEEN ELDER CREEK ROAD AND FLORIN ROAD, SW OF MATHER AFB.

**Detailed Location:**
COLONY OCCUPIES 30+ ACRES. BIRDS FORAGE IN OPEN FIELDS UP TO 2 MILES RADIUS FROM THE COLONY.

**Ecological:**
NESTING SUBSTRATE CONSISTED OF BLACKBERRIES AND WILD ROSE SURROUNDED BY GRASSLAND.

**Threats:**
GENERAL:
ABOUT 5,500 ADULTS OBSERVED ON 24 APR 1993. COLONY OF 5,000-10,000 OBS ON 23 APR 1994; PRESUMED NESTING. 4,500 ADULTS OBS ON 24 APR 1994. NONE OBSERVED IN 1997-1999. 2,500 OBSERVED ON 16 APR 2011, NESTING NOT REPORTED.

**PLSS:** T08N, R06E, Sec. 32 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 66

**UTM:** Zone-10 N4263057 E644723  
**Latitude/Longitude:** 38.50413 / -121.34024  
**Elevation (feet):** 55

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**
- CO097F0012 COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1997-06-XX
- MAN94F0005 MANOLIS, T. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-04-23
- SLO04R0001 SLOAT, T. - SOUTH SACRAMENTO HABITAT CONSERVATION PLAN. APPENDIX A: SPECIES ANALYSIS TRICOLORED BLACKBIRD 2004-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G2G3  
- State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

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<th>Natural/Native occurrence</th>
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<td>Presumed Extant</td>
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**Location:**  
JUST WEST OF THE INTERSECTION OF WILTON ROAD AND DILLARD ROAD, 5 MILES EAST OF ELK GROVE.

**Detailed Location:**  
NESTING SUBSTRATE IS BLACKBERRIES; SURROUNDING HABITAT CONSISTS OF AGRICULTURE, GRAZED PASTURE, AND RURAL RESIDENTIAL.

**Threats:**  
THREATENED BY DEVELOPMENT.

**General:**  
ESTIMATED 1000 ADULTS OBSERVED NESTING ON 3 JUNE 1996.

**PLSS:** T06N, R07E, Sec. 06 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4251758 E652042  
**Latitude/Longitude:** 38.40113 / -121.25879  
**Elevation (feet):** 80

**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Sources:**  
ROS96F0002  
ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1996-06-03
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>321</td>
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<td>Occurrence Last Updated:</td>
<td>1996-06-19</td>
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**Scientific Name:** *Agelaius tricolor*

**Common Name:** tricolored blackbird

**Listing Status:**
- Federal: None
- State: None

**CNDDDB Element Ranks:**
- Global: G2G3
- State: S1S2

**General Habitat:**
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 1996-06-10

**Last Survey Date:** 1996-06-10

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
ALONG WALMORT ROAD, 0.6 MILE EAST OF DILLARD ROAD, SACRAMENTO.

**Detailed Location:**
HABITAT CONSISTS OF BLACKBERRY BRAMBLES GROWING ALONG A ROADSIDE DITCH; SURROUNDING AREA CONSISTS OF RURAL RESIDENTIAL/AGRICULTURE.

**Threats:**
THREATENED BY DEVELOPMENT.

**General:**
ESTIMATED 1500 ADULTS OBSERVED NESTING ON 10 JUNE 1996.

**PLSS:** T06N, R06E, Sec. 11 (M)

**Accuracy:** specific area

**UTM:** Zone-10 N4249399 E650261

**Latitude/Longitude:** 38.38018 / -121.27968

**County Summary:** Elk Grove

**Sources:**
- ROS96F0003 ROSCOE, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1996-06-10
### Map Index Number: 37299
### Key Quad: Sloughhouse (3812142)
### Occurrence Number: 342
### EO Index: 32301
### Element Code: ABPBXB0020
### Occurrence Last Updated: 2015-05-05

#### Scientific Name: Agelaius tricolor
#### Common Name: tricolored blackbird

##### Listing Status:
- **Federal:** None
- **State:** None

##### CNDDDB Element Ranks:
- **Global:** G2G3
- **State:** S1S2

### General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

### Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

#### Last Date Observed: 1992-05-XX
#### Last Survey Date: 2014-04-19
#### Owner/Manager: UNKNOWN
#### Presence: Presumed Extant

### Location:
~0.3 MI NW OF GREEN RD & SUNFLOWER RD INTERSECTION, 1.4 MI NNE OF DILLARD RD & WILTON RD INTERSECTION, N OF DILLARD.

#### Detailed Location:
MAPPED TO PROVIDED MAP AND LOCATION DESCRIPTION OF "0.07 MILES N OF GREEN RD, 0.3 MILES W OF SUNFLOWER RD." SMALL POND VISIBLE IN 1993-2014 AERIAL PHOTOGRAPHS. DATA COLLECTED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL, SITE NAME "GREEN RD."

#### Ecological:
NESTING SUBSTRATE CONSISTED OF CATTAILS; SURROUNDED BY LIGHT RESIDENTIAL HOUSING AND GRASSLAND. NOT MUCH FORAGING HABITAT IN THE NEAR VICINITY.

#### Threats:
- **General:**

#### PLSS:
- T07N, R07E, Sec. 31 (M)
#### UTM:
- Zone-10 N4253978 E652812

#### Accuracy:
- 1/10 mile
#### Area (acres):
- 0
#### Latitude/Longitude:
- 38.42099 / -121.24949
#### Elevation (feet):
- 75

### Sources:
- COO92F0006  COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-05-XX
- SLO04R0001  SLOAT, T. - SOUTH SACRAMENTO HABITAT CONSERVATION PLAN. APPENDIX A: SPECIES ANALYSIS TRICOLORED BLACKBIRD 2004-XX-XX
- TRI14D0001  TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 37329
Key Quad: Elk Grove (3812143)
Occurrence Number: 347
EO Index: 32331
Element Code: ABPBX00020
Occurrence Last Updated: 2015-04-07

Scientific Name: Agelaius tricolor
Common Name: tricolored blackbird

Listing Status:
Federal: None
State: None

CNDDDB Element Ranks:
Global: G2G3
State: S1S2

General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 1999-05-11
Last Survey Date: 2008-04-28
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
VICINITY OF ELDER CREEK & FLORIN RD INTERSECTION, ABOUT 0.3 MI ESE OF HEDGE AVE, 0.9 MI E OF FLORIN POST OFFICE.

Detailed Location:
MAPPED TO PROVIDED DESCRIPTIONS OF "E SIDE OF CENTRAL CA TRACTION RR, 0.07 MI S OF FLORIN RD," "0.2 MI E OF HEDGE AVE, 200M ALONG RR TRACKS," & "ALONG CREED DRAINAGE JUST E OF RR TRACKS ACROSS FLORIN RD." 2 POTENTIAL COLONIES MAPPED.

Ecological:
NESTING SUBSTRATE CONSISTS OF BLACKBERRIES; SURROUNDED BY GRASSLAND. TO THE SOUTH AND EAST, UC DAVIS TRICOLORED BLACKBIRD PORTAL SITE NAMES WERE "FLORIN ROAD RAILROAD TRACKS" AND "FLORIN ROAD AT FLORENCIA LANE."

Threats:
General:

PLSS: T07N, R06E, Sec. 06 (M)  Accuracy: 1/5 mile  Area (acres): 0
UTM: Zone-10 N4262050 E643324  Latitude/Longitude: 38.49529 / -121.35649  Elevation (feet): 50

County Summary: Sacramento  Quad Summary: Elk Grove (3812143)

Sources:
COO93F0014  COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1993-06-XX
TRI14D0001  TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

**Map Index Number:** 37499  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 349  
**EO Index:** 32501  
**Element Code:** ABPBXB0020  
**Occurrence Last Updated:** 2015-04-30

**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G2G3  
**State:** S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 2012-06-06  
**Last Survey Date:** 2014-04-18  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
ALONG ELDER CREEK, JUST NE OF EXCELSIOR RD & JACKSON RD INTERSECTION, 3 MI SE OF PERKINS PO, 4.4 MI W OF BLODGETT DAM.

**Detailed Location:**  
MAPPED TO PROVIDED COORDINATES AND LOCATION DESCRIPTION OF "NE CORNER OF JACKSON HWY AND EXCELSIOR RD, ALONG ELDER CREEK." 2010-2014 SURVEY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL SITE NAME WAS "EXCELSIOR AND JACKSON RD."

**Ecological:**  
NESTING SUBSTRATE CONSISTED OF BLACKBERRIES SURROUNDED BY LIGHTLY-GRAZED GRASSLAND. HABITAT ADDITIONALLY COMPOSED OF WILD ROSE. BIRDS FORAGE IN GRASSLAND UP TO 1 MILE FROM THE COLONY SITE.

**Threats:**  
**General:**  
15 BREEDING ADULTS OBSERVED APR-JUN 1994; 2,750 NESTING ON 23 APR. 1,200 BIRDS OBS FORAGING ON 7 JUN 2010, FLEDGLINGS OUT OF NEST. 0 OBS APR 2011. 500 BIRDS OBS ON 6 JUN 2012; FEEDING YOUNG. 75 OBS FORAGING ON 18 APR 2014.

**PLSS:** T08N, R06E, Sec. 26 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 16

**UTM:** Zone-10 N4264835 E648575  
**Latitude/Longitude:** 38.51951 / -121.29571  
**Elevation (feet):** 85

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
COO94F0007  
COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1994-06-XX

DFG04U0002  

TRI14D0001  
TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

- **Map Index Number:** 37738
- **EO Index:** 32746
- **Key Quad:** Elk Grove (3812143)
- **Element Code:** ABPBXB0020
- **Occurrence Number:** 351
- **Occurrence Last Updated:** 2004-05-13

**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

- **Listing Status:** Federal: None  
  State: None
- **Rare Plant Rank:** BLM_S-Sensitive
- **CNDDB Element Ranks:**  
  Global: G2G3  
  State: S1S2
- **Other Lists:**  
  BLM_S-Sensitive  
  CDFW_SSC-Species of Special Concern  
  IUCN_EN-Endangered  
  NABCI_RWL-Red Watch List  
  USFWS_BCC-Birds of Conservation Concern

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

- **Last Date Observed:** 1996-05-19
- **Last Survey Date:** 1996-05-19
- **Owner/Manager:** PVT
- **Presence:** Presumed Extant

**Location:**  
ELK GROVE CREEK, ON THE SOUTH SIDE OF GRANTLINE ROAD, SE OF ELK GROVE.

**Detailed Location:**  
BIRDS FORAGE IN PASTURE/GRASSLAND UP TO 2 MILES RADIUS FROM THE COLONY SITE.

**Ecological:**  
NESTING SUBSTRATE CONSISTS OF BLACKBERRIES; SURROUNDED BY PASTURE.

**Threats:**

**General:**  
"GRANTLINE 2" COLONY SITE. 1500 ADULTS OBSERVED NESTING DURING MAY 1992; NUMEROUS FLEDGLINGS PRESENT. 2000 OBSERVED NESTING BY MANOLIS 19 MAY 1996.

- **PLSS:** T06N, R06E, Sec. 05 (M)  
- **UTM:** Zone-10 N4250894 E645218  
- **County Summary:** Elk Grove (3812143)

**Accuracy:** specific area  
**Latitude/Longitude:** 38.39448 / -121.33709  
**Area (acres):** 13  
**Elevation (feet):** 50

**Sources:**

- CO092F0008  
  COOK, L. - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1992-05-XX
- DFG04U0002  
Map Index Number: 95995
EO Index: 52985
Key Quad: Carmichael (3812153)
Element Code: ABPBXB0020
Occurrence Number: 390
Occurrence Last Updated: 2015-04-29

Scientific Name: *Agelaius tricolor*
Common Name: tricolored blackbird

Listing Status: Federal: None
Rare Plant Rank: BLM_S-Sensitive
State: None
Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks: Global: G2G3
IUCN_EN-Endangered
State: S1S2
NABCI_RWL-Red Watch List
USFWS_BCC-Birds of Conservation Concern

General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 1991-06-10
Last Survey Date: 2015-04-17
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Unknown
Trend: Unknown
Presence: Presumed Extant

Location:
~1.2 MI SE OF BRADSHAW RD & KIEFER BLVD INTERSECTION, 1.4 MI NW OF EXCELSIOR RD & JACKSON RD INTXN, WALSH STATION.

Detailed Location:

Ecological:
HABITAT CONSISTED OF A CATTAILE MARSH ALONG MATHER DRAIN; SURROUNDED BY GRAZED ANNUAL GRASSLAND. 2014-15 COLONY LOCATION WAS A LARGE SHALLOW POND. LAND TO THE SOUTH USED FOR FORAGING. BIRDS ENTERING COLONY FROM THE EAST.

Threats:
THREATENED BY AGGREGATE MINING.

General:
FLOCK OF 300 OBSERVED THREE TIMES IN APR 1991; POSSIBLY NESTING. BETWEEN 500-2,000 BIRDS OBSERVED ON 20 & 24 MAY AND 4 JUN 2014; PREDOMINANTLY FORAGING. NONE OBSERVED ON 17 APR 2015; ANECDOTALY PRESENT IN 2015, NO NESTING INFORMATION.

PLSS: T08N, R06E, Sec. 22 (M) Accuracy: 3/5 mile Area (acres): 0
UTM: Zone-10 N4266366 E646830 Latitude/Longitude: 38.53359 / -121.31539 Elevation (feet): 70

County Summary: Quad Summary:
Sacramento Carmichael (3812153)

Sources:
ADA91F0015 ADAMS, B. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR (NESTING COLONY) 1991-06-10
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
Scientific Name: Agelaius tricolor
Common Name: tricolored blackbird

Listing Status:
Federal: None
State: None

Rare Plant Rank:

Other Lists:
BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_EN-Endangered
NABCI_RWL-Red Watch List
USFWS_BCC-Birds of Conservation Concern

General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 2005-06-30
Last Survey Date: 2014-04-20
Owner/Manager: DFG-YOLO BYPASS WA
Presence: Presumed Extant

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.

Threats:
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.

PLSS: T07N, R03E, Sec. 03 (M)
Accuracy: 2/5 mile
Area (acres): 0

UTM: Zone-10 N4260092 E619268
Latitude/Longitude: 38.48119 / -121.63259
Elevation (feet): 15

County Summary: Yolo
Quad Summary: Clarksburg (3812145), Saxon (3812146)

Sources:
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>Common Name:</td>
<td>tricolored blackbird</td>
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<tr>
<td>Listing Status:</td>
<td>Federal: None, State: None</td>
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<td>CNNDDB Element Ranks:</td>
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<td>General Habitat:</td>
<td>HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY &amp; VICINITY. LARGELY ENDEMIC TO CALIFORNIA.</td>
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<td>Location:</td>
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<td>Ecological:</td>
<td>BLACKBERRY THICKET AT INTERFACE OF BORROW CHANNEL, UPLANDS, BULRUSH MARSH, AND LAKE.</td>
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<tr>
<td>Threats:</td>
<td>CATTLE GRAZING.</td>
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<td>General:</td>
<td>ABOUT 50-75 BIRDS OBSERVED ON 16 MAY 1989; COLONY SUCCESSFULLY NESTED, INDICATED BY OBSERVATION OF FLEDGED YOUNG. NONE DETECTED ON 20 APR 2014.</td>
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<td>Area (acres):</td>
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<tr>
<td>Elevation (feet):</td>
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<td>TRI14D0001 - TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX</td>
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**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G2G3  
- State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMERIOUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

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<td>PVT</td>
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<td>Presence:</td>
<td>Presumed Extant</td>
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**Location:**  
ABOUT 0.6 MI SSW OF GRANT LINE RD & BOND RD INTERSECTION, 1.5 MI NE OF GRANT LINE RD AT BRADSHAW RD, E OF FALLBROOK.

**Detailed Location:**  
MAPPED GENERALLY TO PROVIDED COORDINATES & LOCATION DESCRIPTION OF "SE OF GRANT LINE ROAD, APPROX. 0.5 MI S OF INTERSECTION OF BOND ROAD." COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL, SITE NAME "GRANT LINE ROAD AT BOND ROAD."

**Ecological:**  
PRIMARY SUBSTRATE REPORTED AS HIMALAYAN BLACKBERRY. PASTURE LAND, CULTIVATED FIELDS WITH BLACKBERRY HEDGES. 2011 & 2014 SURVEYS PART OF TRIENNIAL STATEWIDE SURVEYS.

**Threats:**  
SEVERAL HUNDRED OBSERVED ON 20 MAY 1989; ADULTS OBSERVED CARRYING FOOD TO COLONY, UNKNOWN IF COLONY FLEDGED YOUNG. ABOUT 4,000 OBSERVED ON 1 JUN 1992; POSSIBLE COLONY, NESTING NOT CONFIRMED. NONE OBSERVED ON 16 APR 2011 & 19 APR 2014.

**PLSS:** T07N, R06E, Sec. 34 (M)  
**Accuracy:** 2/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N42S3055 E647371  
**Latitude/Longitude:** 38.41359 / -121.31199  
**Elevation (feet):** 75

**County Summary:**  
Elk Grove (3812143)

**Sources:**  
- TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
Map Index Number: 95847
Key Quad: Elk Grove (3812143)
Occurrence Number: 482
Scientific Name: Agelaius tricolor
Common Name: tricolored blackbird
Listing Status: Federal: None
State: None
CNDDB Element Ranks: Global: G2G3
State: S1S2
General Habitat: HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.
Micro Habitat: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.
Last Date Observed: 1990-05-12
Last Survey Date: 2011-04-16
Owner/Manager: UNKNOWN
Presence: Possibly Extirpated
Location: JUST N OF CALVINE RD & BADER RD INTERSECTION, 0.5 MI W OF VINEYARD RD & CAPRILLI DR INTERSECTION, NE OF ELK GROVE.
Detailed Location: MAPPED TO PROVIDED LOCATION DESCRIPTION OF "CALVINE ROAD JUST NORTH OF INTERSECTION OF BADGER ROAD." 2011 SURVEY PART OF TRIENNIAL STATEWIDE SURVEYS, DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL, SITE NAME "CALVINE RD AT BADER RD."
Ecological: NESTING SUBSTRATE IN 1990 WAS BLACKBERRY THICKETS ADJACENT TO PASTURELAND. COLONY SIZE ABOUT 1-2 ACRES. AERIAL IMAGERY SHOWS THAT DEVELOPMENT STARTED IN EARLY 2000'S. MAJORITY OF AREA IS DEVELOPED. SMALL PATCHES OF GRASSLAND (PARK) REMAINS.
Threats: DEVELOPMENT.
General: 80-100 PAIRS OBSERVED ON 12 MAY 1990; ADULTS SEEN CARRYING FOOD TO EITHER NESTLINGS OR FLEDGLINGS (NOT CONFIRMED WHICH). NONE OBSERVED ON 16 APR 2011.
PLSS: T07N, R06E, Sec. 16 (M)
Accuracy: 1/5 mile
Area (acres): 0
UTM: Zone-10 N4257682 E646107
Latitude/Longitude: 38.45549 / -121.32549
Elevation (feet): 65
County Summary: Elk Grove (3812143)
Sources:
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
### Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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**Scientific Name:** *Agelaius tricolor*

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G2G3
- **State:** S1S2

**Science Name:**
- **Common Name:** Tricolored Blackbird

**General Habitat:**
Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.

**Micro Habitat:**
Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.

**Last Date Observed:** 1996-04-20

**Last Survey Date:** 2014-05-20

**Owner/Manager:** Unknown, PVT

**Presence:** Presumed Extant

**Location:**
Vicinity of Exelsior Rd & Florin Rd intersection, 1.5 mi S of Hwy 16 & Exelsior Rd intersection, 4.2 mi E of Florin Po.

**Detailed Location:**
Mapped to provided coordinates and location descriptions of "Junction of Florin Rd & Exelsior Rd, SE Corner" & "N along Florin Rd, E of Exelsior Road." Detections were either personal observations or part of triennial statewide surveys.

**Ecological:**
Primary substrate described as cattails. Data stored in UC Davis Tricolored Blackbird Portal; site names were Florin Road at Exelsior Road # 1 & # 2. Two pontential colonies mapped.

**Threats:**
About 2,500 observed in 1995; nesting unconfirmed. About 265 detected in 1996; 10-20 nesting. About 1,000 observed in 1997; not nesting. None observed in 2011 and 2014.

**PLSS:**
- **T08N, R06E, Sec. 35 (M)**

**UTM:**
- Zone-10 N4262291 E648614

**County Summary:**
Elk Grove (3812143)

**Sources:**
- DFG04U0002 - California Department of Fish & Game - Tricolored Blackbird Breeding Observations 1980-2000, BIOS DS20. 2004-XX-XX
- TRI14D0001 - Tricolored Blackbird Portal - ICE (University of California, Davis) - 1907-2014 Tricolored Blackbird Records from UC Davis Tricolored Blackbird Portal, Information Center for the Environment (ICE) 2014-XX-XX
**Occurrence Report**
*California Department of Fish and Wildlife*
*California Natural Diversity Database*

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<td>Other Lists:</td>
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<td>Micro Habitat:</td>
<td>REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, &amp; FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.</td>
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**Location:**
ABOUT 0.3 MI N OF WALMORT RD & DAVIS RD INTERSECTION, 1 MI S OF DILLARD RD & DAVIS RD INTERSECTION, E OF ELK GROVE.

**Detailed Location:**
MAPPED TO PROVIDED COORDINATES FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL FOR "WALMORT ROAD AT DAVIS ROAD" SITE. SITE ADDITIONALLY DESCRIBED AS "N FORK OF BADGER CREEK WHERE IT CROSSES DAVIS ROAD, JUST N OF WALMORT RD."

**Ecological:**
HIMALAYAN BLACKBERRY THICKETS AND CATTAILS ALONG FENCE ROADS, CREEK, AND DITCH MARGINS. PASTURELANDS AND LOW DENSITY RESIDENTIAL AREAS ADJACENT TO SITE. 1990 COLONY SIZE ABOUT 1-2 ACRES.

**Threats:**
**General:**
ABOUT 25-50 PAIRS OBSERVED ON 28 MAY 1990; ADULTS SEEN FEEDING RECENTLY FLEDGED YOUNG AND CARRYING FOOD INTO BLACKBERRY THICKETS. NONE OBSERVED ON 16 APR 2011 AND 19 APR 2014 DURING TRIENNIAL STATEWIDE SURVEYS.

**PLSS:**
T06N, R06E, Sec. 12 (M)  Accuracy: 80 meters  Area (acres): 0

**UTM:**
Zone-10 N4249887 E651928  Latitude/Longitude: 38.38429/-121.26049  Elevation (feet): 75

**County Summary:**
Sacramento  Elk Grove (3812143)

**Sources:**
- TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Agelaius tricolor**

**tricolored blackbird**

**Map Index Number:** 95855

**Key Quad:** Elk Grove (3812143)

**Occurrence Number:** 485

**EO Index:** 96995

**Element Code:** ABPBXB0020

**Occurrence Last Updated:** 2015-04-09

**Scientific Name:** *Agelaius tricolor*

**Common Name:** tricolored blackbird

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G2G3
- **State:** S1S2

**General Habitat:**

HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**

REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 2014-06-12

**Last Survey Date:** 2014-06-12

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**

ALONG FLORIN RD, ABOUT 0.1 MI ESE OF COE LN INTERSECTION, 0.7 MI E OF EXCELSIOR RD INTERSECTION, 3.3 MI E OF FLORIN PO.

**Detailed Location:**

DATA COLLECTED AS PART OF TRIENNIAL STATEWIDE SURVEYS & SUBSEQUENT PERSONAL OBSERVATIONS, STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME “FLORIN ROAD AT COE LANE.” S SIDE OF FLORIN RD, JUST E OF COE LANE.

**Ecological:**

NESTING SUBSTRATE WAS HIMALAYAN BLACKBERRY AND CATTAILS, WATER PRESENT. ABOUT 400 OBSERVED FORAGING IN NEARBY GRASSLANDS ON 20 APR 2014. BLACKBERRY THICKETS VISIBLE IN GOOGLEMAPS STREET VIEW.

**Threats:**

**General:**

- ~200 OBSERVED IN 2008; COLONY WAS QUIET & INCUBATION INFERRED. 0 OBSERVED IN 2011. BETWEEN 700-4,500 BIRDS OBS FROM 15 MAY-10 JUN 2014, ~200 OBS 11-12 JUN 2014; BIRDS OBS FEEDING YOUNG, CARRYING FOOD, EGGS HATCHING, SINGING, & BATHING.

**PLSS:** T07N, R06E, Sec. 03 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4262176 E647194  
**Latitude/Longitude:** 38.49579 / -121.31209  
**Elevation (feet):** 80

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**

TR114D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
Federal: None  
State: None

**CNDDB Element Ranks:**  
Global: G2G3  
State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 1934-06-04  
**Last Survey Date:** 1934-06-04  
**Owner/Manager:** DFG-YOLO BYPASS WA  
**Presence:** Possibly Extirpated  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** None  
**Trend:** Unknown

**Location:**  
ABOUT 1.9 MI W OF I-80 & BUSSINESS 80 FWY INTERSECTION, 7 MI E OF DAVIS, YOLO BYPASS WILDLIFE AREA.

**Detailed Location:**  
MAPPED GENERALLY AS BEST GUESS TO PROVIDED LOCATION DESCRIPTION OF "SIX MILES WEST OF SACRAMENTO." EXACT LOCATION UNKNOWN. MAPPED ABOUT 6 MILES W OF DOWNTOWN SACRAMENTO.

**Ecological:**  
HABITAT COMPOSED OF CATTAIL MARSH AND THISTLES/MUSTARD ALONG LEVEE.

**Threats:**  
**General:**  

**PLSS:** T08N, R03E, Sec. 01 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4270435 E622129  
**Latitude/Longitude:** 38.57399 / -121.59799  
**Elevation (feet):** 10

**County Summary:**  
Yolo

| Quad Summary: | Sacramento West (3812155) |

**Sources:**

- TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<th>Common Name: tricolored blackbird</th>
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**General Habitat:**
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 1933-06-01

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2014-04-20

**Occurrence Rank:** None

**Presence:** Possibly Extirpated

**Trend:** Unknown

**Location:**
ABOUT 1.6 MI SW OF JEFFERSON BLVD & GREGORY AVE INTERSECTION, ADJACENT TO DEEP WATER SHIPPING CHANNEL, NW OF RIVerview.

**Detailed Location:**
MAPPED GENERALLY TO PROVIDED 1933 LOCATION DESCRIPTION OF "6 MI. SW SACRAMENTO." MEASUREMENT TAKEN FROM DOWNTOWN SACRAMENTO. 2005-2014 DATA PART OF TRIENNIAL STATEWIDE SURVEYS, PART OF UC DAVIS TRICOLORED BLACKBIRD PORTAL.

**Ecological:**
1933 HABITAT GENERALLY DESCRIBED AS CATTAIL MARSH. 2005-2014 HABITAT DESCRIBED AS BULL THISTLE. SITE NAME IN PORTAL WAS "PORT OF SACRAMENTO #3" & "SOUTHWEST SACRAMENTO." EXACT LOCATION OF 1933 COLONY UNKNOWN. 2 POSSIBLE COLONIES MAPPED.

**Threats:**
General:

**PLSS:** T08N, R04E, Sec. 30 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0  

**UTM:** Zone-10 N4264148 E623995  
**Latitude/Longitude:** 38.51709 / -121.57769  
**Elevation (feet):** 10  

**County Summary:**  
Yolo  
Sacramento West (3812155)

**Sources:**


TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
### Scientific Name: *Agelaius tricolor*  
### Common Name: tricolored blackbird

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<td>USFWS_BCC-Birds of Conservation Concern</td>
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### General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

### Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

### Last Date Observed: 1998-05-18  
### Occurrence Type: Natural/Native occurrence

### Owner/Manager: UNKNOWN  
### Presence: Presumed Extant

### Location:
GENERAL AREA BETWEEN DRY CREEK RD AND PATROL ROAD, S OF ASCOT AVE, W OF MCCLELLAN AIR FORCE BASE, SE OF RIO LINDA.

### Detailed Location:
MAPPED GENERALLY TO PROVIDED COORDINATE AND POSSIBLE SUITABLE HABITAT BASED ON 1993-2014 AERIAL IMAGERY (GOOGLEEARTH). COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "MCCLELLAN AFB."

### Ecological:
1998 HABITAT DESCRIBED AS SMALL TULE MARSH. TRICOLORED BLACKBIRD PORTAL DESCRIBES HABITAT AS BULRUSH OR TULE. AERIAL IMAGERY SHOWS THAT SURROUNDING AREA HAS BEEN SUBSTANTIALLY DEVELOPED. IMPACT ON BIRDS NOT DETERMINED.

### Threats:

#### General:
BREEDING COLONY OF A FEW HUNDRED OBSERVED ON 18 MAY 1998 FLYING IN AND OUT OF SITE. OBSERVED ON 20 APR 2014 DURING STATEWIDE SURVEY; SITE OBSERVED FOR ABOUT 17 MINUTES.

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### County Summary: Sacramento  
### Quad Summary: Rio Linda (3812164)

### Sources:
- TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1997-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
Map Index Number: 95971
Key Quad: Carmichael (3812153)
Occurrence Number: 499
EO Index: 97125
Element Code: ABPBXB0020
Occurrence Last Updated: 2015-04-23

Scientific Name: *Agelaius tricolor*
Common Name: tricolored blackbird

Listing Status:
Federal: None
State: None

Rare Plant Rank:
BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_EN-Endangered
NABCI_RWL-Red Watch List
USFWS_BCC-Birds of Conservation Concern

CNDDB Element Ranks:
Global: G2G3
State: S1S2

General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Last Date Observed: 2015-04-18
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2015-04-18
Occurrence Rank: Unknown

Owner/Manager: PVT
Trend: Unknown

Presence: Presumed Extant

Location:
S SIDE OF ELDER CREEK RD, ABOUT 0.25 MI W OF INTERSECTION W/ EXCELSIOR RD INTERSECTION, 4 MI ENE OF FLORIN POST OFFICE.

Detailed Location:
MAPPED TO PROVIDED COORDINATES. SURVEYS CONDUCTED AS PART OF TRIENNIAL SURVEYS; DATA STORED IN UC DAVIS TRBL PORTAL, SITE NAME "FIVE PALM TREES." ONE BIRD WITH WHITE BAND OBSERVED IN 2015, BIRD LIKELY FROM 2007.

Ecological:
2 PATCHES OF BLACKBERRIES ABOUT 15-20 FEET APART, BOTH OCCUPIED. WATER ADJACENT. NESTING OR SIGNS OF NESTING NOT REPORTED IN 1994-2011. ABOUT 111 FLEDGLINGS OBSERVED IN 2014. BLACKBERRY THICKETS VISIBLE FROM GOOGLE MAPS STREET VIEW.

Threats:
General:
ABOUT 2,750 OBSERVED IN 1994. ABOUT 220 OBSERVED IN 2000. 500-700 OBSERVED IN 2008. 0 OBSERVED IN 2011. 300-1,000 OBSERVED IN 2014; BREEDING BEHAVIOR & FLEDGLINGS OBSERVED. 1,200-1,500 OBSERVED IN 2015; CARRYING NEST MATERIAL, BREEDING.

PLSS: T08N, R06E, Sec. 34 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4263823 E648002
Latitude/Longitude: 38.51049 / -121.30249
Elevation (feet): 90

County Summary:
Sacramento
Quad Summary:
Carmichael (3812153)

Sources:
TRI14D0001 TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G2G3  
- State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

**Last Date Observed:** 2014-06-19  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2015-04-24  
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
N SIDE OF JACKSON RD, ABOUT 0.2 MI E OF INTERSECTION W/ MAYHEW RD, 0.3 MI NW OF INTXN W/ BRADSHAW RD, SE OF ROSEMONT.

**Detailed Location:**  
MAPPED TO DESCRIBED HABITAT NEAR COORDINATES. DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL, SITE NAME “JACKSON HWY - ASPEN IV WASHWATER PONDS.” A FLOCK OF 5 POSSIBLE TRBL OBSERVED ON 17 APR 2015, NOT CONFIRMED, MORE RESEARCH NEEDED.

**Ecological:**  
NARROW POND BEHIND VEGETATION SCREENING. POND IS PART OF A WATER RECYCLING SYSTEM USED TO WASH SOIL FROM THE AGGREGATED BEING TRANSPORTED BY CONVEYOR TO PLANT TO THE WEST. EXTENSIVE STAND OF CATTAIL NORTH OF BERM.

**Threats:**

**General:**  
2014: ABOUT 200 OBSERVED ON 8 JUN, NESTING. ABOUT 500 OBSERVED FLYING IN AND OUT OF COLONY ON 12 JUN, 4 FLEDGLINGS HEARD AND SEEN, MANY MORE HEARD BEGGING. ABOUT 300 OBSERVED ON 19 JUN, FLEDGLINGS OBS. 2015: NONE OBS IN APR.

**PLSS:** T08N, R06E, Sec. 20 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4266195 E644732  
**Latitude/Longitude:** 38.53239 / -121.33949  
**Elevation (feet):** 70

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
TRI14D0001  
TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Agelaius tricolor*  
**Common Name:** tricolored blackbird

#### Listing Status:
- **Federal:** None  
- **State:** None

#### CNDDB Element Ranks:
- **Global:** G2G3  
- **State:** S1S2

### General Habitat:
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

### Micro Habitat:
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

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<th>Last Date Observed:</th>
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<td>Fair</td>
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<td>Trend:</td>
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#### Location:
ON S SIDE OF JACKSON RD, 0.4 MI ESE OF EAGLES NEST RD INTERSECTION, 0.6 MI WNW OF SUNRISE BLVD INTXN, W OF BLODGETT DAM.

#### Detailed Location:
MAPIED TO PROVIDED COORDINATES. COLONY WAS ESTABLISHED ON S SIDE OF JACKSON RD, JUST E OF EAGLE NEST RD. BIRDS FORAGING ON THE N SIDE OF JACKSON HWY. OBSERVATION DATA STORED IN UC DAVIS TRBL PORTAL; SITE NAME WAS “JACKSON HWY QUARRY.”

#### Ecological:
NESTING SUBSTRATE WAS BULL (MILK) THISTLE. STAND COULD BE SEEN FROM JACKSON HWY TO THE SOUTH. THISTLE PATCH WAS IN SMALL RAVINE CLOSE TO PERIMETER FENCE. 2013 FLOCK IN FIELD ADJACENT TO PREVIOUS NEST COLONY SITE SEEN DURING DRIVE-BY.

#### Threats:
POSSIBLY THREATENED BY FUTURE DEVELOPMENT OF FORAGING AREAS TO THE NORTH, AND CHANGES IN QUARRY OPERATIONS TO THE SOUTH.

#### General:
~500 OBSERVED ON 3 JUN 2010; RECORDED AS NESTING IN NOTES. ~600 OBS ON 6 JUN 2012; ADULTS OBS CARRYING FOOD. ~200 OBS NEAR PREVIOUS NEST COLONY IN 27 APR 2013. ~400 OBS CARRYING FOOD ON 25 MAY 2013; BREEDING. 0 OBS ON 21 APR & 20 MAY 2014.

#### PLSS:
- **T08N, R07E, Sec. 31 (M)**  
- **Zone-10 N4263587 E652322**

#### Accuracy:
- nonspecific area

#### Area (acres): 32

#### UTM:
- Latitude/Longitude: 38.50764 / -121.25301

#### Elevation (feet): 80

#### County Summary:
Sacramento

#### Quad Summary:
Buffalo Creek (3812152), Carmichael (3812153)

### Sources:
- **GRA13F0007**  
  GRAY, F. B.  - FIELD SURVEY FORM FOR AGELAIUS TRICOLOR 2013-05-25

- **TRI14D0001**  
  TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Agelaius tricolor  
**Common Name:** tricolored blackbird

**Listing Status:**  
- Federal: None  
- State: None

**CNDDDB Element Ranks:**  
- Global: G2G3  
- State: S1S2

**General Habitat:**  
HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

**Micro Habitat:**  
REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

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**Location:**  
JUST W OF SUNRISE BLVD, 0.3 MI SW OF JACKSON RD INTERSECTION, 0.5 MI NW OF FLORIN RD INTERSECTION, W OF SLOUGHHOUSE.

**Detailed Location:**  
APPROXIMATELY 5-6 COLONIES MAPPED. EXACT LOCATION OF COLONIES UNCLEAR. SURVEY DATA STORED IN UC DAVIS TRBL PORTAL. MAPPED TO COORDINATES PROVIDED BY UCD TRBL PORTAL FOR COLONY SITES. DIFFERENT COLONIES BRED IN DIFFERENT YEARS.

**Ecological:**  
THISTLE BECOMING MORE ESTABLISHED AROUND CATCHMENT BASIN. NESTING OR SIGNS OF NESTING NOT REPORTED FOR 2011-15. LIMITED ACCESS TO PROPERTY REPORTED, PERMISSION REQUIRED FROM OFFICES. MANY SURVEYS CONDUCTED FROM ROADS, MORE RESEARCH NEEDED.

**Threats:**  
POTENTIAL THREAT FROM MINING ACTIVITIES.

**General:**  

**PLSS:**  
T08N, R07E, Sec. 31 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 71

**UTM:**  
Zone-10 N4263016 E652786  
**Latitude/Longitude:** 38.50241 / -121.24782  
**Elevation (feet):** 115

**County Summary:**  
Sacramento  
Sloughhouse (3812142), Elk Grove (3812143), Buffalo Creek (3812152), Carmichael (3812153)

**Sources:**
- TRI14D0001: TRICOLORED BLACKBIRD PORTAL - ICE (UNIVERSITY OF CALIFORNIA, DAVIS) - 1907-2014 TRICOLORED BLACKBIRD RECORDS FROM UC DAVIS TRICOLORED BLACKBIRD PORTAL, INFORMATION CENTER FOR THE ENVIRONMENT (ICE) 2014-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Xanthocephalus xanthocephalus*

**Common Name:** yellow-headed blackbird

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
NESTS IN FRESHWATER EMERGENT WETLANDS WITH DENSE VEGETATION & DEEP WATER. OFTEN ALONG BORDERS OF LAKES OR PONDS.

**Micro Habitat:**
NESTS ONLY WHERE LARGE INSECTS SUCH AS ODONATA ARE ABUNDANT, NESTING TIMED WITH MAXIMUM EMERGENCE OF AQUATIC INSECTS.

**Last Date Observed:** 1899-06-10

**Last Survey Date:** 1899-06-10

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:** 0.5 MI SOUTH OF FREEPORT.

**Detailed Location:**
Sacramento, Yolo

**Ecological:**

**Threats:**

**General:**

MVZ #954-957 (EGG SETS) COLLECTED 10 JUN 1899 BY R. H. ELLIOTT.

**PLSS:** T07N, R04E, Sec. 23 (M)

**UTM:** Zone-10 N4256965 E630771

**County Summary:**
Sacramento, Yolo

**Sources:**

MVZ03S0013 MUSEUM OF VERTEBRATE ZOOLOGY (UNIVERSITY OF CALIFORNIA, BERKELEY) - PRINTOUT OF MVZ SPECIMEN DATABASE FOR XANTHOCEPHALUS XANTHOCEPHALUS. 2003-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<td>Occurrence Number</td>
<td>17</td>
<td>Occurrence Last Updated:</td>
<td>2009-03-13</td>
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**Scientific Name:** Oncorhynchus tshawytscha  
**Common Name:** chinook salmon - Central Valley spring-run ESU

**Listing Status:**  
- Federal: Threatened  
- State: Threatened

**CNDDB Element Ranks:**  
- Global: G5  
- State: S1

**General Habitat:**  
ADULT NOS. DEPEND ON POOL DEPTH & VOLUME, AMOUNT OF COVER, & PROXIMITY TO GRAVEL. WATER TEMPS >27 C IS LETHAL TO ADULTS

**Micro Habitat:**  
FEDERAL LISTING REFERS TO POPS SPAWNING IN SACRAMENTO RIVER & TRIBUTARIES.

**Last Date Observed:** 2004-05-25  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Poor  
**Trend:** Unknown  
**Presence:** Presumed Extant

**Location:**  
BARGE CANAL AT LOCK (JEFFERSON BLVD), SACRAMENTO DEEP WATER SHIP CHANNEL, WEST SACRAMENTO.

**Detailed Location:**  
MAPPED TO PROVIDED COORDINATES.

**Ecological:**  
MAN MADE CHANNEL FOR CARGO SHIPS. LOCKS NO LONGER IN USE. RIVER BANKS VARY FROM RIPRAPP TO VERTICAL CEMENT WALLS.

**Threats:**  
THREATENED BY MIGRATION BARRIERS AND JEFFERSON ST BRIDGE CONSTRUCTION.

**General:**  

**PLSS:** T08N, R04E, Sec. 10 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4269112 E628268  
**Latitude/Longitude:** 38.56120 / -121.52778  
**Elevation (feet):** 20

**County Summary:**  
Yolo  
Sacramento West (3812155)

**Sources:**  
HOC04F0004 HOCHGRAF, K. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR ONCORHYNCHUS TSHAWYTSCHA SPRING-RUN 2004-05-25
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

<table>
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**Scientific Name:** Oncorhynchus tshawytscha  
**Common Name:** chinook salmon - Sacramento River winter-run ESU

**Listing Status:**  
- Federal: Endangered  
- State: Endangered

**CNDDDB Element Ranks:**  
- Global: G5  
- State: S1

**General Habitat:**  
SACRAMENTO RIVER BELOW KESWICK DAM. SPAWNS IN THE SACRAMENTO RIVER BUT NOT IN TRIBUTARY STREAMS.

**Micro Habitat:**  
REQUIRES CLEAN, COLD WATER OVER GRAVEL BEDS WITH WATER TEMPERATURES BETWEEN 6 & 14 C FOR SPAWNING.

**Last Date Observed:** 2004-01-13  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2004-01-13  
**Occurrence Rank:** Poor

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
BARGE CANAL AT LOCK (JEFFERSON BLVD), SACRAMENTO DEEP WATER SHIP CHANNEL, WEST SACRAMENTO.

**Detailed Location:**  
MAPPED TO PROVIDED COORDINATES AND LOCATION DESCRIPTION.

**Ecological:**  
MAN MADE CHANNEL FOR CARGO SHIPS. LOCKS NO LONGER IN USE. RIVER BANKS VARY FROM RIPRAP TO VERTICAL CEMENT WALLS.

**Threats:**  
THREATENED BY MIGRATION BARRIERS (BOAT LOCKS) AND JEFFERSON ST BRIDGE CONSTRUCTION.

**General:**  

**PLSS:** T08N, R04E, Sec. 10 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4269112 E628268  
**Latitude/Longitude:** 38.56120 / -121.52778  
**Elevation (feet):** 20

**County Summary:**  
Yolo  
Sacramento West (3812155)

**Sources:**  
HOC04F0003  
HOCHGRAF, K. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR ONCORHYNCHUS TSHAWYTSCHA WINTER-RUN 2004-01-13
# Occurrence Report
## California Department of Fish and Wildlife
### California Natural Diversity Database

<table>
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### Scientific Name: Oncorhynchus mykiss irideus
- **Common Name:** steelhead - Central Valley DPS

### Listing Status:
- **Federal:** Threatened
- **State:** None

### CNDDDB Element Ranks:
- **Global:** G5T2Q
- **State:** S2

### General Habitat:
POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.

### Last Date Observed: 2007-XX-XX

### Presence: Presumed Extant

### Location:
DRY CREEK AND ITS TRIBUTARIES SECRET RAVINE AND MINERS RAVINE.

### Detailed Location:
MAPPED TO REACHES OF DRY CREEK & OCCUPIED TRIBUTARIES CURRENTLY NAVIGABLE BY STEELHEAD. COTTONWOOD DAM WAS TOTAL BARRIER ON MINERS PRIOR TO ITS FAILURE IN 2009. ALL SPAWNING REPORTS FROM U/S OF WASTEWATER TREATMENT PLANT (38.736, -121.316).

### Ecological:
MAINSTEM DRY CREEK (DC) USED AS MIGRATORY CORRIDOR, BUT WATER QUALITY & SUBSTRATE TOO DEGRADED TO SUPPORT SPAWNING. SPAWNING & REARING HABITAT UPSTREAM, IN SECRET (SR) & MINERS (MR) RAVINES.

### Threats:
- BANK DESTABILIZATION/EROSION, VEG REMOVAL, CHANNELIZATION, POLLUTION, BARRIERS, LOW FLOWS, URBANIZATION, SILTATION.

### General:

### PLSS:
- T11N, R06E, Sec. 36 (M)
- Accuracy: nonspecific area
- Area (acres): 4,977

### UTM:
- Zone-10 N4291660 E651767
- Latitude/Longitude: 38.76061 / -121.25324
- Elevation (feet):

### Sources:
- ECO08R0019 ECO Corp Consulting, Inc. - Technical Memorandum on Secret Ravine Creek and Special Status Fish, Public Draft Environmental Impact Report for the Rocklin Crossings Project. 2008-XX-XX
- JOH13U0001 Johnson, M. - Status Update - Chinook Salmon in the Auburn Ravine Watershed: Memorandum to Placer County Board of Supervisors. 2013-01-08
- NMF09R0001 National Marine Fisheries Service (NOAA) - California Central Valley Salmon & Steelhead Draft Recovery Plan, Appendix A: Central Valley Watershed Profiles. 2009-10-XX
## Scientific Name:
*Oncorhynchus mykiss irideus*

### Common Name:
steelhead - Central Valley DPS

### Listing Status:
- **Federal:** Threatened
- **State:** None

### Rare Plant Rank:
- **Global:** G5T2Q
- **State:** S2

### Other Lists:
AFS_TH-Threatened

### General Habitat:
POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.

### Micro Habitat:

### Last Date Observed:
2012-XX-XX

### Last Survey Date:
2012-XX-XX

### Presence:
Presumed Extant

### Location:
LOWER AMERICAN RIVER, FROM ITS MOUTH IN THE SACRAMENTO RIVER TO THE NIMBUS HATCHERY DAM (RM23).

### Detailed Location:
MAPPED TO 23 MI OF RIVER CURRENTLY NAVIGABLE BY STEELHEAD (SH). OLD FOLSOM DAM (RM27) BUILT 1895; NIMBUS AND FOLSOM DAMS BUILT 1955, CUT OFF NEARLY ALL OF SPAWNING HABITAT. RSTS FISHED BELOW WATT BRIDGE AT RM9.

### Ecological:

### Threats:
DAM, HABITAT LOSS. SMALL WILD POP SWAMPED W/ HO SH. HIGH WATER TEMP & RELATED DISEASES. REDD DEWATERING. BASS PREDATION.

### General:
1944-47: SUMMER RUN OF 400-1,246; GONE BY 1955. WINTER RUN ESTS: 3K-5K (LATE 60S); >19K (1971-72); >12K (1973-74); 255-1,462 (1990-93).


### PLSS:
T09N, R06E, Sec. 14 (M)

### UTM:
Zone-10 N4276902 E648185

### County Summary:
Sacramento

### Accuracy:
nonspecific area

### Area (acres):
2,592

### Latitude/Longitude:
38.62828 / -121.29761

### Elevation (feet):

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**Map Index Number:** 90985  
**EO Index:** 92033

**Key Quad:** Citrus Heights (3812163)  
**Element Code:** AFCHA0209K

**Occurrence Number:** 5  
**Occurrence Last Updated:** 2014-02-26

---

**Scientific Name:** *Oncorhynchus mykiss irideus*  
**Common Name:** steelhead - Central Valley DPS

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**Rare Plant Rank:**
- **Global:** G5T2Q
- **State:** S2

**Other Lists:** AFS_TH-Threatened

---

**General Habitat:** POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.

**Micro Habitat:**

---

**Last Date Observed:** 2012-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2012-XX-XX  
**Occurrence Rank:** Poor

**Owner/Manager:** SAC COUNTY, CITY OF SACRAMENTO  
**Trend:** Decreasing

**Presence:** Presumed Extant  

---

**Location:** LOWER AMERICAN RIVER, FROM ITS MOUTH IN THE SACRAMENTO RIVER TO THE NIMBUS HATCHERY DAM (RM23).

**Detailed Location:**
MAPPED TO 23 MI OF RIVER CURRENTLY NAVIGABLE BY STEELHEAD (SH). OLD FOLSOM DAM (RM27) BUILT 1895; NIMBUS AND FOLSOM DAMS BUILT 1955, CUT OFF NEARLY ALL OF SPAWNING HABITAT. RSTS FISHED BELOW WATT BRIDGE AT RM9.

**Ecological:**

**Threats:**
DAM, HABITAT LOSS. SMALL WILD POP SWAMPED W/ HO SH. HIGH WATER TEMP & RELATED DISEASES. REDD DEWATERING. BASS PREDATION.

**General:**
1944-47: SUMMER RUN OF 400-1,246; GONE BY 1955. WINTER RUN ESTS: 3K-5K (LATE 60S); >19K (1971-72); >12K (1973-74); 255-1,462 (1990-93).


**PLSS:** T09N, R06E, Sec. 14 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 2,592

**UTM:** Zone-10 N4276902 E648185  
**Latitude/Longitude:** 38.62828 / -121.29761  
**Elevation (feet):**

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**County Summary:**
Sacramento
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<td>GER71R0001</td>
<td>GERSTUNG, E. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-REGION 2) - A REPORT TO THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD ON THE FISH AND WILDLIFE RESOURCES OF THE AMERICAN RIVER TO BE AFFECTED BY THE AUBURN DAM...</td>
<td>1971-06-XX</td>
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<td>HAN05R0001</td>
<td>HANNON, J. &amp; B. DEASON (U.S. BUREAU OF RECLAMATION) - AMERICAN RIVER STEELHEAD (ONCORHYCHUS MYKISS) SPAWNING 2001-2005</td>
<td>2005-10-27</td>
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<td>HAN11R0002</td>
<td>HANNON, J. (U.S. BUREAU OF RECLAMATION) - AMERICAN RIVER STEELHEAD (ONCORHYNCHUS MYKISS) SPAWNING - 2011, WITH COMPARISONS TO PRIOR YEARS.</td>
<td>2011-XX-XX</td>
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<td>HAN12R0002</td>
<td>HANNON, J. (U.S. BUREAU OF RECLAMATION) - AMERICAN RIVER STEELHEAD (ONCORHYNCHUS MYKISS) SPAWNING - 2012, WITH COMPARISONS TO PRIOR YEARS.</td>
<td>2012-XX-XX</td>
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<tr>
<td>HSR12R0004</td>
<td>CALIFORNIA HATCHERY SCIENTIFIC REVIEW GROUP - CALIFORNIA HATCHERY REVIEW PROJECT - APPENDIX VIII: NIMBUS FISH HATCHERY STEELHEAD PROGRAM REPORT</td>
<td>2012-06-XX</td>
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<tr>
<td>MCE96R0001</td>
<td>MCEWAN, D. &amp; T. JACKSON (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - STEELHEAD RESTORATION AND MANAGEMENT PLAN FOR CALIFORNIA.</td>
<td>1996-XX-XX</td>
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<td>NMF09R0001</td>
<td>NATIONAL MARINE FISHERIES SERVICE (NOAA) - CALIFORNIA CENTRAL VALLEY SALMON &amp; STEELHEAD DRAFT RECOVERY PLAN, APPENDIX A: CENTRAL VALLEY WATERSHED PROFILES.</td>
<td>2009-10-XX</td>
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<tr>
<td>NMF11R0002</td>
<td>NATIONAL MARINE FISHERIES SERVICE (NOAA) - CENTRAL VALLEY RECOVERY DOMAIN 5-YEAR REVIEW: SUMMARY AND EVALUATION OF CENTRAL VALLEY STEELHEAD DPS.</td>
<td>2011-XX-XX</td>
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<tr>
<td>SNI97R0001</td>
<td>SNIDER, B. ET AL. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - LOWER AMERICAN RIVER EMIGRATION SURVEY, NOVEMBER 1994 - SEPTEMBER 1995.</td>
<td>1997-09-XX</td>
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<tr>
<td>SNI98R0001</td>
<td>SNIDER, B. ET AL. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - LOWER AMERICAN RIVER EMIGRATION SURVEY, OCTOBER 1995 - SEPTEMBER 1996.</td>
<td>1998-09-XX</td>
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</table>
### Scientific Name: **Oncorhynchus mykiss irideus**

- **Common Name:** steelhead - Central Valley DPS

### Listing Status:
- **Federal:** Threatened
- **State:** None

### General Habitat:
- POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.

### 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 MOKEUMNE, 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.

### Threats:
- DESPITE ABSENCE OF MAJOR DAM, HABITAT DEGRADED DUE TO ALTERED STREAM MORPHOLOGY.

### General:

### PLSS:
- T08N, R08E, Sec. 35 (M)  
- **Accuracy:** nonspecific area  
- **Area (acres):** 4,344

### UTM:
- Zone-10 N4262685 E668600  
- **Latitude/Longitude:** 38.49658 / -121.06664  
- **Elevation (feet):**

### County Summary:
- Amador, El Dorado, Sacramento, San Joaquin  
- Galt (3812133), Bruceville (3812134), Carbondale (3812141), Sloughhouse (3812142), Elk Grove (3812143), Folsom SE (3812151)

### Sources:
- **CAY74U0001** CAYWOOD ET AL. (CALIFORNIA STATE UNIVERSITY, SACRAMENTO) - COSUMNES RIVER FISH SAMPLING RECORDS, 1973-1974. 1974-04-23
- **JEF14U0001** JEFFRES, C. (UNIVERSITY OF CALIFORNIA, DAVIS) - EMAIL REGARDING STEELHEAD IN THE COSUMNES RIVER. 2014-01-28
- **KEN14U0001** KENNEDY, T. (FISHERY FOUNDATION OF CALIFORNIA) - EMAIL AND EXCEL TABLE REGARDING STEELHEAD RECORDED BY VAKI RIVERWATCHER CAMERA AT GRANLEES DAM, COSUMNES RIVER, DEC 2012 - JAN 2013. 2014-01-27
- **MAR07A0001** MARSH, G. - HISTORIC AND PRESENT DISTRIBUTION OF CHINOOK SALMON AND STEELHEAD IN THE CALAVERAS RIVER. 2007-XX-XX
- **MOYNDU0001** MOYLE, P. & P. CRAIN (UNIVERSITY OF CALIFORNIA, DAVIS) - COSUMNES RESEARCH GROUP PHASE 1, REPORT 1B: AQUATIC RESOURCE SURVEY FOR LOWER COSUMNES AND MOKEUMNE RIVERS: FISHES. 2007-XX-XX
- **NMF09R0001** NATIONAL MARINE FISHERIES SERVICE (NOAA) - CALIFORNIA CENTRAL VALLEY SALMON & STEELHEAD DRAFT RECOVERY PLAN, APPENDIX A: CENTRAL VALLEY WATERSHED PROFILES. 2009-10-XX

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**Map Index Number:** 91514  
**EO Index:** 92591  
**Element Code:** AFCHA0209K  
**Occurrence Last Updated:** 2014-02-10  
**Key Quad:** Carbondale (3812141)  
**Occurrence Number:** 24  
**Occurrence Number:** 24  
**Occurrence Last Updated:** 2014-02-10  
**Scientific Name:** Oncorhynchus mykiss irideus  
**Common Name:** steelhead - Central Valley DPS  
**Listing Status:**  
- **Federal:** Threatened  
- **State:** None  
**CNDDB Element Ranks:**  
- **Global:** G5T2Q  
- **State:** S2  
**General Habitat:** POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.  
**Micro Habitat:**  
**Last Date Observed:** 2013-01-07  
**Last Survey Date:** 2013-01-07  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  
**Location:** COSUMNES RIVER, FROM ITS MOUTH IN THE MOKEUMNE RIVER TO LATROBE FALLS (~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 MOKEUMNE, 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.  
**Threats:** DESPITE ABSENCE OF MAJOR DAM, HABITAT DEGRADED DUE TO ALTERED STREAM MORPHOLOGY.  
**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.  
**PLSS:** T08N, R08E, Sec. 35 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 4,344  
**UTM:** Zone-10 N4262685 E668600  
**Latitude/Longitude:** 38.49658 / -121.06664  
**Elevation (feet):**

---

**County Summary:**  
- Amador, El Dorado, Sacramento, San Joaquin  
- Galt (3812133), Bruceville (3812134), Carbondale (3812141), Sloughhouse (3812142), Elk Grove (3812143), Folsom SE (3812151)
**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

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**Map Index Number:** 91603

**EO Index:** 92687

**Key Quad:** Bouldin Island (3812115)

**Occurrence Number:** 27

**Occurrence Last Updated:** 2014-02-27

**Scientific Name:** Oncorhynchus mykiss irideus

**Common Name:** steelhead - Central Valley DPS

**Listing Status:**
- Federal: Threatened
- State: None

**CNDDDB Element Ranks:**
- Global: G5T2Q
- State: S2

**Last Date Observed:** 2012-05-07

**Occurrence Type:** Natural/Native occurrence

**Presence:** Presumed Extant

**Location:** SACRAMENTO-SAN JOAQUIN DELTA, FROM CHIPPS ISLAND TO SAN JOAQUIN R AT DOS REIS(RM51) & SACRAMENTO R AT GARCIA BEND (RM49).


**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%.

**Threats:** ENTRAINMENT; DREDGING; BANK EROSION; CHANNEL OCCLUSION BY SILT & AQUATIC VEGETATION; POLLUTED RUNOFF.

**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.

**PLSS:** T03N, R03E, Sec. 13 (M)

**UTM:** Zone-10 N4218343 E622752

**Accuracy:** nonspecific area

**Latitude/Longitude:** 38.10457 / -121.59990

**Area (acres):** 55,159

**Elevation (feet):**

**Contra Costa, Sacramento, San Joaquin, Solano, Yolo**

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)
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<tr>
<td>BDA06D0001</td>
<td>BAY DELTA AND TRIBUTARIES PROJECT - BAY DELTA AND TRIBUTARIES PROJECT WEBSITE STEELHEAD DOWNLOAD</td>
<td>[1/12/2006 BDAT WEBSITE] 2006-01-12</td>
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<tr>
<td>DEK13R0001</td>
<td>DEKAR, M. ET AL. (U.S. FISH AND WILDLIFE SERVICE) - USFWS DELTA JUVENILE FISH MONITORING PROGRAM REVIEW: BACKGROUND REPORT PREPARED FOR REVIEW BY THE IEP SCIENCE ADVISORY GROUP.</td>
<td>2013-06-XX</td>
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<tr>
<td>FCC07R0001</td>
<td>FISHERY FOUNDATION OF CALIFORNIA - WESTERN DELTA SEINE SURVEY 2005-2006.</td>
<td>2007-03-XX</td>
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<tr>
<td>FOS05A0001</td>
<td>FOSS, S. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - SALVAGE OF HATCHERY-RELEASED JUVENILE STEELHEAD AT THE STATE WATER PROJECT AND CENTRAL VALLEY PROJECT FISH FACILITIES.</td>
<td>2005-XX-XX</td>
</tr>
<tr>
<td>NMF11R0002</td>
<td>NATIONAL MARINE FISHERIES SERVICE (NOAA) - CENTRAL VALLEY RECOVERY DOMAIN 5-YEAR REVIEW: SUMMARY AND EVALUATION OF CENTRAL VALLEY STEELHEAD DPS.</td>
<td>2011-XX-XX</td>
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<tr>
<td>NOB01A0001</td>
<td>NOBRIGA, M. &amp; P. CADRETT - DIFFERENCES AMONG HATCHERY AND WILD STEELHEAD: EVIDENCE FROM DELTA FISH MONITORING PROGRAMS. IEP NEWSLETTER 14(3):30-38.</td>
<td>2001-XX-XX</td>
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<td>SIN12A0001</td>
<td>SINGER, G. ET AL. (UNIVERSITY OF CALIFORNIA, DAVIS) - INTERANNUAL VARIATION OF REACH SPECIFIC MIGRATORY SUCCESS FOR SACRAMENTO RIVER HATCHERY YEARLING LATE-FALL RUN CHINOOK SALMON AND STEELHEAD TROUT.</td>
<td>2012-05-22</td>
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<tr>
<td>STO11D0002</td>
<td>STOCKTON FISH AND WILDLIFE OFFICE - BEACH SEINES CHINOOK &amp; PELAGIC ORGANISM DECLINE SPECIES 1976-2011 MONITORING DATA.</td>
<td>2011-XX-XX</td>
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<td>STO11D0004</td>
<td>STOCKTON FISH AND WILDLIFE OFFICE - CHIPPS ISLAND TRAWLS CHINOOK &amp; PELAGIC ORGANISM DECLINE SPECIES 1976-2011 MONITORING DATA.</td>
<td>2011-XX-XX</td>
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<td>STO13D0001</td>
<td>STOCKTON FISH AND WILDLIFE OFFICE - BEACH SEINES CHINOOK &amp; PELAGIC ORGANISM DECLINE SPECIES 2012-2013 MONITORING DATA.</td>
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<td>STO13D0003</td>
<td>STOCKTON FISH AND WILDLIFE OFFICE - CHIPPS ISLAND TRAWLS CHINOOK &amp; PELAGIC ORGANISM DECLINE SPECIES 2012-2013 MONITORING DATA.</td>
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### Scientific Name
**Oncorhynchus mykiss irideus**
- **Common Name:** steelhead - Central Valley DPS

### Listing Status
- **Federal:** Threatened
- **State:** None

### CNDDB Element Ranks
- **Global:** G5T2Q
- **State:** S2

### General Habitat
- POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.

### Detailed Location

### Ecological
MIGRATION CORRIDOR FROM UPPER SAC & TRIBS TO DELTA. YIELDS AVERAGE 3% OF YEARLY SAC R ANGLING CATCH. FLOOD FLOWS DIVERTED INTO SUTTER & YOLO BYPASSES (OCC 30, 31) PROVIDE REARING HABITAT BUT STRAYING ADULTS MAY BE STRANDED AS FLOWS SUBSIDE.

### Threats
- CHANNELIZATION, DIVERIONS, POLLUTANTS.

### General

### PLSS:
- **T11N, R02E, Sec. 13 (M)**
- **Accuracy:** nonspecific area
- **Area (acres):** 20,980

### UTM:
- **Zone-10 N4295601 E612546**
- **Latitude/Longitude:** 38.80199 / -121.70389
- **Elevation (feet):**

### County Summary
- **Colusa, Sacramento, Sutter, Yolo**
- **Sacramento West (3812155), Taylor Monument (3812165), Grays Bend (3812166), Verona (3812175), Knights Landing (3812176), Eldorado Bend (3812177), Kirkville (3812187), Tisdale Weir (3912117), Grimes (3912118), Meridian (3912128), Colusa (3912221)**
Map Index Number: 91663 | EO Index: 92737
Key Quad: Sacramento West (3812155) | Element Code: AFCHA0209K
Occurrence Number: 30 | Occurrence Last Updated: 2014-02-21

Scientific Name: Oncorhynchus mykiss irideus | Common Name: steelhead - Central Valley DPS
Listing Status: Federal: Threatened | Rare Plant Rank: None
State: None | Other Lists: AFS_TH-Threatened
CNDDB Element Ranks: Global: G5T2Q | State: S2

General Habitat: POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.

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.

Threats:
ENTRAINMENT & STRANDING BEHIND MIGRATION BARRIERS.

General:

PLSS: T08N, R04E, Sec. 30 (M) | Accuracy: nonspecific area
UTM: Zone-10 N4264097 E623420 | Latitude/Longitude: 38.51671 / -121.58429
Area (acres): 10,025 | Elevation (feet):
County Summary: Sacramento, Solano, Yolo | Rio Vista (3812126), Courtland (3812135), Liberty Island (3812136), Clarksburg (3812145), Saxon (3812146), Sacramento West (3812155)

Sources:
BDA06D0001 BAY DELTA AND TRIBUTARIES PROJECT - BAY DELTA AND TRIBUTARIES PROJECT WEBSITE STEELHEAD DOWNLOAD [1/12/2006 BDAT WEBSITE] 2006-01-12
CRA14U0001 CRAIN, P. - EMAIL REGARDING MIGRATORY RAINBOW TROUT IN PUTAH CREEK. 2014-01-14
HAR06U0001 HARRELL, W. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - SCIENTIFIC COLLECTING REPORT OF SPECIMENS CAPTURED OR SALVAGED [SC-001146] 2006-07-06
HOC04F0005 HOCHGRAF, K. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR ONCORHYNCHUS MYKISS IRIDEUS 2004-04-15
## Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Spirinchus thaleichthys*

**Common Name:** longfin smelt

**Listing Status:**
- **Federal:** Candidate
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S1

**General Habitat:**
EURYHALINE, NEKTONIC & ANADROMOUS. FOUND IN OPEN WATERS OF ESTUARIES, MOSTLY IN MIDDLE OR BOTTOM OF WATER COLUMN.

**Micro Habitat:**
PREFER SALINITIES OF 15-30 PPT, BUT CAN BE FOUND IN COMPLETELY FRESHWATER TO ALMOST PURE SEAWATER.

**Last Date Observed:** 2004-01-05

**Last Survey Date:** 2012-09-27

**Owner/Manager:** UNKNOWN, STATE

**Presence:** Presumed Extant

**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.

**Threats:**
BAY-DELTA POPULATION IN DECLINE DUE TO DIVERSION, DROUGHT, ENTRAINMENT, FOOD LIMITATION CAUSED BY INVASIVE AMUR CLAM.

**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.

**PLSS:**
- **T08N, R04E, Sec. 22 (M)**

**UTM:**
- **Zone-10 N4265920 E628376**

**County Summary:**
Sacramento, Yolo  
Courtland (3812135), Florin (3812144), Clarksburg (3812145), Sacramento West (3812155), Taylor Monument (3812165), Grays Bend (3812166)

**Sourcés:**
- FWS12R0001 - U.S. FISH AND WILDLIFE SERVICE - ENDANGERED AND THREATENED WILDLIFE AND PLANTS; 12-MONTH FINDING ON A PETITION TO LIST THE SAN FRANCISCO BAY-DELTA POPULATION OF THE LONGFIN SMELT AS ENDANGERED OR THREATENED 2012-03-13
- LAN40S0001 - LANTIS, H. - CAS SU(ICH) SPECIMEN #35431, COLLECTED FROM THE SACRAMENTO RIVER AT HOOD. 1940-01-04
- STO13D0001 - STOCKTON FISH AND WILDLIFE OFFICE - BEACH SEINES CHINOOK & PELAGIC ORGANISM DECLINE SPECIES 2012-2013 MONITORING DATA. 2013-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Pogonichthys macrolepidotus*

**Common Name:** Sacramento splittail

**Listing Status:**
- Federal: None
- State: None

**CNLBB Element Ranks:**
- Global: GNR
- State: S3

**General Habitat:**
Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay & associated marshes.

**Micro Habitat:**
Slow moving river sections, dead end sloughs, requires flooded vegetation for spawning & foraging for young.

**Last Date Observed:** 1995-02-26

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1995-02-26

**Occurrence Rank:** Good

**Owner/Manager:** PVT, STATE

**Presence:** Presumed Extant

**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.

**Threats:**
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.

**PLSS:**
T09N, R04E, Sec. 20 (M)

**Accuracy:** specific area

**Area (acres):** 5,038

**UTM:**
Zone-10 N4274883 E625304

**Latitude/Longitude:** 38.61362 / -121.56075

**Elevation (feet):** 20

**Counties Summary:**
Sacramento, Sutter, Yolo

**County 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)

**Sources:**
- BRODE, J.M. - FIELD SURVEY FORM FOR POGONICHTHYS MACROLEPIDOTUS 1990-03-21
- WIXOM, L., J. PISCOTTO & C. LAKE (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - AS REQUIRED BY FEDERAL AID IN SPORT FISH RESTORATION ACT. PROJECT 27, SACRAMENTO RIVER SYSTEM SPORT FISH CATCH INVENTORY. JOB 1, ESTIMATE HARVEST AND ANGLER USE. 1995-02-26
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| General Habitat:       | HISTORICALLY FOUND IN THE SLOUGHS, SLOW-MOVING RIVERS, AND LAKES OF THE CENTRAL VALLEY. |
| Micro Habitat:         | PREFERS WARM WATER. AQUATIC VEGETATION IS ESSENTIAL FOR YOUNG. TOLERATES WIDE RANGE OF PHYSIO-CHEMICAL WATER CONDITIONS. |

| Last Date Observed:    | 1973-XX-XX |
| Last Survey Date:      | 1973-XX-XX |
| Owner/Manager:         | UNKNOWN    |
| Presence:              | Presumed Extant |

| Location:              | LAKE GREENHAVEN (AKA BRICKYARD POND), W OF HAVENSIDE DR & N OF GLORIA DR, BETWEEN I-5 & SACRAMENTO RIVER, SACRAMENTO. |
| Detailed Location:     | PRESENT IN LAKE AS OF 1973, INFORMATION REPORTED AS BEING TAKEN FROM FISH & GAME FILES. |
| Ecological:            | PAST FLOODPLAIN LAKE, IN THE GARCIA BEND AREA OF THE SACRAMENTO RIVER. |
| Threats:               | INTRODUCED PREDATORS & COMPETITORS, POOR WATER QUALITY. |


| PLSS:                  | T08N, R04E, Sec. 27 (M) |
| Accuracy:              | specific area |
| Area (acres):          | 53 |
| UTM:                   | Zone-10 N4263243 E627705 |
| Latitude/Longitude:    | 38.50841 / -121.53532 |
| Elevation (feet):      | 10 |

| County Summary:        | Sacramento |
| Quad Summary:          | Sacramento West (3812155) |

**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

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**Map Index Number:** 68548  
**EO Index:** 68900

**Key Quad:** Sacramento West (3812155)  
**Element Code:** AMACC05030

**Occurrence Number:** 137  
**Occurrence Last Updated:** 2007-03-19

**Scientific Name:** *Lasiurus cinereus*  
**Common Name:** hoary bat

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G5  
- **State:** S4

---

**General Habitat:**  
PREFERS OPEN HABITATS OR HABITAT MOSAICS, WITH ACCESS TO TREES FOR COVER & OPEN AREAS OR HABITAT EDGES FOR FEEDING.

**Micro Habitat:**  
ROOSTS IN DENSE FOLIAGE OF MEDIUM TO LARGE TREES. FEEDS PRIMARILY ON MOTHS. REQUIRES WATER.

---

**Last Date Observed:** 1991-09-18  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1991-09-18  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
WEST SACRAMENTO.

**Detailed Location:**  
MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY MANIS, WITH UNCERTAINTY OF 2475.1711 M.

**Ecological:**

**Threats:**

**General:**

1 FEMALE SPECIMEN (MVZ #182430) COLLECTED BY WILLIAM E. RAINEY ON 18 SEP 1991.

**PLSS:** T08N, R04E, Sec. 03 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4271223 E627750  
**Latitude/Longitude:** 38.58030 / -121.53333  
**Elevation (feet):**

**County Summary:**  
Sacramento West (3812155)

**Sources:**

MAN04S0029  
MAMMAL NETWORKED INFORMATION SYSTEM (MANIS) - PRINTOUT OF LASIURUS CINEREUS SPECIMENS FOR CALIFORNIA FROM MANIS. INCLUDES RECORDS FROM MVZ, CAS, MSB, LSU, KU, LACM, UWBM, FMNH AND TTU. 2004-12-10
Map Index Number: 32459
EO Index: 56607
Key Quad: Carmichael (3812153)
Occurrence Number: 73
Occurrence Code: AMAJF04010
Occurrence Last Updated: 2004-09-01

Scientific Name: Taxidea taxus
Common Name: American badger

Listing Status:
Federal: None
State: None

Rare Plant Rank:

CNDDB Element Ranks:
Global: G5
State: S3

General Habitat:
MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.

Micro Habitat:
NEEDS SUFFICIENT FOOD, FRIABLE SOILS & OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.

Last Date Observed: 1991-01-15
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1991-01-15
Occurrence Rank: Unknown

Owner/Manager: PVT
Trend: Unknown

Presence: Presumed Extant

Location:
SW OF FORMER MATHER AFB; BETWEEN KIEFER BLVD, BRADSHAW ROAD, JACKSON ROAD, AND EXCELSIOR ROAD.

Detailed Location:

Ecological:
HABITAT CONSISTS OF GRAZED ANNUAL GRASSLAND WITH VERNAL POOLS. CURRENT LAND USE: GRAZING. GRAVEL PITS IN NORTHERN EXTREME PORTION OF SITE.

Threats:
PROPOSED AGGREGATE MINING.

General:
CARCASS OF 1 JUVENILE OBSERVED ON 15 JAN 1991.

PLSS: T08N, R06E, Sec. 21 (M)  Accuracy: nonspecific area  Area (acres): 1,493
UTM: Zone-10 N4266114 E646979  Latitude/Longitude: 38.53130 / -121.31374  Elevation (feet): 70

County Summary: Sacramento  Quad Summary: Carmichael (3812153)

Sources:
ADA91F0016  ADAMS, B. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORM FOR TAXIDEA TAXUS 1991-01-15
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>Detailed Location:</td>
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<td>Threats:</td>
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<td>General:</td>
<td>MVZ #88217; COLLECTED BY DAVID H. JOHNSON ON 22 OCT 1938.</td>
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<td>Bruceville (3812134), Courtland (3812135), Florin (3812144), Clarksburg (3812145)</td>
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<td>Sources:</td>
<td>DFG86R0004 CALIFORNIA DEPARTMENT OF FISH &amp; GAME - MAMMALIAN SPECIES OF SPECIAL CONCERN IN CALIFORNIA, AMERICAN BADGER ACCOUNT. 1986-XX-XX</td>
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<td>MVZ04S0005 MVZ SPECIMEN DATABASE QUERY (UNIVERSITY OF CALIFORNIA, BERKELEY) - PRINTOUT OF TAXIDEA TAXUS SPECIMENS FOR CALIFORNIA FROM THE MVZ DATABASE. 2004-09-13</td>
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**Scientific Name:** *Taxidea taxus*

**Common Name:** American badger

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G5
- **State:** S3

**General Habitat:**
Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.

**Micro Habitat:**

**Last Date Observed:** XXXX-XX-XX

**Last Survey Date:** XXXX-XX-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
POLK; 21ST AVE AT POWER INN RD, SACRAMENTO.

**Detailed Location:**
NMNH stated location was "POLK. SACRAMENTO COUNTY."

**Ecological:**

**Threats:**

**General:**
Male specimen (USNM #228495) collected by W. L. PORKMAN, date unknown.

**PLSS:**
- T08N, R05E, Sec. 23 (M)

**UTM:**
- Zone-10 N4266069 E638699

**Latitude/Longitude:** 38.53222 / -121.40871

**Elevation (feet):** 40

**Accuracy:** 1 mile

**Area (acres):** 0

**County Summary:**
Sacramento

**Quad Summary:**
Sacramento East (3812154)

**Sources:**

1. **DFG86R0004** - CALIFORNIA DEPARTMENT OF FISH & GAME - MAMMALIAN SPECIES OF SPECIAL CONCERN IN CALIFORNIA, AMERICAN BADGER ACCOUNT, 1986-XX-XX
2. **PORND00001** - PORKMAN, W. (U.S. NATIONAL MUSEUM OF NATURAL HISTORY) - USNM AMERICAN BADGER SPECIMEN #228495 COLLECTED AT POLK, SACRAMENTO COUNTY. XXXX-XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 26582  
**EO Index:** 1462  
**Element Code:** ARAAD02030  
**Occurrence Last Updated:** 1996-01-05

**Scientific Name:** Emys marmorata  
**Common Name:** western pond turtle

**Listing Status:**  
- Federal: None  
- State: None

**CNNDDB Element Ranks:**  
- Global: G3G4  
- State: S3

**General Habitat:**  
A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

**Micro Habitat:**  
NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

**Last Date Observed:** 1995-XX-XX  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Location:** MCCLELLAN AFB. DON JULIO CREEK ABOUT 1.4 KM NE OF THE INTERSECTION OF MAIN AVE & RALEY BLVD.

**Detailed Location:**  
SURROUNDING AREA IS ANNUAL GRASSLAND WITH MANY VERNAL POOLS.

**Threats:**  
MILITARY ACTIVITIES, DEVELOPMENT.

**General:**  
2 TURTLES SEEN AT ONE SITE AND AN UNKNOWN NUMBER SEEN AT A NEARBY BASKING SITE DURING A FEBRUARY TO JUNE FAIRY SHRIMP SURVEY.

**PLSS:** T09N, R05E, Sec. 24 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 6

**UTM:** Zone-10 N4280410 E637756  
**Latitude/Longitude:** 38.66156 / -121.41669  
**Elevation (feet):** 50

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
LAC95R0001  
LACY, T. (WESCO-RMI) - 1995 VERNAL POOL CRUSTACEAN SURVEY RESULTS - MCCLELLAN AFB AND LINCOLN & DAVIS COMMUNICATIONS FACILITIES; CONSERVATION PLAN INCLUDED. 1995-XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 32695 **EO Index:** 1330
**Key Quad:** Carmichael (3812153) **Element Code:** ARAAD02030
**Occurrence Number:** 433 **Occurrence Last Updated:** 1995-12-12

**Scientific Name:** *Emys marmorata* **Common Name:** western pond turtle

**Listing Status:** Federal: None **Rare Plant Rank:** None
State: None **Other Lists:** BLM_S-Sensitive

**CNDDDB Element Ranks:**
- Global: G3G4
- State: S3

**General Habitat:**
A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

**Micro Habitat:**
NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

**Last Date Observed:** 1991-04-26 **Occurrence Type:** Natural/Native occurrence
**Last Survey Date:** 1991-04-26 **Occurrence Rank:** Good
**Owner/Manager:** PVT **Trend:** Unknown
**Presence:** Presumed Extant

**Location:**
SOUTH OF MATHER AIR FORCE BASE; MORRISON CREEK BELOW THE CONFLUENCE WITH MATHER AFB DRAIN.

**Detailed Location:**
SITE OWNED BY GRANITE CONSTRUCTION COMPANY AND TEICHERT MINING COMPANY.

**Ecological:**
SLOW MOVING CREEK WITH ABUNDANT AQUATIC VEGETATION; SURROUNDING AREA IS ANNUAL GRASSLAND.

**Threats:**
GRAZING; GRAVEL PITS IN NORTHERN EXTREME OF SITE VICINITY; PROPOSED AGGREGATE MINING.

**PLSS:** T08N, R06E, Sec. 21 (M) **Accuracy:** 1/5 mile
**UTM:** Zone-10 N4265748 E646120 **Area (acres):** 0
**Latitude/Longitude:** 38.52815 / -121.32366 **Elevation (feet):** 55

**County Summary:** Sacramento **Quad Summary:** Carmichael (3812153)

**Sources:**
ADA91F0013 ADAMS, B. - FIELD SURVEY FORM FOR CLEMMYS MARMORATA MARMORATA 1991-04-26
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**Scientific Name:** *Emys marmorata*  
**Common Name:** western pond turtle

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3G4  
- **State:** S3

**General Habitat:**  
A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

**Micro Habitat:**  
NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

**Occurrence Report**

**Location:**  
CARMICHAEL; ANCIL HOFFMAN PARK; IN SMALL POND 0.7 KM EAST OF END OF KENNETH DRIVE.

**Detailed Location:**  
SITE COMPLETELY WITHIN NATURE STUDY AREA.

**Ecological:**  
SMALL POND SURROUNDED BY QUERCUS LOBATA, SAMBUCUS MEXICANA, TYPHA AND RUBUS.

**Threats:**  
VISITORS MAY ACCIDENTALLY TRAMPLE NESTING SITES.

**General:**  
3 ADULTS OBSERVED BASKING ON PARTIALLY SUBMERGED LOG AND ON COLLAPSED SAMBUCUS MEXICANA BRANCHES, HATCHLING OBSERVED IN 1991 OR 1992; S. MEXICANA IS CRITICAL HABITAT FOR VALLEY ELDERBERRY LONGHORN BEETLE.

**PLSS:** T09N, R06E, Sec. 22 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4275246 E647190  
**Latitude/Longitude:** 38.61353 / -121.30939  
**Elevation (feet):** 65

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
NOS92F0006 NOSAL, T. - FIELD SURVEY FORM FOR CLEMMSYS MARMORATA MARMORATA 1992-08-XX
**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

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**Scientific Name:** *Emys marmorata*

**Common Name:** western pond turtle

**Listing Status:**
- Federal: None
- State: None

**CNDDDB Element Ranks:**
- Global: G3G4
- State: S3

**General Habitat:**
A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

**Micro Habitat:**
NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

**Last Date Observed:** 2003-09-23

**Last Survey Date:** 2003-09-23

**Owner/Manager:** DPR-STONE LAKE PARK

**Presence:** Presumed Extant

**Location:**
STONE LAKE PRESERVE, APPROXIMATELY 1.5 TO 2.5 MILES NORTHEAST OF HOOD.

**Ecological:**
HABITAT CONSISTS OF A SEMI-NATURAL LAKE BORDERED BY SOME BULRUSHES, GRAZED GRASSLAND, AND RIPARIAN VEGETATION.

**Threats:**
THREATENED BY POTENTIAL POLLUTANTS FROM UPSTREAM CATTLE OPERATION AND THE PRESENCE OF BULLFROGS.

**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.

**PLSS:** T06N, R04E, Sec. 12 (M)

**Accuracy:** nonspecific area

**Area (acres):** 110

**UTM:** Zone-10 N4250506 E631092

**Latitude/Longitude:** 38.39316 / -121.49886

**Elevation (feet):** 10

**County Summary:** Sacramento

**Quad Summary:** Florin (3812144)

**Sources:**
- BRA88R0001 BRATTSTROM, B.H. & D.F. MESSER - CURRENT STATUS OF THE SOUTHWESTERN POND TURTLE (CLEMMYS MARMORATA PALLIDA), IN SOUTHERN CALIFORNIA 1988-XX-XX
- HOL88U0002 HOLLAND, D.C. (UNIVERSITY OF SOUTHWESTERN LOUISIANA) - MUSEUM RECORDS COLLECTED AND COMPILED BY HOLLAND. 1988-03-23
- PAT03F0001 PATTERSON, L. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR ACTINEMYS (=EMYS) MARMORATA (MARMORATA) 2003-09-21
- PAT03F0002 PATTERSON, L. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR ACTINEMYS (=EMYS) MARMORATA (MARMORATA) 2003-09-23
Map Index Number: 11275
EO Index: 623
Key Quad: Florin (3812144)
Element Code: ARAAD02030
Occurrence Number: 449
Occurrence Last Updated: 1996-03-07

Scientific Name: Emys marmorata
Common Name: western pond turtle

Listing Status: Federal: None
Rare Plant Rank: BLM_S-Sensitive
State: None
Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks: Global: G3G4
IUCN_VU-Vulnerable
State: S3
USFS_S-Sensitive

General Habitat:
A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

Micro Habitat:
NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

Last Date Observed: XXXX-XX-XX
Occurrence Type: Natural/Native occurrence
Last Survey Date: XXXX-XX-XX
Occurrence Rank: Unknown
Owner/Manager: SAC COUNTY, PVT
Trend: Unknown
Presence: Presumed Extant

Location:
BEACH LAKE PRESERVE; APPROX. 1.5 MILES SOUTH OF FREEPORT.

Detailed Location:
Ecological:

Threats:

General:
COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.

PLSS: T07N, R04E, Sec. 25 (M)
Accuracy: nonspecific area
Area (acres): 61
UTM: Zone-10 N4254853 E631081
Latitude/Longitude: 38.43234 / -121.49818
Elevation (feet): 10

County Summary:
Sacramento
Florin (3812144)

Sources:
BRA88R0001 BRATTSTROM, B.H. & D.F. MESSER - CURRENT STATUS OF THE SOUTHWESTERN POND TURTLE (CLEMMYS MARMORATA PALLIDA), IN SOUTHERN CALIFORNIA 1988-XX-XX
HOL88U0002 HOLLAND, D.C. (UNIVERSITY OF SOUTHWESTERN LOUISIANA) - MUSEUM RECORDS COLLECTED AND COMPILED BY HOLLAND 1988-03-23
### Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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<td>Micro Habitat:</td>
<td>NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.</td>
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| Detailed Location: |                     |
|                   |                     |
| Ecological:       |                     |
| Threats:          |                     |

| General:          | COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN. |

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<td>Sacramento</td>
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<tr>
<td>BRA88R0001</td>
<td>BRATTSTROM, B.H. &amp; D.F. MESSER - CURRENT STATUS OF THE SOUTHWESTERN POND TURTLE (CLEMMYS MARMORATA PALLIDA), IN SOUTHERN CALIFORNIA 1988-XX-XX</td>
</tr>
<tr>
<td>HOL88U0002</td>
<td>HOLLAND, D.C. (UNIVERSITY OF SOUTHWESTERN LOUISIANA) - MUSEUM RECORDS COLLECTED AND COMPILED BY HOLLAND. 1988-03-23</td>
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### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<td>Occurrence Number:</td>
<td>532</td>
<td>Occurrence Last Updated:</td>
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**Scientific Name:** *Emys marmorata*  
**Common Name:** western pond turtle

**Listing Status:**  
- Federal: None  
- State: None

**CNNDDB Element Ranks:**  
- Global: G3G4  
- State: S3

**General Habitat:**  
A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

**Micro Habitat:**  
NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

**Last Date Observed:**  
2001-07-11

**Owner/Manager:** ELK GROVE COMM SERVICES DIST  
**Presence:** Presumed Extant  
**Location:** NE Elk Grove. Laguna Ck 0.3 Miles South Intersection Elk Grove Florin/ Bond Rd & 0.2 Miles East of Elk Grove Florin Rd.

**Detailed Location:**  
OBSERVED BASKING ON WOODY DEBRIS WITHIN CREEK.

**Ecological:**  
HABITAT CONSISTS OF VALLEY-FOOTHILL RIPARIAN PLANT COMMUNITY DOMINATED BY VALLEY OAK WITH UNDERSTORY OF HIMALAYAN BLACKBERRY. EMERGENT VEGETATION (CATTAILS, BULRUSH) AND LARGE AMOUNT OF ALGAE IN CREEK.

**Threats:**  
CREEK & TRAILS EXPERIENCE HEAVY USE BY HUMANS.

**General:**  
1 ADULT OBSERVED.

**PLSS:** T07N, R06E, Sec. 31 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4253561 E642371  
**Latitude/Longitude:** 38.41897 / -121.36913  
**Elevation (feet):** 35

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
FULL1F0001  
FULLEN, K. (U.S. DEPARTMENT OF AGRICULTURE) - FIELD SURVEY FORM FOR CLEMMS MARMORATA MARMORATA 2001-07-11
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 60252
**EO Index:** 60288
**Key Quad:** Florin (3812144)
**Occurrence Number:** 633
**Occurrence Last Updated:** 2005-02-28

**Scientific Name:** *Emys marmorata*
**Common Name:** western pond turtle

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3G4
- **State:** S3

**General Habitat:**
A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

**Micro Habitat:**
NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

**Last Date Observed:** 2004-XX-XX
**Occurrence Type:** Natural/Native occurrence
**Occurrence Last Updated:** 2005-02-28
**Occurrence Rank:** Fair

**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.

**Threats:**
THREATENED BY INTRODUCED PREDATORS/COMPETITORS (BULLFROGS, BASS, AND RED-EARED SLIDERS).

**General:**
6 MALES AND 4 FEMALES WERE CAPTURED THROUGHOUT THE 2004 SEASON; ALL WERE VERY OLD ADULTS AND INCLUDED ONE GRAVID FEMALE.

**PLSS:** T07N, R05E, Sec. 20 (M)
**Accuracy:** 2/5 mile
**Area (acres):** 0

**UTM:** Zone-10 N4256541 E635188
**Latitude/Longitude:** 38.44693 / -121.45081
**Elevation (feet):** 15

**County Summary:** Florin (3812144)

**Sources:**
PATTERSON, L. (CALIFORNIA DEPARTMENT OF WATER RESOURCES) - FIELD SURVEY FORM FOR ACTINEMYS (=EMYS) MARMORATA (MARMORATA) 2004-XX-XX
Map Index Number: 78642
Key Quad: Taylor Monument (3812165)
Occurrence Number: 1216

Scientific Name: Emys marmorata
Common Name: western pond turtle

Listing Status: Federal: None
State: None

Rare Plant Rank:
BLM_S-Sensitive
CDFW_SSC-Species of Special Concern
IUCN_VU-Vulnerable
USFS_S-Sensitive

CNDDDB Element Ranks: Global: G3G4
State: S3

General Habitat:
A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.

Micro Habitat:
NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

Last Date Observed: 2009-04-07

Occurrence Type: Natural/Native occurrence
Occurrence Rank: Good
Trend: Unknown

Owner/Manager: PVT-NATOMAS MUTUAL WATER CO
Presence: Presumed Extant

Location:
JUST WEST OF THE SACRAMENTO RIVER AT THE ELKHORN PUMPING STATION, NORTHWEST OF THE SACRAMENTO INTERNATIONAL AIRPORT.

Detailed Location:
NEST IS LOCATED NEAR NORTH EDGE OF NORTHMOST POND - NEAR EDGE OF DIRT ROAD.

Ecological:
HABITAT CONSISTS OF ANNUAL GRASSLAND, VALLEY OAK, BLACK WILLOW, COYOTEBRUSH, & BLUE ELDERBERRY IN AREA WITH SANDY SOILS. THERE IS A COMPLEX OF SEVERAL PONDS, IRRIGATION CANALS, & DRAINAGE DITCHES AT THIS SITE. GOOD HABITAT E OF GARDEN HWY.

Threats:
THREATS INCLUDE COLLISIONS WITH VEHICLES, LEVEE REPAIR WORK, AND CONSTRUCTION OF SEDIMENTATION BASIN.

General:
4 JUVENILES (ASSUMED OVERWINTERING) OBSERVED ON 27 MAR 2009 IN A NEST COVERED WITH OAK LEAF LITTER. 1 ADULT FOUND DOR ON 7 APR 2009. SURROUNDING LAND INCLUDES GOLF COURSE, AGRICULTURE, AND AG WATER SUPPLY OPERATIONS.

PLSS: T10N, R03E, Sec. 23 (M)
UTM: Zone-10 N4284926 E620237
Accuracy: specific area
Area (acres): 9
Latitude/Longitude: 38.70480 / -121.61720
Elevation (feet): 32

County Summary:
Sacramento
Taylor Monument (3812165)

Sources:
DOW09F0001 DOWNS, J. (EDAW, INC.) - FIELD SURVEY FORM FOR ACTINEMYS MARMORATA MARMORATA 2009-03-27
DOW09F0002 DOWNS, J. (EDAW, INC.) - FIELD SURVEY FORM FOR ACTINEMYS MARMORATA MARMORATA 2009-04-07
**Scientific Name:** Thamnophis gigas

**Common Name:** giant garter snake

**Listing Status:**
- Federal: Threatened
- State: Threatened

**CNDDDB Element Ranks:**
- Global: G2
- State: S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES. THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Micro Habitat:**

**Last Date Observed:** 2006-05-28

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Unknown

**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
DRAINAGE CANALS ALONG MEISTER WAY, POWERLINE RD, AND I-5, EAST OF SACRAMENTO INTERNATIONAL AIRPORT, NW OF NATOMAS.

**Detailed Location:**
MAPPED TO PROVIDED COORDINATES AND GENERAL LOCATION DESCRIPTION OF "POWER LINE RD, 0.2 MILES S BAYOU WAY" & "MEISTER RD, E SACTO. METRO. AIRPORT." CAPTURED SNAKES WERE WEIGHED, MEASURED, PIT-TAGGED & RELEASED.

**Ecological:**
1986: CANALS 10 FT WIDE WITH STEEP BANKS. BANKS SUPPORTED CATTAILS, TULES, BLACKBERRIES & GRASSES. 2003: FALLOW LAND TO THE NORTH, PREPARATION FOR METRO AIRPARK. WEEDY DICOTS & GRASSES.

**Threats:**
GENERALLY THREATENED BY AGRICULTURE, URBANIZATION, FLOODING, POLLUTION, WETLAND RECLAMATION, & PEST CONTROL.

**General:**

**PLSS:** T10N, R04E, Sec. 32 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 163  
**UTM:** Zone-10 N4281609 E623844  
**Latitude/Longitude:** 38.67442 / -121.57632  
**Elevation (feet):** 15

**County Summary:** Sacramento  
**Quad Summary:** Taylor Monument (3812165)
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<td>BRO80U0001</td>
<td>BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG). 1980-XX-XX</td>
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<td>HAN06D0001</td>
<td>HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX</td>
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<td>HAN86F0001</td>
<td>HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX</td>
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<tr>
<td>HAN96R0001</td>
<td>HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12</td>
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<td>USG04D0001</td>
<td>USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09</td>
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<td>WYL04R0001</td>
<td>WYLIE, G. ET AL. (U.S. GEOLOGICAL SURVEY-WESTERN ECOLOGICAL RESEARCH CENTER) - MONITORING GIANT GARTER SNAKES IN THE NATOMAS BASIN: 2003 RESULTS 2004-01-XX</td>
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**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

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<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
<td><strong>Location:</strong></td>
<td>VICINITY OF FISHERMANS LAKE &amp; WEST DRAINAGE CANAL, ABOUT 1 MILE SW OF EL CENTRO RD &amp; DEL PASO RD INTERSECTION.</td>
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**Detailed Location:**  
MAPPED TO PROVIDED COORDINATES AND MAPS. LARGEST CONCENTRATION OF DETECTIONS WAS IN AREA JUST WEST OF GIARRE WAY. GENERAL LOCATION DESCRIBED AS "WEST DRAINAGE CANAL, 1 MILE W TO 1 MILE S INTERSECTION EL CENTRO RD AND DEL PASO RD."

**Ecological:**  
FISHERMANS LAKE IS A WIDE, SHALLOW PONDED PORTION OF WEST DRAINAGE CANAL, WHICH SUPPORTS TULE/CATTAIL MARSH & RIPARIAN WOODLAND OF COTTONWOOD, WILLOW, POISON OAK & BLACKBERRY. ADJACENT AGRICULTURE WAS RICE.

**Threats:**  
AGRICULTURE, FLOOD CONTROL/WETLAND RECLAMATION, URBANIZATION, FLOODING, INTRODUCED PREDATOR, PEST CONTROL, POLLUTION.

**General:**  

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**County Summary:**  
Sacramento

**Quad Summary:**  
Taylor Monument (3812165)
Sources:

HAN05F0004 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-05-26
HAN05U0001 HANSEN, E. - SHAPEFILE (CREATED FROM EXCEL FILE FROM HANSEN) OF THAMNOPHIS GIGAS LOCATIONS FOR YEARS 2001-2004. ALSO INCLUDES HARDCOPY OF ATTRIBUTE TABLE LOCATED IN ELEMENT FILE. 2005-07-23
HAN06D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX
HAN06F0001 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-05-04
HAN06F0002 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-07-23
HAN07D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2007. 2007-XX-XX
HAN08D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2008. 2008-XX-XX
HAN09D0002 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2009 [SC-003881] 2009-XX-XX
HAN10D0001 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2010 [SC-003881] 2010-XX-XX
HAN11D0001 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2011 [SC-003881] 2011-XX-XX
HAN86F0001 HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX
HAN96R0001 HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
RAI92F0004 RAINIE, R. & E. RAINIE - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1992-06-XX
USG04D0001 USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09
WAR06R0001 WARNE, B. ET AL. (U.S. FISH AND WILDLIFE SERVICE-SACRAMENTO) - GIANT GARTER SNAKE (THAMNOPHIS GIGAS) 5-YEAR REVIEW: SUMMARY AND EVALUATION 2003-09-XX
YOR93F0006 YORK, R. (CALIFORNIA ENERGY COMMISSION) - FIELD SURVEY FORM FOR BUTEO SWAINSONI (NEST SITE) WITH INCIDENTAL SIGHTING OF GIANT GARTER SNAKE. 1993-06-02
YOR93F0010 YORK, R. & D. ANDERSON (CALIFORNIA ENERGY COMMISSION) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1993-06-02
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<th>Scientific Name:</th>
<th>Thamnophis gigas</th>
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<td>General Habitat:</td>
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<td>Micro Habitat:</td>
<td>THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.</td>
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<td>Location:</td>
<td>VICINITY OF ELK GROVE CREEK, JUST NW OF ELK GROVE AND HWY 99 INTERSECTION, ABOUT 1.2 MILES WNW OF ELK GROVE POST OFFICE.</td>
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### Sources:
- BRO80U0001 BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG). 1980-XX-XX
- CAS40S0001 CALIFORNIA ACADEMY OF SCIENCES - 1900-1940 CAS HERPETOLOGY HOLDINGS (INCLUDES STANFORD UNIVERSITY COLLECTIONS) FOR THAMNOPHIS GIGAS 1940-XX-XX
- HAN82R0001 HANSEN, G.E. - "STATUS OF THE GIANT GARTER SNAKE (THAMNOPHIS COUCHII GIGAS), ALONG PORTIONS OF LAGUNA AND ELK GROVE CREEKS, SACRAMENTO COUNTY, CA." 1982-XX-XX
- HOL85U0003 HOLLAND, R.F. - PERSONAL COMMUNICATION REGARDING THAMNOPHIS (COUCHII) GIGAS. 1985-08-23
**Occurrence Report**

California Department of Fish and Wildlife  
California Natural Diversity Database

**Map Index Number:** 11413  
**EO Index:** 27599  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 14  
**Occurrence Last Updated:** 2014-12-04

**Scientific Name:** *Thamnophis gigas*  
**Common Name:** giant garter snake

**listing Status:**  
**Federal:** Threatened  
**State:** Threatened

**CNDDDB Element Ranks:**  
**Global:** G2  
**State:** S2

**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1976-08-03  
**Last Survey Date:** 1987-XX-XX  
**Owner/Manager:** PVT  
**Presence:** Possibly Extirpated

**Location:**  
LAGUNA CREEK, JUST SOUTH OF SHEL DON RD, ABOUT 0.3 MI W OF BRUCEVILLE RD, ELK GROVE.

**Detailed Location:**  
MAPPED ACCORDING TO PROVIDED LOCATION DESCRIPTION OF "SHEL DON RD AT CREEK CROSSING, 0.3 MI W OF BRUCEVILLE RD" AND "200 FT S SHEL DON 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.

**Threats:**  
AGRICULTURE & GRAZING, AREA BECAME HEAVILY RESIDENTIAL BY 2002 (AERIALS).

**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.

**PLSS:**  
T07N, R05E, Sec. 27 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:**  
Zone-10 N4255470 E637628  
**Latitude/Longitude:** 38.43691 / -121.42307  
**Elevation (feet):** 25

**County Summary:**  
Sacramento  
Fiorin (3812144)

**Sources:**

- BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG). 1980-XX-XX
- HANSEN, G.E. - "STATUS OF THE GIANT GARTER SNAKE (THAMNOPHIS COUCHII GIGAS), ALONG PORTIONS OF LAGUNA AND ELK GROVE CREEKS, SACRAMENTO COUNTY, CA." 1982-XX-XX
### Scientific Name: *Thamnophis gigas*

- **Common Name:** giant garter snake
- **Listing Status:**
  - Federal: Threatened
  - State: Threatened
- **CNDDB Element Ranks:**
  - Global: G2
  - State: S2
- **General Habitat:**
  - Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals & irrigation ditches.
- **Micro Habitat:**
  - This is the most aquatic of the garter snakes in California.

### Last Date Observed:
- **1992-07-19**

### Occurrence Type:
- Natural/Native occurrence

### 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).

### Threats:
- Site was sprayed by herbicides in 1991.

### General:

### PLSS:
- T07N, R04E, Sec. 25 (M)

### UTM:
- Zone-10 N4254384 E631417
- Latitude/Longitude: 38.42806 / -121.49442
- Elevation (feet): 10

### County Summary:
- Sacramento
- Florin (3812144), Clarksburg (3812145)

### Sources:
- BRO80U0001 BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG). 1980-XX-XX
- NOS92F0001 NOSAL, T. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1992-07-19
### Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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**Scientific Name:** *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- **Federal:** Threatened
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 2008-07-07

**Last Survey Date:** 2008-07-07

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
ALONG RIEGO RD ABOUT 0.3-0.7 MILES W OF HWY 99 AND DRAINAGE CANALS 0.9 MI WNW OF RIEGO RD & HWY 99 INTERSECTION.

**Detailed Location:**
MAPPED TO PROVIDED COORDINATES AND LOCATION DESCRIPTIONS. 1999 CAPTURES ALONG N-S ORIENTED CANAL (W FEATURE). PROVIDED LOCATION DESCRIPTION FOR 1976 DETECTION WAS “RIEGO RD APPROXIMATELY 0.5 KM WEST OF SR-99/70.”

**Ecological:**
DRAINAGE CANAL.

**Threats:**
FLOODING, VEGETATION CONTROL/MAINTENANCE, AG ACTIVITIES (VEHICLE & FARM EQUIPMENT TRAFFIC), POLLUTION, & INTRODUCED SP.

**General:**

**PLSS:**
- **T10N, R04E, Sec. 04 (M)**

**Accuracy:** specific area

**Area (acres):** 59

**UTM:**
- Zone-10 N4290042 E625787

**Latitude/Longitude:** 38.75012 / -121.55246

**Elevation (feet):** 20

**County Summary:**
- Sutter
- Taylor Monument (3812165), Verona (3812175)

**Sources:**
- BRO80U0001 BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG). 1980-XX-XX
- HAN06D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX
- HAN08D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2008. 2008-XX-XX
- HAN96R0001 HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
- USG04D0001 USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09
## Scientific Name: Thamnophis gigas

### Common Name: giant garter snake

### Listing Status:
- **Federal:** Threatened
- **State:** Threatened

### CNDDDB Element Ranks:
- **Global:** G2
- **State:** S2

### General Habitat:
Preferes freshwater marsh and low gradient streams. Has adapted to drainage canals & irrigation ditches.

### Micro Habitat:
This is the most aquatic of the garter snakes in California.

### Last Date Observed:
1996-XX-XX

### Last Survey Date:
1996-XX-XX

### Presence:
Presumed Extant

### Location:
NORTH DRAINAGE CANAL AT RIEGO RD, 0.7 MI E OF POWERLINE RD, NNW OF SACRAMENTO.

### Detailed Location:
Ecological:
Irrigation canal, 30 ft wide, 3 ft deep, slow moving water. Berms on each side have been cleaned of vegetation, now supports thin margin of grasses & cattails.

### Threats:
Flood control/wetland reclamation; urbanization; flooding; introduced predators; pest control; pollution.

### General:
One adult found freshly run over by a vehicle on 15 Apr 1986 - Deposited w/CDFG. Unknown number of snakes observed during 1996.

### PLSS:
T10N, R04E, Sec. 05 (M)

### Accuracy:
1/5 mile

### Area (acres):
0

### UTM:
Zone-10 N4289847 E624823
Latitude/Longitude: 38.74850 / -121.56358

### Elevation (feet):
20

### County Summary:
Sutter
Taylor Monument (3812165), Verona (3812175)

### Sources:
- **HAN86F0001** - HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX
- **HAN96R0001** - HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
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<td>Location:</td>
<td>POWERLINE RD, ABOUT 0.7 MI S OF RIEGO RD AND 1.7 MI N OF ELVERTA RD, E OF SACRAMENTO RIVER, NNW OF SACRAMENTO.</td>
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<td>Ecological:</td>
<td>SMALL DRAINAGE DITCHES BORDERING POWERLINE RD, STANDS OF CATTAIL IN DITCH, GRASSES &amp; LOW PERENNIALS (BUCHWHEAT &amp; BLACKBERRIES) ALONG DITCH BANKS. LITTLE OPEN WATER. AGRICULTURAL ACTIVITY IN ADJACENT FIELDS WAS RICE.</td>
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<td>Threats:</td>
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<td>ONE FOUND DEAD ON ROAD (POOR CONDITION, NOT PRESERVED) ON 15 APR 1986. 1 YOUNG ADULT MALE FOUND DEAD ON ROAD ON 15 JUN 2008. 1 ADULT FEMALE FOUND DEAD ON ROAD ON 8 AUG 2008. 1 ADULT OBSERVED &quot;RUN OVER ON ROAD&quot; ON 17 SEP 2010.</td>
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<td>HAN86F0001 HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX</td>
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<tr>
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<td>HUA10F0003 HUANG, J. (AECOM) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2010-09-17</td>
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### Map Index Number: 11064  
**EO Index:** 27567

### Key Quad: Taylor Monument (3812165)  
**Element Code:** ARADB36150

### Occurrence Number: 63  
**Occurrence Last Updated:** 2014-07-21

### Scientific Name: *Thamnophis gigas*  
**Common Name:** giant garter snake

### Listing Status:  
**Federal:** Threatened  
**State:** Threatened

### CNDDB Element Ranks:  
**Global:** G2  
**State:** S2

### General Habitat:  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

### Micro Habitat:  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

### Last Date Observed: 2012-05-22  
**Occurrence Type:** Natural/Native occurrence

### Last Survey Date: 2012-05-22  
**Occurrence Rank:** Good

### Owner/Manager: SAC INTERNATIONAL AIRPORT  
**Trend:** Unknown

### Presence: Presumed Extant

### Location:  
PRICHARD LAKE, ABOUT 1.1 MILES NW OF POWER LINE RD & ELVERTA RD INTERSECTION, EAST OF GARDEN HIGHWAY, NW OF SACRAMENTO.

### Detailed Location:  
MAPPED TO PROVIDED COORDINATES & MAPS. OTHER SNAKES WERE OBSERVED WITHIN AREA IN 2002, BUT COULD NOT BE CLEARLY IDENTIFIED DUE TO EVASIVENESS; SITE APPEARS TO CONTAIN A VIABLE GGS POPULATION. SITE INTENDED FOR WETLAND RESTORATION IN 2004.

### Ecological:  
HABITAT CONSISTS OF A RICE FILEDS AND WETLAND/MARSH CHARACTERIZED BY A DEEP CENTRAL CHANNEL; WETLAND AREA BOUNDED BY SCIRPUS, TYPHA, AND LUDWIGEA, AND BANKSIDES DOMINATED BY RUDERALS AND RUBUS.

### Threats:  
FLOOD CONTROL/WETLAND RECLAMATION, URBANIZATION, FLOODING, INTRODUCED PREDATORS, PEST CONTROL, VEHICLES, & POLLUTION.

### General:  

### PLSS: T10N, R04E, Sec. 18 (M)  
Accuracy: specific area  
**Area (acres):** 67

### UTM: Zone-10 N4287573 E622529  
Latitude/Longitude: 38.72834 / -121.59038  
**Elevation (feet):** 15

### County Summary: Sacramento  
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<td>GERSON, R. (U.S. FISH AND WILDLIFE SERVICE) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2002-09-10</td>
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<td>HAN03F0007</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2003-09-XX</td>
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<td>HAN03R0002</td>
<td>HANSEN, E.C. - BASELINE SURVEYS FOR GIANT GARTER SNAKE (THAMNOPHIS GIGAS) AT THE PRICHARD LAKE RESTORATION PROJECT SITE: SACRAMENTO COUNTY, CALIFORNIA. 2003-12-22</td>
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<td>HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2008. 2008-XX-XX</td>
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<td>HAN09D0002</td>
<td>HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2009 [SC-003881] 2009-XX-XX</td>
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<td>HAN10D0001</td>
<td>HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2010 [SC-003881] 2010-XX-XX</td>
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<td>HAN11D0001</td>
<td>HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2011 [SC-003881] 2011-XX-XX</td>
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<tr>
<td>HAN12D0001</td>
<td>HANSEN, E. - ERIC C. HANSEN'S GIANT GARTER SNAKE OBSERVATIONS [SC-003881] 2012-XX-XX</td>
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<tr>
<td>HAN86F0001</td>
<td>HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX</td>
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<tr>
<td>HAN96R0001</td>
<td>HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12</td>
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<tr>
<td>SMY02F0001</td>
<td>SMYLY, J. (HARDING ESE, INC.) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2002-07-23</td>
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### Scientific Name:  *Thamnophis gigas*

**Common Name:** giant garter snake

### Listing Status:
- **Federal:** Threatened
- **State:** Threatened

### CNDDDB Element Ranks:
- **Global:** G2
- **State:** S2

### General Habitat:
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

### Micro Habitat:
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

### Last Date Observed: 1986-04-28

### Last Survey Date: 1986-04-28

### Owner/Manager: UNKNOWN

### Presence: Presumed Extant

### Location:
0.5 MI N OF ELVERTA RD, ONE MI W OF POWERLINE RD, 1.5 MI NORTH OF SACRAMENTO METRO AIRPORT.

### Detailed Location:

#### Ecological:
N-S DRAIN (DITCH) LINKING 2 E-W DRAINS; 20 FT WIDE, LINED WITH COTTONWOODS, WILLOWS, & LUSH ANNUAL VEGETATION. ADJACENT AG FIELDS CONSISTS OF RICE & OTHER GRAINS (N & W) & SMALL GRAZED GRASSLAND TO THE SOUTH.

#### Threats:
FLOOD CONTROL/WETLAND RECLAMATION; URBANIZATION; FLOODING; INTRODUCED PREDATORS; PEST CONTROL; POLLUTION.

#### General:
ONE ADULT OBSERVED. LARGE COLONY (100+) OF NIGHT HERONS IN NEARBY WILLOW THICKET.

### PLSS:
- **T10N, R03E, Sec. 13 (M)**

### UTM:
- **Zone-10 N4286783 E622094**

### Accuracy:
1/5 mile

### Area (acres): 0

### Latitude/Longitude:
38.72128 / -121.59552

### Elevation (feet): 20

### County Summary:
Taylor Monument (3812165)

### Sources:
- HAN86F0001  HANSEN, G. E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX
- HAN96R0001  HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
Map Index Number: 11108
EO Index: 27563
Key Quad: Taylor Monument (3812165)
Element Code: ARADB36150
Occurrence Number: 65
Occurrence Last Updated: 2014-12-05

Scientific Name: Thamnophis gigas
Common Name: giant garter snake

Listing Status:
  Federal: Threatened
  State: Threatened

Rare Plant Rank:
Other Lists: IUCN_VU-Vulnerable

CNDDDB Element Ranks:
  Global: G2
  State: S2

General Habitat:
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

Micro Habitat:
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

Last Date Observed: 2007-05-19
Last Survey Date: 2007-05-19
Owner/Manager: PVT-NATOMAS MUTUAL WATER CO
Presence: Presumed Extant

Location:
IRRIGATION CANALS NEAR JUNCTION OF POWERLINE RD & ELVERTA RD, ~1.6 MI E OF GARDEN HWY, NNE OF SACRAMENTO INT'L AIRPORT.

Detailed Location:
MAPPED TO PROVIDED COORDINATES AND LOCATION DESCRIPTIONS OF: ELVERTA RD., 1.5 MILES E GARDEN HWY (1976); CANAL ON EAST SIDE/CROSSING POWER LINE RD. 0.25-0.3 MI N ELVERTA RD. (1986 & 1990); 1ST & 2ND CHECK DAMS N OF ELVERTA RD. (1992).

Ecological:

Threats:
VEHICLES, URBANIZATION, WATER QUALITY & MGMT, FLOODING, VEG CONTROL & MAINTENANCE ACTIVITIES, INTRODUCED PREDATORS.

General:

PLSS: T10N, R04E, Sec. 17 (M)
Accuracy: nonspecific area
Area (acres): 53

UTM: Zone-10 N4286186 E623755
Latitude/Longitude: 38.71567 / -121.57652
Elevation (feet): 25

County Summary:
Sacramento

Quad Summary:
Taylor Monument (3812165)
Sources:

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<th>Source Code</th>
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<tr>
<td>BRO80U0001</td>
<td>BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG). 1980-XX-XX</td>
</tr>
<tr>
<td>BRO90F0003</td>
<td>BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1990-09-14</td>
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<tr>
<td>HAN06D0001</td>
<td>HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX</td>
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<td>HAN06F0013</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-09-20</td>
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<td>HAN07D0001</td>
<td>HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2007. 2007-XX-XX</td>
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<tr>
<td>HAN86F0001</td>
<td>HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX</td>
</tr>
<tr>
<td>HAN96R0001</td>
<td>HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12</td>
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<tr>
<td>USG04D0001</td>
<td>USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09</td>
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<tr>
<td>WOR92F0001</td>
<td>WORKMAN, M. &amp; T. KING (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1992-04-27</td>
</tr>
<tr>
<td>WYL04R0001</td>
<td>WYLIE, G. ET AL. (U.S. GEOLOGICAL SURVEY-WESTERN ECOLOGICAL RESEARCH CENTER) - MONITORING GIANT GARTER SNAKES IN THE NATOMAS BASIN: 2003 RESULTS 2004-01-XX</td>
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</table>
### Map Index Number: 11091
### EO Index: 27562
### Key Quad: Taylor Monument (3812165)
### Occurrence Number: 66
### Occurrence Last Updated: 1995-08-10

#### Scientific Name: *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- **Federal:** Threatened
- **State:** Threatened

**CNDDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1986-04-15
**Occurrence Type:** Natural/Native occurrence
**Occurrence Rank:** Excellent
**Trend:** Unknown
**Presence:** Presumed Extant

**Location:**
CREEK/MARSH 0.3 MI WEST OF POWERLINE ROAD AND 0.3 MI SOUTH OF ELVERTA ROAD, 1 MI NE OF SACRAMENTO METRO AIRPORT.

**Detailed Location:**
SMALL (10 FT WIDE), SLOW-MOVING CR CONTAINING LUSH VEG OF WILLOW, COTTONWOOD, TULE, & CATTAIL. CR OVERFLOW PRODUCED WIDE, MARSHY AREA EAST OF CR. AG (RICE) SURROUNDS THIS LOW-LYING WASATE AREA.

**Threats:**
NEW DEVELOPMENT ON AIRPORT PROPERTY (TO THE SOUTH) RAPIDLY ENCROACHING.

**General:**
ONE JUVENILE OBSERVED.

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<th>PLSS</th>
<th>Accuracy</th>
<th>Area (acres)</th>
<th>UTM</th>
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<td>38.70989 / -121.58273</td>
<td>20</td>
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**County Summary:**
Sacramento

**Quad Summary:**

**Sources:**
- HAN86F0001 HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX
- HAN96R0001 HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
### Scientific Name: Thamnophis giga

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<tr>
<th>General Habitat:</th>
<th>Prefer freshwater marsh and low gradient streams. Has adapted to drainage canals &amp; irrigation ditches.</th>
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<tbody>
<tr>
<td>Micro Habitat:</td>
<td>This is the most aquatic of the garter snakes in California.</td>
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<th>Last Date Observed:</th>
<th>1999-06-17</th>
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<td>Presence:</td>
<td>Presumed Extant</td>
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| Location: | SMALL DRAINAGE CANALS N OF ELKHORN BLVD & WEST OF EAST DRAINAGE CANAL, NORTH OF SACRAMENTO. |
| Detailed Location: | ONE CANAL RUNS E-W, PARALLEL TO ELKHORN BLVD & ONE CANAL RUNS N-S, PERPENDICULAR TO ELKHORN BLVD & PARALLEL TO EAST DRAINAGE CANAL. |

| Ecological: | 1986: E-W CANAL WITH STEEP CUT BANKS LINED WITH TULE & CATTAIL. PARALLELS N SIDE OF ABANDONED ROADWAY N OF ELKHORN BLVD. SMALLER DITCH BETWEEN 2 PAVED RDS SUPPORTS THICK STAND OF TULE/CATTAIL. GOOD HABITAT ALL YEAR. |
| Threats:   | FLOOD CONTROL/WETLAND RECLAMATION; URBANIZATION; FLOODING; INTRODUCED PREDATORS; PEST CONTROL; POLLUTION. |

| PLSS: | T10N, R04E, Sec. 26 (M) |
| Accuracy: | nonspecific area   |
| Area (acres): | 44 |

| UTM: | Zone-10 N4283192 E629423 |
| Latitude/Longitude: | 38.68788 / -121.51191 |
| Elevation (feet): | 15 |

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| Latitude/Longitude: | 38.68788 / -121.51191 |
| Elevation (feet): | 15 |

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<tr>
<th>Sources:</th>
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<tbody>
<tr>
<td>HAN86R0001 - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX</td>
</tr>
<tr>
<td>HAN86R0002 - &quot;STATUS OF THE GIANT GARTER SNAKE, THAMNOPSIS COUCHII GIGAS (FITCH), IN THE SOUTHERN SACRAMENTO VALLEY DURING 1986&quot;. 1986-XX-XX</td>
</tr>
<tr>
<td>HAN96R0001 - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12</td>
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<tr>
<td>USG04D0001 - USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09</td>
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**Map Index Number:** 11112  
**EO Index:** 27560

**Key Quad:** Taylor Monument (3812165)  
**Element Code:** ARADB36150

**Occurrence Number:** 68  
**Occurrence Last Updated:** 1995-08-10

**Scientific Name:** *Thamnophis gigas*  
**Common Name:** giant garter snake

**Listing Status:**  
- Federal: Threatened
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G2
- State: S2

**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1986-05-11

**Last Survey Date:** 1986-05-11

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**  
CANAL E OF POWERLINE RD, 0.9 MI S OF ELVERTA RD, 1 MI E OF SACRAMENTO AIRPORT.

**Detailed Location:**

**Ecological:**  
20 FT WIDE IRRIGATION CANAL, W/ELEVATED BERMS ON EACH SIDE; RECENTLY CLEANED & DEVOID OF VEG. BANKS SUPPORT ANNUAL GRASSES, THISTLES, TULES, CATTAILS, & A FEW WILLOWS.

**Threats:**
  
FLOOD CONTROL/WETLAND RECLAMATION; URBANIZATION; FLOODING; INTRODUCED PREDATORS; PEST CONTROL; POLLUTION.

**General:**

2 FEMALES FOUND IN DEPRESSION BY PUMP AT S END OF CANAL. ONE RELEASED AT PRICHARD LAKE, THE SECOND DIED.

**PLSS:** T10N, R04E, Sec. 20 (M)  
**Accuracy:** 1/5 mile

**UTM:** Zone-10 N4284744 E623816  
**Latitude/Longitude:** 38.70267 / -121.57608

**County Summary:**

**Sacramento**
**Quad Summary:**

**Sources:**

HAN86F0001 HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX


HAN96R0001 HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
Sources:

HAN06D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX
HAN06F0007 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-09-01
HAN86F0001 HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX
HAN96R0001 HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
USG04D0001 USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09
WYL04R0001 WYLIE, G. ET AL. (U.S. GEOLOGICAL SURVEY-WESTERN ECOLOGICAL RESEARCH CENTER) - MONITORING GIANT GARTER SNAKES IN THE NATOMAS BASIN: 2003 RESULTS 2004-01-XX

Map Index Number: 11148
Key Quad: Taylor Monument (3812165)
Occurrence Number: 69
Scientific Name: Thamnophis gigas
Common Name: giant garter snake
Listing Status: Federal: Threatened
State: Threatened
CNDBB Element Ranks: Global: G2
State: S2
General Habitat: PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.
Micro Habitat: THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.
Last Date Observed: 2006-09-01
Last Survey Date: 2006-09-01
Owner/Manager: UNKNOWN
Presence: Presumed Extant
Location: CANALS ALONG LONE TREE RD, FROM ABOUT 0.5 MI E OF ELKHORN RD AND METRO PKWY INTERSECTION, JUST N OF I-5.
Detailed Location: MAPPED TO PROVIDED COORDINATES & PROVIDED LOCATION DESCRIPTION OF T 10N, R 4E, Sec 33. GENERAL LOCATION (1986) DESCRIBED AS “THREE PARALLEL DITCHES, RUNNING E-W, INTERSECT N-S RUNNING CANAL AT LONE TREE RD.”
Ecological: SEVERAL DRAINAGE AND IRRIGATION CANALS AND DITCHES; 3 RUNNING EAST-WEST, 1 LARGER RUNNING NORTH-SOUTH. LARGER DITCH WAS LINED WITH CATTAIL, TULE, WILLOW, COTTONWOOD, AND BLACKBERRY. MIDDLE DITCH WAS SMALLER AND SLIGHTLY LESS VEGETATED.
Threats: PROPOSED DEVELOPMENT, LACK OF WATER, FLOODING, VEGETATION CONTROL & MAINTENANCE ACTIVITIES, AND INTRODUCED PREDATORS.
General: 1 ADULT SNAKE OBSERVED ON 4 AUG 1986; EXACT LOCATION UNKNOWN. 1 FEMALE CAPTURED ON 1 JUL, 1 MALE AND 1 FEMALE CAPTURED ON 11 JUL, & 1 FEMALE CAPTURED ON 14 JUL 1999. 0 CAPTURED BETWEEN 21 JUL-6 AUG 2003. 2 FEMALES CAPTURED ON 1 SEP 2006.
PLSS: T10N, R04E, Sec. 33 (M) Accuracy: specific area Area (acres): 24
UTM: Zone-10 N4282513 E625433 Latitude/Longitude: 38.68234 / -121.55789 Elevation (feet): 15
County Summary: Sacramento
Specific Area: Taylor Monument (3812165)
SCIENTIFIC NAME: *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- Federal: Threatened
- State: Threatened

**Rare Plant Rank:**
- Global: G2
- State: S2

**Other Lists:** IUCN_VU-Vulnerable

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1986-03-25
**Last Survey Date:** 1986-03-25
**Owner/Manager:** UNKNOWN

**Presence:** Possibly Extirpated

**Location:**
BAYOU WAY, 0.5 MI SW OF HWY 99/I-5 INTERCHANGE, APPROXIMATELY 1 MI E OF POWERLINE RD, SACRAMENTO.

**Detailed Location:**

**Ecological:**
FLOOD CONTROL/WETLAND RECLAMATION; URBANIZATION; FLOODING; INTRODUCED PREDATORS; PEST CONTROL; POLLUTION.

**Threats:**
ONE JUVENILE FOUND DEAD ON BAYOU WAY BESIDE CANAL - SPECIMEN HOUSED AT DFG.

**PLSS:** T09N, R04E, Sec. 04 (M)
**Accuracy:** 1/5 mile
**Area (acres):** 0

**UTM:** Zone-10 N4280749 E626539
**Latitude/Longitude:** 38.66629 / -121.54551
**Elevation (feet):** 20

**County Summary:**
Sacramento

**Sources:**
- HAN86F0001 HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX
- HAN96R0001 HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

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**Map Index Number:** 11199  
**EO Index:** 27555  
**Key Quad:** Taylor Monument (3812165)  
**Element Code:** ARADB36150  
**Occurrence Number:** 72  
**Occurrence Last Updated:** 2014-12-12

**Scientific Name:** *Thamnophis gigas*  
**Common Name:** giant garter snake

**Listing Status:**  
**Federal:** Threatened  
**State:** Threatened

**CNDDB Element Ranks:**  
**Global:** G2  
**State:** S2

**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last DateObserved:** 1986-06-25  
**Last Survey Date:** 1986-06-25  
**Owner/Manager:** UNKNOWN

**Presence:** Possibly Extirpated  
**Location:**  
VICINITY OF EL CENTRO ROAD & DEL PASO ROAD INTERSECTION, ABOUT 0.4 MILES WEST OF I-5, NATOMAS, NORTH OF SACRAMENTO.

**Detailed Location:**  
1980 SNAKE COLLECTED AT EL CENTRO RD AT DEL PASO RD. 1986 LOCATION DESCRIPTION WAS "SMALL (5-10 FT WIDE) ROADSIDE DITCHES PARALLELING EL CENTRO RD ON BOTH E & W SIDES & THOSE PARALLELING DEL PASO ON N & S CONVERGE HERE."

**Ecological:**  
1986: STEEP 10 FT BANKS SUPPORT MOSTLY ANNUAL GRASSES & THISTLES, WITH SOME TULE & CATTAIL IN DITCHES. 2008 AERIAL PHOTOS SHOW THIS AREA IS ALMOST COMPLETELY DEVELOPED.

**Threats:**  
FLOOD CONTROL/WETLAND RECLAMATION, URBANIZATION, FLOODING, INTRODUCED PREDATOR, PEST CONTROL, POLLUTION.

**General:**  
1 COLLECTED ON 1 AUG 1980 BY G. HANSEN (CAS# 178587, DFGHM# 75). 1 ADULT AND 2 JUVENILES OBSERVED ON 25 JUN 1986 BASKING BETWEEN IN CRACKS BETWEEN PIECES OF CONCRETE RIPRAP AT CULVERT IN SW CORNER OF INTERSECTION.

**PLSS:** T09N, R04E, Sec. 09 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4279592 E627055  
**Latitude/Longitude:** 38.65579 / -121.53979  
**Elevation (feet):** 17

---

**Sources:**

- BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG). 1980-XX-XX
- HANSEN, G. (CALIFORNIA ACADEMY OF SCIENCES) - CAS HERPETOLOGICAL SPECIMEN #178587, COLLECTED AT EL CENTRO RD AT DEL PASO RD., SACTO., CA 1980-06-01
- HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX

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Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch

Report Printed on Tuesday, September 15, 2015

Information Expires 3/1/2016

Page 432 of 843
## Map Index Number: 11265
### EO Index: 27554
### Key Quad: Taylor Monument (3812165)
### Occurrence Number: 73
### Occurrence Last Updated: 2014-12-05

### Scientific Name: *Thamnophis gigas*
### Common Name: giant garter snake

### Listing Status:
- **Federal**: Threatened
- **State**: Threatened

### CNDDB Element Ranks:
- **Global**: G2
- **State**: S2

### General Habitat:
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

### Micro Habitat:
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

### Last Date Observed: 1998-06-26
### Last Survey Date: 1998-06-26
### Owner/Manager: UNKNOWN
### Presence: Possibly Extirpated

### Location:
ALONG DEL PASO RD, BTWN TRUXEL RD & E DRAINAGE CANAL, 1.9 MI SE OF HWY 99 & I-5 INTERCHANGE, NATOMAS, N OF SACRAMENTO.

### Detailed Location:
MAPPED TO PROVIDED COORDINATES & LOCATION DESCRIPTION OF "CANAL N DEL PASO RD., W EAST DRAINAGE CANAL." 1980 SNAKE (CAS #178588, DFGHM #76) COLLECTED "DEL PASO RD. 0.2 W. EAST DRAINAGE CANAL 1.2 MI E HWY 99 - I-5."

### Ecological:
SMALL ROADSIDE DRAINAGE DITCH PARALLELING N EDGE OF ROAD. IN 1986, STEEP BANKS WITH GRASSES & CATTAIL/TULE AT WATER MARGIN. NORTH BANK IS AN ELEVATED BERM WITH SOME WILLOW & BLACKBERRY. 2009 AERIAL PHOTOS SHOW AREA IS COMPLETELY DEVELOPED.

### Threats:
- 1998: AG, DEVELOPMENT, FLOOD CONTROL/WETLAND RECLAMATION, FLOODING, INTRODUCED PREDATOR, PEST CONTROL, POLLUTION.

### General:
1 COLLECTED ON 1 SEP 1980. 1 ADULT OBSERVED 30 APR 1986. 1 SNAKE SIGHTED AND 1 FEMALE CAPTURED BY HAND OR NET ON DRY LAND ON 26 JUN 1998; CAPTURED SNAKE WAS WEIGHED, MEASURED, PIT TAGGED AND RELEASED.

### PLSS:
- **T09N, R04E, Sec. 11 (M)**
- **Zone-10 N4279696 E629660**

### Accuracy: nonspecific area
### Area (acres): 21
### UTM: Latitude/Longitude: 38.65635 / -121.50984
### Elevation (feet): 11

### County Summary: Sacramento

### Quad Summary:
- **Taylor Monument (3812165)**

### Sources:
- BRO08U0001 BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG). 1980-XX-XX
- HAN80S0062 HANSEN, G. (CALIFORNIA ACADEMY OF SCIENCES) - CAS HERPETOLOGICAL SPECIMEN #178588, COLLECTED ON DEL PASO RD, 0.2 MI W OF EAST DRAINAGE CANAL, 1.2 MI E HWY 99 - I-5, SACTO. CO. CALIF. 1980-09-01
- HAN86F0001 HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX
- USG04D0001 USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>Common Name:</td>
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**General Habitat:**

PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**

THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

<table>
<thead>
<tr>
<th>Last Date Observed:</th>
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**Location:**

SMALL DITCH INTERSECTING EAST DRAINAGE CANAL, 0.3 MI S OF DEL PASO RD, SACRAMENTO.

**Detailed Location:**

**Ecological:**

1986: SMALL (10-15 FT WIDE) E-W DITCH WITH THICKETS OF WILLOW, COTTONWOOD, BLACKBERRY & TULE/CATTAILE MARGINS. LARGER (30 FT WIDE) EAST DRAINAGE CANAL HAS 4 FT STEEP VERT LEVEES WHICH HAVE BEEN CLEARED OF VEG EXCEPT RIGHT AT WATER EDGE.

**Threats:**

1986: ENCROACHING DEVELOPMENT TO THE EAST; FLOOD CONTROL; INTRODUCED PREDATOR; PEST CONTROL; POLLUTION.

**General:**

1 ADULT & 1 JUV OBSERVED 30 APR 1986. 2009 AERIAL PHOTOS SHOW THAT THIS AREA HAS BEEN COMPLETELY DEVELOPED.

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**County Summary:**

Sacramento  
Taylor Monument (3812165)

**Sources:**

HAN86F0001  
HANSEN, G.E. - COLLECTION OF FIELD SURVEY FORMS FROM GEORGE HANSEN'S STUDY OF THE GIANT GARTER SNAKE IN SOUTHERN SACTO. VALLEY (SEE HAN86R0002) FOR FULL REPORT. 1986-XX-XX

HAN86R0002  

HAN88R0001  

HAN96R0001  
HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
**Map Index Number:** 11276  
**EO Index:** 27551  
**Key Quad:** Taylor Monument (3812165)  
**Element Code:** ARADB36150  
**Occurrence Number:** 75  
**Occurrence Last Updated:** 2010-08-18

**Scientific Name:** *Thamnophis gigas*  
**Common Name:** giant garter snake

**Listing Status:**  
- **Federal:** Threatened  
- **State:** Threatened

**CNDDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals & irrigation ditches.

**Micro Habitat:**  
This is the most aquatic of the garter snakes in California.

**Last Date Observed:** 1986-04-30  
**Last Survey Date:** 1986-04-30  
**Owner/Manager:** UNKNOWN  
**Presence:** Possibly Extirpated

**Location:**  
Intersection of small E-W canal w/ east drainage canal, 1.5 mi S Del Paso Rd, Sacramento.

**Detailed Location:**  
Ecological:  
1986: 30 ft wide slow-moving E drainage canal w/stEEP banks & cattail/tule at water edge; blackberries, milk thistle, mustard, star thistle on banks. smaller ditch is similar w/a few cottonwoods & willows which survived clearing 2 yrs ago.

**Threats:**  
Agriculture; Development; Flood Control/Wetland Reclamation; Introduced Predator; Pest Control; Pollution.

**General:**  
One juvenile observed 30 Apr 1986. 2009 aerial photos show that this area has been completely developed.

**PLSS:** T09N, R04E, Sec. 14 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4277289 E630004  
**Latitude/Longitude:** 38.63462 / -121.50634  
**Elevation (feet):** 10

**County Summary:**  
Sacramento  
Taylor Monument (3812165)

**Sources:**

HAN86F0001  
HANSEN, G.E. - Collection of field survey forms from George Hansen's study of the giant garter snake in southern Sacto. Valley (see HAN86R0002) for full report. 1986-XX-XX

HAN86R0002  

HAN88R0001  

HAN96R0001  
HANSEN, G. - GPS coordinates for locations of the giant garter snake (Thamnophis Gigas) in the Sacramento Valley at the time of federal listing 1996-09-12
**Occurrence Report**
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

<table>
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**Scientific Name:** *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- Federal: Threatened
- State: Threatened

**CNDDB Element Ranks:**
- Global: G2
- State: S2

**General Habitat:** PREFERENCES FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:** THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1982-08-03

**Last Survey Date:** 1987-XX-XX

**Owner/Manager:** PVT

**Presence:** Possibly Extirpated

**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 CRK W OF HWY 99.

**Ecological:**
1982: SNAKE FOUND SWIMMING AMONG CATTAILS & TULES; AREA ALSO KNOWN AS "CONFLUENCE MARSH" (JCT OF LAGUNA CR & ELK GROVE CR). POTENTIAL PREY SPECIES INCLUDE CARP, BULLHEAD, MOSQUITOFISH, & BULLFROG.

**Threats:**
1982: MARSH SURROUNDED BY IRRIGATED PASTURE & GRAZED GRASSLAND. 2009: CONSTRUCTED WETLAND IN HEAVILY DEVELOPED AREA.

**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.

**PLSS:** T07N, R05E, Sec. 26 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4254866 E639409  
**Latitude/Longitude:** 38.43119 / -121.40279  
**Elevation (feet):** 20

**County Summary:** Sacramento

**Quad Summary:** Florin (3812144)

**Sources:**
- BRO80U0001 BRODE, J. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - GEOGRAPHIC REFERENCE CARD CATALOG OF SPECIMENS AND FIELD NOTE RECORDS COMPILED BY JOHN BRODE (DFG). 1980-XX-XX
- HAN82R0001 HANSEN, G.E. - "STATUS OF THE GIANT GARTER SNAKE (THAMNOPHIS COUCHII GIGAS), ALONG PORTIONS OF LAGUNA AND ELK GROVE CREEKS, SACRAMENTO COUNTY, CA." 1982-XX-XX

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**Information Expires 3/1/2016**
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Thamnophis gigas*  
**Common Name:** giant garter snake

**Listing Status:**  
- Federal: Threatened  
- State: Threatened

**CNDDDB Element Ranks:**  
- Global: G2  
- State: S2

**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

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**Location:**  
0.65 MI NORTH OF ELKHORN BLVD AND 0.3 MI EAST OF HWY 99, 3 MI EAST OF SACRAMENTO METROPOLITAN AIRPORT.

**Detailed Location:**  
GGS WAS FOUND ON THE SOUTH BANK OF THE AGRICULTURAL CANAL.

**Ecological:**  
HABITAT IS AN AGRICULTURAL CANAL CONTAINING SMALL STRANDS OF STREAMSIDE GRASSES, TULES, CATTAILS, MUSTARD, ETC. VEGETATING THE BANKS. SURROUNDING AREA IS RICE/WHEAT AGRICULTURE.

**Threats:**  
THREATENED BY VEGETATION DISTURBANCE IN CANALS AND SUPPORTING LEVEES AND BERMS.

**General:**  
ONE ADULT OBSERVED BASKING. THIS CANAL IS PROBABLY IMPORTANT AS A CONNECTING CORRIDOR BETWEEN EASTERN AND WESTERN AMERICAN BASIN GIANT GARTER SNAKE COLONIES.

**PLSS:**  
T10N, R04E, Sec. 27 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:**  
Zone-10 N4283970 E627438  
**Latitude/Longitude:** 38.69518 / -121.53459  
**Elevation (feet):** 20

**County Summary:**  
Sacramento  
**Quad Summary:**  
Taylor Monument (3812165)

**Sources:**

- HAN88F0001  
  HANSEN, G.E. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1988-05-21

- HAN96R0001  
  HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIGAS) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Thamnophis gigas*  
**Common Name:** giant garter snake

**Listing Status:**  
- **Federal:** Threatened  
- **State:** Threatened

**CNNDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 2000-08-01  
**Last Survey Date:** 2000-08-01  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
CANALS IN VICINITY OF ELKHORN BLVD, EAST OF HWY 99, WEST OF COMMERCE WAY, 3 MI EAST OF SACRAMENTO INTERNATIONAL AIRPORT.

**Detailed Location:**  
CAS & LSU LOCATIONS GIVEN AS "ELKHORN BLVD, JUST E CA-99." EACH LSU SPECIMENS NOTED AS BEING "IN DAM, 1 OF BROOD OF 6." 1983 SNAKES DELIVERED TO CAL POLY POMONA (CAPTIVE BREEDING); COLLECTED AT "JUNCT. ELKHORN BLVD & HWY 99."

**Ecological:**  
HABITAT CONSISTS OF AGRICULTURAL/ROADSIDE DRAINS; DRAINS HAVE GRASSY BANKS AND TULE/CATTAIL STANDS ALONG THE WATER MARGIN. SURROUNDING LAND USE IS RICE/WHEAT AGRICULTURE.

**Threats:**  
MAIN THREAT IS HABITAT DESTRUCTION OF CANALS, THEIR BANKS, AND SUPPORTING BERMS AND LEVEES. ALSO ROAD TRAFFIC.

**General:**  
3 LIVE COLL IN 1983; CAL POLY POMONA. 7 COLL ON 26 MAY 1986, CAS #178596 & LSU #44363-7. DETECTED 1986-87. 1 FOUND DEAD ON ROAD ON 22 MAY 1988; DEPOSITED W/ CDFW. 1 FEMALE CAPTURED ON 28 APR 1998; TAGGED/RELEASED. 1 OBSERVED ON 1 AUG 2000.

**PLSS:**  
T10N, R04E, Sec. 27 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 79

**UTM:**  
Zone-10 N4282892 E627284  
**Latitude/Longitude:** 38.68549 / -121.53655  
**Elevation (feet):** 20

**County Summary:**  
Sacramento  
Taylor Monument (3812165)

**Sources:**
- CAS05S0005  
  CALIFORNIA ACADEMY OF SCIENCES - PRINTOUT OF CAS MUSEUM SPECIMENS FOR THAMNOPHIS GIGAS. 2005-06-21
- HAN88F0002  
  HANSEN, G.E. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1988-05-22
- HAN88R0001  
- LSU05S0001  
  LOUISIANA STATE UNIVERSITY MUSEUM OF ZOOLOGY - PRINTOUT OF THAMNOPHIS GIGAS RECORDS. 2005-06-21
- STE86U0006  
  STEWART, G. (CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA) - LETTER TO J. BRODE (DFG) WITH UPDATE ON FIELD WORK ON GIANT GARTER SNAKE AND RUBBER BOA PER MEMORANDUM OF UNDERSTANDING (INCLUDES LIST OF STEWART & ROSSMAN GGS SPECIMEN LOCALS). 1986-01-06
- USG04D0001  
  USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09
**Map Index Number:** 21512

**EO Index:** 18150

**Key Quad:** Taylor Monument (3812165)

**Element Code:** ARADB36150

**Occurrence Number:** 87

**Occurrence Last Updated:** 2006-05-10

**Scientific Name:** *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- Federal: Threatened
- State: Threatened

**CNDDDB Element Ranks:**
- Global: G2
- State: S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNakes IN CALIFORNIA.

**Last Date Observed:** 1992-XX-XX

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1992-XX-XX

**Occurrence Rank:** Fair

**Owner/Manager:** UNKNOWN

**Occurrence Last Updated:** 2006-05-10

**Presence:** Presumed Extant

**Location:**
0.65 MI NORTH OF ELKHORN BLVD AND 1 MI EAST OF HWY 99, 3.7 MI EAST OF SACRAMENTO METROPOLITAN AIRPORT.

**Detailed Location:**
Ecological:
HABITAT IS AN AGRICULTURAL CANAL WITH SMALL STRANDS OF STREAMSIDE GRASSES, TULES, CATTAILS, MUSTARD, ETC. VEGETATING THE BANKS. SURROUNDING LAND USE IS RICE/WHEAT AGRICULTURE.

**Threats:**
MAIN THREAT IS DISTURBANCE ALONG CANALS, THEIR BANKS, AND THEIR SUPPORTING LEVEES OR BERMS.

**General:**
1 ADULT OBSERVED ON 22 MAY 1988 WHERE THE DIRT ROAD CROSSES THE CANAL. UNKNOWN NUMBER OBSERVED DURING 1992. THIS CANAL IS PROBABLY IMPORTANT AS A CONNECTING CORRIDOR BETWEEN EASTERN & WESTERN AMERICAN BASIN GIANT GARTER SNAKE POPULATIONS.

**PLSS:** T10N, R04E, Sec. 27 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4283979 E628550

**Latitude/Longitude:** 38.69510 / -121.52180

**Elevation (feet):** 20

**County Summary:**
Sacramento

**Quad Summary:**
Taylor Monument (3812165)

**Sources:**
HAN88F0003 HANSEN, G.E. - FIELD SURVEY FORM FOR THAMNOPHIS GIgas 1988-05-22

HAN96R0001 HANSEN, G. - GPS COORDINATES FOR LOCATIONS OF THE GIANT GARTER SNAKE (THAMNOPHIS GIgas) IN THE SACRAMENTO VALLEY AT THE TIME OF FEDERAL LISTING 1996-09-12
Map Index Number: 21510  
Key Quad: Taylor Monument (3812165)  
Occurrence Number: 88  
EO Index: 18146  
Element Code: ARADB36150  
Occurrence Last Updated: 2014-12-08  

Scientific Name: *Thamnophis gigas*  
Common Name: giant garter snake  
Listing Status: Federal: Threatened  
State: Threatened  

CNDDDB Element Ranks:  
Global: G2  
State: S2  

General Habitat:  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.  

Micro Habitat:  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.  

Last Date Observed: 2014-09-17  
Last Survey Date: 2014-09-17  
Owner/Manager: NATOMAS BASIN CONSERVANCY, PVT  
Presence: Presumed Extant  
Location: ELVERTA CANAL, NORTH & EAST DRAINAGE CANAL & INTERSECTING CANALS, FROM SACRAMENTO/SUTTER COUNTY LINE S TO ELVERTA RD.  
Detailed Location:  
DIGITAL DATA PROVIDED BY E.C. HANSEN & USGS-WERC. CANALS FOUND WITHIN THE AMERICAN BASIN. MAJORITY OF SNAKES WERE DETECTED VIA CAPTURE, SOME ONLY OBSERVED. MANY SNAKES WERE CAPTURED MORE THAN ONCE DURING YEARLY SURVEYS.  

Ecological:  
HABITAT COMPOSED OF MANAGED WETLAND CHARACTERIZED BY MUD/SILT SUBSTRATE WITH STEEP BANKS VEGETATED WITH GRASSES & RUDE RALS. CANAL PROPER DENSELY VEGETATED WITH BULRUSH, CATTAIL, SMARTWEED, AND WATER PRIMROSE. RICE FIELDS ADJACENT.  

Threats:  
AG OPERATIONS, GRAZING, VEHICLE/EQUIPMENT TRAFFIC, DEVELOPMENT, FLOODING, VEG CONTROL, INTRODUCED PREDATORS, POLLUTION.  

General:  

PLSS: T10N, R04E, Sec. 15 (M)  
Accuracy: specific area  
Area (acres): 713  

UTM: Zone-10 N4287539 E628492  
Latitude/Longitude: 38.72718 / -121.52180  
Elevation (feet): 15  

County Summary: Sacramento, Sutter  
Quad Summary: Rio Linda (3812164), Taylor Monument (3812165)
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Sources:

BRO90F0004 BRODE, J.M. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS (=THAMNOPHIS COUCHII GIGAS) 1990-06-20

COA09R0002 COATES, P.S. ET AL. (U.S. GEOLOGICAL SURVEY-WESTERN ECOLOGICAL RESEARCH CENTER) - USING TIME-DEPENDENT MODELS TO INVESTIGATE BODY CONDITION AND GROWTH RATE OF THE GIANT GARTERSNAKE. JOURNAL OF ZOOLOGY 2009-06-25

HAN05F0009 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-09-16
HAN05F0010 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-06-07
HAN05F0011 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-06-07
HAN05F0013 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-08-01
HAN05F0015 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-05-28
HAN05U0001 HANSEN, E. - SHAPEFILE (CREATED FROM EXCEL FILE FROM HANSEN) OF THAMNOPHIS GIGAS LOCATIONS FOR YEARS 2001-2004. ALSO INCLUDES HARDCOPY OF ATTRIBUTE TABLE LOCATED IN ELEMENT FILE. 2005-07-XX
HAN06D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX
HAN06F0004 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-08-28
HAN06F0008 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-07-31
HAN06F0009 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-07-06
HAN07D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2007. 2007-XX-XX
HAN08D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2008. 2008-XX-XX
HAN09D0002 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2009 [SC-003881] 2009-XX-XX
HAN10D0001 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2010 [SC-003881] 2010-XX-XX
HAN11D0001 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2011 [SC-003881] 2011-XX-XX
HAN12F0001 HANSEN, E. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2012-09-13
HAN12F0002 HANSEN, E. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2012-09-09
STA01F0002 STACKHOUSE, E.L. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2001-08-10
STA01F0013 STACKHOUSE, E. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR PLEGADIS CHIHI & FALCO PEREGRINUS ANATUM & THAMNOPHIS GIGAS 2001-08-10
STA12F0003 STACKHOUSE, E. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2012-07-20
STA12F0004 STACKHOUSE, E. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2012-07-23
STA12F0005 STACKHOUSE, E. (SACRAMENTO COUNTY) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2012-07-25
USG04D0001 USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09
WYL04R0001 WYLIE, G. ET AL. (U.S. GEOLOGICAL SURVEY-WESTERN ECOLOGICAL RESEARCH CENTER) - MONITORING GIANT GARTER SNAKES IN THE NATOMAS BASIN: 2003 RESULTS 2004-01-XX
Scientific Name: *Thamnophis gigas*  
Common Name: giant garter snake

Listing Status:  
- **Federal:** Threatened  
- **State:** Threatened

CNDDB Element Ranks:  
- **Global:** G2  
- **State:** S2

General Habitat:  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES. THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

Micro Habitat:  

Last Date Observed: 1990-09-26  
Occurrence Type: Natural/Native occurrence

Ecological:  
1990: HABITAT ALONG CANAL BANKS IS SPARSE EMERGENT MONOCOTS; LEVEES ARE NON-NATIVE GRASSLAND. SURROUNDING LAND USE IS AG; RICE, SAFFLOWER, & SUGAR BEETS GROWING AT TIME OF THIS OBSERVATION. 2009 AERIAL PHOTOS SHOW THIS AREA DEVELOPED.

Threats:  
1990: THREATENED BY A PROPOSED RESIDENTIAL AND GOLF COURSE DEVELOPMENT.

Location:  
EAST DRAINAGE CANAL, BETWEEN DEL PASO BLVD AND ELKHORN BLVD, 5 MI EAST OF SACRAMENTO INTERNATIONAL AIRPORT.

Detailed Location:  

PLSS:  
T10N, R04E, Sec. 35 (M)  
Accuracy: 80 meters  

UTM:  
Zone-10 N4281353 E629871  
Latitude/Longitude: 38.67125 / -121.50710  
Elevation (feet): 10

County Summary:  
Sacramento  
Taylor Monument (3812165)

Sources:  
TOW90F0001 TOWERS, S. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1990-09-26
Scientific Name: *Thamnophis gigas*
Common Name: giant garter snake

Listing Status: Federal: Threatened  
State: Threatened

Rare Plant Rank:
Other Lists: IUCN_VU-Vulnerable

CNDDB Element Ranks:  
Global: G2  
State: S2

General Habitat:  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

Micro Habitat:  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

Last Date Observed: 1987-XX-XX  
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1987-XX-XX  
Occurrence Rank: Unknown

Owner/Manager: UNKNOWN  
Trend: Unknown

Presence: Presumed Extant

Location: CANAL; 1.2 KM EAST OF THE CROSSING BETWEEN NORTH MAIN CANAL AND RIEGO ROAD.

Detailed Location:

Ecological:

General Threats:

SNake OBSERVED DURING 1986-87 STUDY.

PLSS: T10N, R04E, Sec. 02 (M)  
Accuracy: 1/5 mile  
Area (acres): 0

UTM: Zone-10 N4290071 E628877  
Latitude/Longitude: 38.74993 / -121.51691  
Elevation (feet): 23

County Summary: Sutter  
Quad Summary: Taylor Monument (3812165), Verona (3812175)

Sources:  
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>Occurrence Last Updated:</td>
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**Scientific Name:** *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- **Federal:** Threatened
- **State:** Threatened

**CNNDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1987-XX-XX

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Unknown

**Presence:** Presumed Extant

**Location:**
DRAINAGE CANAL; 0.9 KM S OF ELVERTA CANAL; 1.6 KM E OF EAST DRAINAGE CANAL.

**Detailed Location:**

**Ecological:**

**General Threats:**
SNAKE OBSERVED DURING THE 1986-87 STUDY.

**PLSS:** T10N, R04E, Sec. 23 (M)

**Accuracy:** 1/5 mile

**Area (acres):** 0

**UTM:** Zone-10 N4285193 E628549

**Latitude/Longitude:** 38.70604 / -121.52159

**Elevation (feet):** 20

**County Summary:**
Sacramento

**Quad Summary:**
Taylor Monument (3812165)

**Sources:**
## Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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**Location:**  
AMERICAN BASIN; APPROX. 0.7 KM SE OF THE INTERSECTION BETWEEN ELVERTA ROAD AND POWERLINE ROAD.

**Detailed Location:**

**Ecological:**

**General:**  
SNAKE OBSERVED DURING 1986-87 STUDY.

**PLSS:**  
T10N, R04E, Sec. 20 (M)  
Accuracy: 1/5 mile  
Area (acres): 0

**UTM:**  
Zone-10 N4285804 E624360  
Latitude/Longitude: 38.71214 / -121.56964  
Elevation (feet): 15

**County Summary:**

Sacramento  
Taylor Monument (3812165)

**Sources:**

**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 32425
**EO Index:** 9262
**Key Quad:** Taylor Monument (3812165)
**Occurrence Number:** 129
**Occurrence Last Updated:** 2010-08-18

**Scientific Name:** *Thamnophis gigas*
**Common Name:** giant garter snake

**Listing Status:**
- **Federal:** Threatened
- **State:** Threatened

**CNDDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1987-XX-XX
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1987-XX-XX
**Occurrence Rank:** None

**Owner/Manager:** UNKNOWN
**Trend:** Unknown

**Presence:** Possibly Extirpated

**Location:**
AMERICAN BASIN; DRAINAGE CANAL 0.8 KM ESE OF I-5 JUNCTION WITH DEL PASO ROAD.

**Detailed Location:**

**Ecological:**
2009 AERIAL PHOTOS SHOW THAT THIS AREA HAS BEEN DEVELOPED.

**Threats:**

**General:**
SNAKE OBSERVED AT SITE DURING THE 1986-87 STUDY.

**PLSS:** T09N, R04E, Sec. 10 (M)
**Accuracy:** 1/5 mile
**Area (acres):** 0

**UTM:** Zone-10 N4279538 E628321
**Latitude/Longitude:** 38.65513 / -121.52526
**Elevation (feet):** 20

**County Summary:** Sacramento
**Quad Summary:** Taylor Monument (3812165)

**Sources:**

Report Printed on Tuesday, September 15, 2015
Information Expires 3/1/2016
### Scientific Name: *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- **Federal:** Threatened
- **State:** Threatened

**CNDDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**Micro Habitat:**
This is the most aquatic of the garter snakes in California.

**General Habitat:**
Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals & irrigation ditches.

### Occurrence Details

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<tr>
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<tr>
<td><strong>Occurrence Type:</strong></td>
<td>Natural/Native occurrence</td>
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<td><strong>Trend:</strong></td>
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<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
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<tr>
<td><strong>Location:</strong></td>
<td>ELKHORN ROAD, 0.5 MILE WEST OF EAST LEVEE ROAD.</td>
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<tr>
<td><strong>Detailed Location:</strong></td>
<td>SURROUNDING HABITAT CONSISTS OF RICE FIELDS TO THE SOUTH, PLOWED AGRICULTURAL FIELDS TO THE NORTH, AND RUDERAL VEGETATION ALONG THE ROADWAY.</td>
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<tr>
<td><strong>Ecological:</strong></td>
<td>POSSIBLE THREAT OF URBAN DEVELOPMENT.</td>
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<td><strong>PLSS:</strong></td>
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<td><strong>Elevation (feet):</strong></td>
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<td><strong>County Summary:</strong></td>
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<tr>
<td><strong>Quad Summary:</strong></td>
<td>Rio Linda (3812164)</td>
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**Sources:**

- ROD96F0001
- RODDY, F. (STATE WATER RESOURCES CONTROL BOARD) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1996-09-27
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

<table>
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<tr>
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<th>General Habitat:</th>
<th>PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS &amp; IRRIGATION DITCHES.</th>
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<tbody>
<tr>
<td>Micro Habitat:</td>
<td>THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.</td>
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<td>Presumed Extant</td>
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<tr>
<td>Location:</td>
<td>SOUTH OF SOUTH BEACH LAKE AND WEST OF I-5, VICINITY OF LOWER MORRISON CREEK, SOUTH OF SACRAMENTO.</td>
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<tr>
<td>Detailed Location:</td>
<td>SNAKES WERE FOUND IN OLD &quot;PIT&quot; BLINDS AT A SMALL DUCK CLUB.</td>
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<table>
<thead>
<tr>
<th>Threats:</th>
<th>POSSIBLE THREATS INCLUDE FLOODING, CONVERSION TO OTHER WETLAND TYPES, AND UPSTREAM URBANIZATION.</th>
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| 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. |

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### Sources:

HAN65F0001   HANSEN, G.E. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 1965-XX-XX
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<td><strong>Common Name:</strong></td>
<td>giant garter snake</td>
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**General Habitat:**

PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES. THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1999-09-30

**Last Survey Date:** 1999-09-30

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
IRRIGATION CANAL (TULE), ~1.5 MILES SOUTH OF I-5 AT THE SACRAMENTO RIVER, ~2.5 MILES SE OF CONWAY RANCH HQ, YOLO BYPASS.

**Detailed Location:**
IRRIGATION CANAL LINED WITH THYPHA SP, SCIRPUS SP, AND JUNEUS SP.

**Ecological:**
A 50 FOOT LEVEE RECONTOURING PROJECT (COMPLETED).

**Threats:**
1 SNAKE OBSERVED IN 1999, THE CANAL WAS FLAGGED OFF AND NOT DISTURBED DURING CONSTRUCTION. A MONITOR WAS ONSITE DURING CONSTRUCTION.

**PLSS:** T09N, R03E, Sec. 03 (M)
**Accuracy:** nonspecific area

**UTM:** Zone-10 N4279283 E619244
**Latitude/Longitude:** 38.65410 / -121.62959
**Elevation (feet):** 22

**County Summary:** Yolo
**Quad Summary:** Taylor Monument (3812165), Grays Bend (3812166)

**Sources:**
TAY99F0006 TAYLOR, E. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS (GIANT GARTER SNAKE) 1999-09-30
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- **Federal:** Threatened
- **State:** Threatened

**CNDDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 2002-03-27

**Occurrence Type:** Natural/Native occurrence

**Presence:** Presumed Extant

**Location:**
EAST SIDE OF WATERMAN ROAD, 0.8 MILE NORTH OF GRANT LINE ROAD, SE OF ELK GROVE.

**Detailed Location:**
SNAKE OBSERVED AT THE CONFLUENCE OF A WETLAND SWALE AND THE DITCH.

**Ecological:**
HABITAT CONSISTS OF A ROADSIDE DITCH ALONG WATERMAN ROAD; VEGETATION CONSISTS OF PASPALUM DILATATUM, TYPHA LATIFOLIA, AND CYPERUS ERAGRASTIS.

**Threats:**
THREATENED BY TRAFFIC AND DITCH MAINTENANCE.

**General:**
1 ADULT OBSERVED ON 27 MAR 2002.

**PLSS:** T06N, R06E, Sec. 08 (M)
**Accuracy:** 80 meters
**Area (acres):** 0

**UTM:** Zone-10 N4250752 E643861
**Latitude/Longitude:** 38.39342 / -121.35265
**Elevation (feet):** 50

**County Summary:** Sacramento

**Quad Summary:** Elk Grove (3812143)

**Sources:**
HEN02F0002  HENKE, J. (MOORE BIOLOGICAL CONSULTANTS) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2002-03-27
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**Scientific Name:** *Thamnophis gigas*  
**Common Name:** giant garter snake

**Listing Status:**  
- Federal: Threatened  
- State: Threatened

**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Poor  
**Trend:** Unknown  
**Presence:** Presumed Extant

**Location:**  
ALONG POWERLINE ROAD, 0.5 MI SOUTH OF THE SUTTER COUNTY LINE.

**Detailed Location:**  
2003 SNAKE FOUND AT CULVERT CROSSING.

**Ecological:**  
Habitat consists of a drainage canal between inactive rice fields.

**Threats:**  
Flooding, vegetation control, maintenance & agricultural activates, vehicle traffic, pollution & introduced predators.

**General:**  
1 semi-adult male found dead on road (800 M S of county line) 31 Mar 2003. 1 young adult female found dead on road (700 M S of county line), 4 Jul 2008.

**PLSS:** T10N, R04E, Sec. 07 (M)  
**Accuracy:** specific area  
**Area (acres):** 8  
**UTM:** Zone-10 N4287681 E623699  
**Latitude/Longitude:** 38.72914 / -121.57691  
**Elevation (feet):** 15  

**County Summary:** Sacramento  
**Quad Summary:** Taylor Monument (3812165)

**Sources:**  
HAN03F0003 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2003-03-31  
HAN08D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2008. 2008-XX-XX
| **Map Index Number:** | 55304 |
| **EO Index:** | 55304 |
| **Key Quad:** | Davis (3812156) |
| **Occurrence Number:** | 185 |
| **Occurrence Last Updated:** | 2014-12-09 |

| **Scientific Name:** | *Thamnophis gigas* |
| **Common Name:** | giant garter snake |
| **Listing Status:** | Federal: Threatened | Rare Plant Rank: |
| | State: Threatened | Other Lists: IUCN_VU-Vulnerable |
| **CNDDDB Element Ranks:** | Global: G2 | Micro Habitat: |
| | State: S2 | THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA. |

| **General Habitat:** | |
| **Micro Habitat:** | PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES. |

| **Last Date Observed:** | 2014-04-12 |
| **Last Survey Date:** | 2014-04-12 |
| **Owner/Manager:** | DFG-YOLO BYPASS WA |

| **Presence:** | Presumed Extant |
| **Location:** | DRAINAGE DITCH ON THE WEST SIDE OF THE WESTERN LEVEE, ABOUT 1.3 MI S OF COUNTY ROAD 32 & I-80 UNDERPASS, YOLO BASIN WA. |

**Detailed Location:**
MAPTED TO PROVIDED COORDINATES, SNAKES DETECTED ALONG WESTERN EDGE OF YOLO BYPASS WILDLIFE AREA. SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, AND RELEASED. SOME SNAKES WERE RE-CAPTURED MORE THAN ONCE WITHIN THE SAME YEAR, 3 CAP IN 2005 & '06.  

**Ecological:**
DRAINAGE CANALS, WITH STEEP BANKS (>1:1), DENSELY VEGETATED WITH GRASSES, RUDERALS, CATTAILS, BULRUSH, AND WILLOWS AND MANAGED WETLANDS WITH GRADUALLY SLOPED BANKS (<1:1), OPEN WATER, DENSE CATTAILS, BULRUSH & WATER PRIMROSE.  

**Threats:**
FLOODING, VEGETATION CONTROL, INTRODUCED PREDATORS, WATER QUALITY/MANAGEMENT, AG POLLUTION, WETLAND & CANAL MAINTENANCE.  

**General:**

**PLSS:**
T08N, R03E, Sec. 15 (M)  
**Accuracy:** specific area  
**Area (acres):** 190  
**UTM:** Zone-10 N4267175 E619240  
**Latitude/Longitude:** 38.54501 / -121.63171  
**Elevation (feet):** 20  

**County Summary:**
Yolo  
**Quad Summary:**
Sacramento West (3812155), Davis (3812156)
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<tr>
<td>FEL04F0001</td>
<td>FELIZ, D. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-YOLO BASIN WILDLIFE AREA) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2004-03-23</td>
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<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-08-26</td>
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<td>HAN05F0025</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-09-05</td>
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<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-09-09</td>
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<td>HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX</td>
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<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-09-20</td>
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<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-09-10</td>
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<td>HAN06F0036</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-09-18</td>
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<td>HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2007. 2007-XX-XX</td>
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<td>MCI14F0004</td>
<td>MCINTYRE, P. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE-CALIFORNIA NATURAL DIVERSITY DATABASE) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2014-04-12</td>
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**Map Index Number:** 61361
**Key Quad:** Florin (3812144)
**Occurrence Number:** 198

**EO Index:** 61397
**Element Code:** ARADB36150
**Occurrence Last Updated:** 2010-03-03

**Scientific Name:** *Thamnophis gigas*
**Common Name:** giant garter snake

**Listing Status:**
- **Federal:** Threatened
- **State:** Threatened

**CNDDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 2005-05-01
**Last Survey Date:** 2005-05-01
**Owner/Manager:** SRCSD-BUFFERLANDS
**Presence:** Presumed Extant

**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.

**Threats:**
THREATENED BY URBAN GROWTH AND WATER POLLUTION FROM CITY RUNOFF IN AREAS.

**General:**
1 JUVENILE (~1.5' IN LENGTH) OBSERVED ON 1 MAY 2005.

**PLSS:** T07N, R05E, Sec. 17 (M) **Accuracy:** 80 meters **Area (acres):** 0
**UTM:** Zone-10 N4257392 E634044 **Latitude/Longitude:** 38.45477 / -121.46375 **Elevation (feet):** 10

**County Summary:** Sacramento
**Quad Summary:** Florin (3812144)

**Sources:**
PAR05F0001 PARSONS, S. & C. TWEEDY (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-05-01
<table>
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**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

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**Location:**
NORTH DRAINAGE CANAL, ~0.4 MI SE OF RIO VISTA DR & RIO GRANDE DR, AND 0.8 MI SW OF POWERLINE RD & RIEGO RD JUNCTIONS.

**Detailed Location:**
MAPPED TO PROVIDED COORDINATES. LOCATION DESCRIPTION WAS "NORTH DRAINAGE CANAL APPROXIMATELY 0.7 KM WEST OF POWERLINE RD; APPROXIMATELY 1.0 KM SOUTH OF RIEGO RD." CAPTURED SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, MARKED, AND RELEASED.

**Ecological:**
HABITAT CONSISTS OF AN AGRICULTURAL DITCH WITH 1:1 VERTICAL BANKS. BULRUSH, CATTAILS, & RUDERALS EMERGING AT MARGINS, WITH SALIX PROVIDING INTERMITTENT OVERSTORY. DRAINAGE CANAL WITH RICE FIELD TO THE EAST AND DENSE UPLAND TO THE WEST.

**Threats:**
FLOODING, VEGETATION CONTROL, MAINTENANCE & AGRICULTURAL ACTIVITIES (VEHICLE AND FARM EQUIPMENT TRAFFIC), & POLLUTION.

**General:**

**PLSS:**
T10N, R04E, Sec. 07 (M)  
**UTM:**
Zone-10 N4288854 E623002

**Accuracy:**
specific area  
**Area (acres):** 34

**Latitude/Longitude:**
38.73980 / -121.58470  
**Elevation (feet):** 20

**County Summary:**
Sutter  
**Quad Summary:**
Taylor Monument (3812165)
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<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2003-XX-XX</td>
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<td>HAN03R0003</td>
<td>HANSEN, E.C. - RESULTS OF SURVEYS FOR GIANT GARTER SNAKES (THAMNOPHIS GIGAS) AT THE NATOMAS BASIN CONSERVANCY'S ATKINSON PARCEL HIGHLINE DITCH AND NORTH DRAINAGE, CA. 2003-12-05</td>
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<td>HAN05F0014</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-08-26</td>
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<td>HAN06D0001</td>
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<td>HAN06F0010</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-06-07</td>
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<td>HAN09D0002</td>
<td>HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2009 [SC-003881] 2009-XX-XX</td>
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<td>HAN10D0001</td>
<td>HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2010 [SC-003881] 2010-XX-XX</td>
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### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Thamnophis gigas*  
**Common Name:** giant garter snake

**Listing Status:**  
- **Federal:** Threatened  
- **State:** Threatened

**CNDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.  
**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1998-05-18  
**Last Survey Date:** 1998-05-18  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Presence:** Presumed Extant

**Location:**  
AT THE JUNCTION OF TWO DRAINAGE CANALS ABOUT 0.45 MI SOUTH OF RIEGO RD AND 0.4 MI WEST OF HWY 99.

**Detailed Location:**

**Ecological:**

**Threats:**

**General:**  
1 MALE SNAKE CAPTURED BY HAND OR NET ON DRY LAND ON 18 MAY 1998. SNAKE WAS WEIGHED, MEASURED, PIT TAGGED AND RELEASED.

**PLSS:** T10N, R04E, Sec. 04 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4289338 E626211  
**Latitude/Longitude:** 38.74371 / -121.54770  
**Elevation (feet):** 20

**County Summary:**  
Sutter  
**Quad Summary:**  
Taylor Monument (3812165)

**Sources:**

USG04D0001  
USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- Federal: Threatened
- State: Threatened

**CNDDB Element Ranks:**
- Global: G2
- State: S2

**General Habitat:**
Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals & irrigation ditches. This is the most aquatic of the garter snakes in California.

**Last Date Observed:** 1998-04-30

**Last Survey Date:** 1998-04-30

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
Along a road about 0.5 mi south of Riego Road and about 1 mi east of Hwy 99.

**Detailed Location:**

**Ecological:**

**Threats:**

**General:**

One female snake captured by hand or net on dry land on 30 Apr 1998. Snake was weighed, measured, pit tagged and released.

**PLSS:**
- T10N, R04E, Sec. 11 (M)

**Accuracy:**
- 80 meters

**Area (acres):**
- 0

**UTM:**
- Zone-10 N4289351 E628520

**Latitude/Longitude:**
- 38.74350 / -121.52114

**Elevation (feet):**
- 20

**County Summary:**
- Taylor Monument (3812165)

**Sources:**

USG04D0001 USGS - Biological Resources Discipline - Shapefile from BIOS (DS94) of Giant Garter Snake Collection Records from 21 Apr 1995 through 9 Sep 2004. 2004-09-09
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Last Date Observed:** 1998-07-08  
**Last Survey Date:** 1998-07-08

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**  
DRAINAGE CANAL JUST NE OF THE INTERSECTION OF I-5 AND HWY 99. NW OF SACRAMENTO.

**Detailed Location:**  
DRAINAGE CANALS.

**Threats:**

**General:**  
1 FEMALE CAPTURED, WEIGHED (523 G), MEASURED (987 MM SVL), PIT TAGGED AND RELEASED ON 8 JUL 1998.

**PLSS:** T09N, R04E, Sec. 03 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4281090 E627100  
**Latitude/Longitude:** 38.66928 / -121.53900  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Taylor Monument (3812165)

**Sources:**  
USG04D0001 USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09
### Scientific Name: *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- **Federal:** Threatened
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
PREPARES FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 2003-08-06

**Last Survey Date:** 2003-08-06

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
DRAINAGE CANAL JUST W OF HWY 99, ~0.9 MI NNW OF INTERSECTION W/ ELKHORN BLVD, 1.2 MI SSW OF ELVERTA RD INTERSECTION.

**Detailed Location:**
MAPPED ACCORDING TO PROVIDED COORDINATES. SITE NAME WAS "CENTRAL MAIN CANAL-SOUTHERNMOST PORTION." CANAL ORIENTED NW-SE.

**Ecological:**
SUBSTRATE NEAR TRAPS WAS MOSTLY OPEN WATER AND BARE GROUND; VEGETATION DOMINATED BY WEEDY DICOTS, GRASSES, AND OTHER MISCELLANEOUS WETLAND VEGETATION. PREY DENSITY WAS MODERATE TO HIGH.

**Threats:**

**General:**

**PLSS:** T10N, R04E, Sec. 28 (M)

**Accuracy:** specific area

**Area (acres):** 10

**UTM:** Zone-10 N4284223 E626267

**Latitude/Longitude:** 38.69763 / -121.54800

**Elevation (feet):** 22

**County Summary:** Sacramento

**Quad Summary:** Taylor Monument (3812165)

**Sources:**
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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<tr>
<td>Location:</td>
<td>DRAINAGE CANAL ABOUT 0.6 MILES WSW OF ELVERTA RD &amp; E LEVEE RD INTERSECTION, EAST OF HWY 99, NW OF RIO LINDA.</td>
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<td>Detailed Location:</td>
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<tr>
<td>Ecological:</td>
<td>SUBSTRATE WAS A MIX OF OPEN WATER &amp; BARE GROUND. VEG MOSTLY DICOTS W/ GRASSES &amp; MISCELLANEOUS WETLAND VEG. PREY DENSITY WAS RELATIVELY LOW, W/ SOME FISH PRESENT. ADJACENT FIELD CONDITIONS RANGED FROM DRY NON-RICE CROPS TO FLOODED RICE.</td>
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<tr>
<td>Threats:</td>
<td>ONE SNAKE OBSERVED ON 2 JUN 1998. 0 CAPTURED DURING SURVEYS CONDUCTED BETWEEN 26 JUN-24 JUL 2003; &quot;CONSISTENT WITH 2002 FINDINGS.&quot;</td>
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<td>Latitude/Longitude:</td>
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<td>County Summary:</td>
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**Common Name:** giant garter snake

**Rare Plant Rank:** Threatened

**State:** Threatened

**Global:** G2

**State:** S2

**Other Lists:** IUCN_VU-Vulnerable

**General Habitat:**

**Micro Habitat:**

**Occurrence Last Updated:** 2014-12-10
### Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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**Scientific Name:** Thamnophis gigas  
**Common Name:** giant garter snake

**Listing Status:**  
- Federal: Threatened  
- State: Threatened

**Rare Plant Rank:**  
- State: Threatened  
- Other Lists: IUCN_VU-Vulnerable

**CNDDB Element Ranks:**  
- Global: G2  
- State: S2

**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 1999-10-04  
**Last Survey Date:** 1999-10-04  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
DRAINAGE CANAL EAST OF HWY 99 AND ABOUT 1 MILE SOUTH OF RIEGO RD.

**Detailed Location:**  
DRAINAGE CANAL.

**Threats:**  
**General:**  
3 FEMALES AND 2 UNKNOWN SNAKES OBSERVED OR CAPTURED BETWEEN 7 AUG 1998 AND 4 OCT 1999. THE 3 FEMALE SNAKES WERE RECAPTURES THAT HAD BEEN PIT TAGGED.

**PLSS:**  
- T10N, R04E, Sec. 10 (M)

**UTM:**  
- Zone-10 N4288530 E627318

**County Summary:**  
Sacramento, Sutter  
Taylor Monument (3812165)

**Accuracy:** nonspecific area  
**Area (acres):** 33

**Lat/Lon:** 38.73627 / -121.53513  
**Elevation (feet):** 17

**Sources:**  
USG04D0001  
USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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  State: Threatened | Rare Plant Rank:  
  Other Lists: IUCN_VU-Vulnerable |
| CNDDDB Element Ranks:  
  Global: G2  
  State: S2 | |

**General Habitat:**  
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

| Last Date Observed: 2014-09-14 | Occurrence Type: Natural/Native occurrence |
| Last Survey Date: 2014-09-14 | Occurrence Rank: Good |
| Owner/Manager: NATOMAS BASIN CONS, RD 1000 | Trend: Unknown |
| Presence: Presumed Extant | |

**Location:**  
N AND S OF RIEGO RD, 0.2 MI W POWERLINE RD INTERSECTION AND 0.7 MI E OF RIEGO RD & GARDEN INTERSECTION.

**Detailed Location:**  
MAPPED TO PROVIDED COORDINATES. 3-10 SNAKES WERE RECAPTURED AT LEAST ONCE DURING YEARLY SURVEYS. CANAL RUNS NORTH-SOUTH AND BENDS TO THE WEST ALONG THE PART SOUTH OF RIEGO RD. CAPTURED SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, & RELEASED.

**Ecological:**  
DRAINAGE CANAL CHARACTERIZED BY MUD/SILT SUBSTRATE WITH STEEP BANKS (GREATER THAN 1:1). BANKS MODERATELY VEGETATED WITH GRASS, RUDEALRS, CATTAILS, BULRUSH, SMARTWEED AND INTERMITTENT WATER PRIMROSE. SURROUNDING AREA IS RICE FIELDS.

**Threats:**  
FLOODING, DROUGHT, DEVELOPMENT, POLLUTION, VEG CONTROL, NON-NATIVE PREDATORS, MAINTENANCE ACTIVITIES, & AGRICULTURE.

**General:**  

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**County Summary:**  
Sutter  
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<td>HAN05F0017</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-09-16</td>
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<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-09-10</td>
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<td>HAN06D0001</td>
<td>HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX</td>
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<td>HAN06F0006</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-09-12</td>
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<td>HAN06F0011</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-08-26</td>
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<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-08-31</td>
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<td>HAN06F0018</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-08-21</td>
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<td>HAN06F0030</td>
<td>HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-06-11</td>
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<td>HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2007. 2007-XX-XX</td>
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<td>HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2008. 2008-XX-XX</td>
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<td>HAN09D0002</td>
<td>HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2009 [SC-003881] 2009-XX-XX</td>
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<td>HAN10D0001</td>
<td>HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2010 [SC-003881] 2010-XX-XX</td>
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<th>General Habitat:</th>
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<tbody>
<tr>
<td>Micro Habitat:</td>
<td>THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.</td>
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<td>Presence:</td>
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| Location: | 0.67 MILE NORTH OF THE JUNCTION OF W ELVERTA RD & POWERLINE RD. |
| Detailed Location: | 1.47 MILES SOUTH EAST OF BM 42. |
| Ecological: | SURROUNDING AREA IS RICE FIELDS. |
| Threats: | TRAFFIC, URBANIZATION, WATER QUALITY/MANAGEMENT, FLOODING, VEGETATION CONTROL/MAINTENANCE, INTRODUCED PREDATORS. |
| General: | 1 ADULT SNAKE FOUND DEAD ON ROAD, 29 APR 2006. |

| PLSS: | T10N, R04E, Sec. 17 (M) |
| Accuracy: | 80 meters |
| Area (acres): | 0 |
| UTM: | Zone-10 N4287129 E623722 |
| Latitude/Longitude: | 38.72416 / -121.57673 |
| Elevation (feet): | 25 |

| County Summary: | Sacramento |
|                | Taylor Monument (3812165) |

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<td>HAN06F0012</td>
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EO Index: 77898

Key Quad: Taylor Monument (3812165)
Element Code: ARADB36150

Occurrence Number: 262
Occurrence Last Updated: 2014-11-03

Scientific Name: Thamnophis gigas
Common Name: giant garter snake

Listing Status: Federal: Threatened
State: Threatened

Rare Plant Rank:

Other Lists: IUCN_VU-Vulnerable

CNDDB Element Ranks:
Global: G2
State: S2

General Habitat:
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

Micro Habitat:
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

Last Date Observed: 2014-09-24

Occurrence Type: Natural/Native occurrence

Last Survey Date: 2014-09-24

Occurrence Rank: Fair

Owner/Manager: PVT-NATOMAS MUTUAL WATER

Trend: Unknown

Presence: Presumed Extant

Location:
ABOUT 0.8 MI NW OF ELVERTA RD & LONE TREE RD INTERSECTION, E OF POWER LINE RD, NE OF SACRAMENTO INTERNATIONAL AIRPORT.

Detailed Location:
MAPPED TO PROVIDED COORDINATES. LARGE DRAINAGE CANAL BTWN POWER LINE RD (WEST) AND LONE PINE RD (EAST). CAPTURED SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, IDENTIFIED, PHOTOGRAPHED, AND RELEASED. MAJORITY OF SNAKES CAPTURED, SOME ONLY OBS.

Ecological:
HABITAT CONSISTS OF AN IRRIGATION CANAL, WITH STEEP BANKS (GREATER THAN 1:1), MODERATELY VEGETATED WITH GRASS AND RUDERALS WITH INTERMITTENT PATCHES OF BULRUSH AND CATTAILS. SURROUNDING AREA WAS RICE FIELDS.

Threats:
FLOODING, VEGETATION CONTROL, MAINTENANCE ACTIVITIES. AGRICULTURAL ACTIVITIES, VEHICLE AND FARM EQUIPMENT TRAFFIC.

General:

PLSS: T10N, R04E, Sec. 17 (M)

Accuracy: specific area

Area (acres): 68

UTM: Zone-10 N4286900 E624822

Latitude/Longitude: 38.72195 / -121.56413

Elevation (feet): 25

County Summary:
Sacramento
Taylor Monument (3812165)

Sources:
HAN05F0008 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-09-12
HAN06D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX
HAN06F0003 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-08-27
HAN07D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2007. 2007-XX-XX
HAN08D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2008. 2008-XX-XX
HAN09D0002 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2009 [SC-003881] 2009-XX-XX
HAN10D0001 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2010 [SC-003881] 2010-XX-XX
**Thamnophis gigas**

**Occurrence Number:** 263  
**Last Date Observed:** 2010-06-23  
**Last Survey Date:** 2010-06-23  
**Owner/Manager:** NATOMAS BASIN CONSERVANCY  
**Presence:** Presumed Extant  
**Location:** THE JUNCTION OF W ELVERTA RD & LONE TREE RD AND 0.25 MILES EAST AND 0.28 MILES SOUTH OF JUNCTION.

**Detailed Location:** MAPPED TO PROVIDED COORDINATES. LOCATION DESCRIBED AS "IRRIGATION CANAL APPROXIMATELY 1 KM WEST OF SR-99/70, 0.2 KM SOUTH OF ELVERTA ROAD." CAPTURED SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, MARKED, PHOTOGRAPHED, AND RELEASED.

**Ecological:**  
IRRIGATION CANAL SURROUNDED BY FALLOW FIELDS AND VACANT WEEDY FIELDS. CANAL HAS VEGETATED BANKS (RUDERALS DOMINANT). BANKSIDE SLOPES >3:1.

**Threats:**  
VEHICLES, URBANIZATION, FLOODING, WATER MANAGEMENT, VEGETATION CONTROL AND MAINTENANCE ACTIVITIES, INTRODUCED PREDATORS.

**General:**  
1 FEMALE CAPTURED ON 31 JUL 2001. NONE CAPTURED/DETECTED DURING 2003 TRAP SURVEYS. 1 ADULT FEMALE FOUND DEAD (TANGLED IN MONOFILAMENT NETTING) AND 1 MALE OBSERVED ON 23 OCT 2006. 1 FEMALE AND 1 SNAKE OF UNKNOWN SEX CAPTURED ON 23 JUN 2010.

**PLSS:** T10N, R04E, Sec. 21 (M)  
**Accuracy:** specific area  
**Area (acres):** 23  
**UTM:** Zone-10 N4285667 E625362  
**Latitude/Longitude:** 38.71076 / -121.55814  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Detailed Location:** MAPPED TO PROVIDED COORDINATES. LOCATION DESCRIBED AS "IRRIGATION CANAL APPROXIMATELY 1 KM WEST OF SR-99/70, 0.2 KM SOUTH OF ELVERTA ROAD." CAPTURED SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, MARKED, PHOTOGRAPHED, AND RELEASED.

**Micro Habitat:** THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Sources:**  
HAN06D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX  
HAN06F0014 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-10-23  
HAN10D0001 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2010 [SC-003881] 2010-XX-XX  
USG04D0001 USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09  
WYL04R0001 WYLIE, G. ET AL. (U.S. GEOLOGICAL SURVEY-WESTERN ECOLOGICAL RESEARCH CENTER) - MONITORING GIANT GARTER SNAKES IN THE NATOMAS BASIN: 2003 RESULTS 2004-01-XX
### Scientific Name: *Thamnophis gigas*

### Common Name: giant garter snake

### Listing Status:
- **Federal:** Threatened
- **State:** Threatened

### CNDDB Element Ranks:
- **Global:** G2
- **State:** S2

### General Habitat:
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

### Micro Habitat:
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

### Last Date Observed:
2006-05-25

### Occurrence Type:
Natural/Native occurrence

### Owner/Manager:
PVT-NATOMAS MUTUAL WATER CO

### Presence:
Presumed Extant

### Location:
IRRIGATION DITCH S OF ELVERTA RD, ~1 MI SE OF INTERSECTION WITH ERNEST RD, 1.3 MILES SW OF INTERSECTION W/ LEVEE RD.

### Detailed Location:
MAPPED ACCORDING TO PROVIDED COORDINATES AND MAP LOCATIONS. DITCH RUNS EAST-WEST. 2003 SITE NAME WAS “AYALA-SOUTH END OF PROPERTY.” CAPTURED SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, PHOTOGRAPHED, & RELEASED.

### Ecological:

### Threats:
URBANIZATION, FLOODING, WATER MANAGEMENT, VEGETATION CONTROL AND MAINTENANCE ACTIVITIES, INTRODUCED PREDATORS.

### PLSS:
T10N, R04E, Sec. 23 (M)

### Accuracy:
specific area

### Area (acres):
23

### UTM:
Zone-10 N4284937 E629674

### Latitude/Longitude:
38.70356 / -121.50870

### Elevation (feet):
15

### County Summary:
Sacramento

### Quad Summary:
Taylor Monument (3812165)

### Sources:
- HAN05F0006 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-08-22
- HAN06D0001 HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX
- HAN06F0040 HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2006-05-25
- WYL04R0001 WYLIE, G. ET AL. (U.S. GEOLOGICAL SURVEY-WESTERN ECOLOGICAL RESEARCH CENTER) - MONITORING GIANT GARTER SNAKES IN THE NATOMAS BASIN: 2003 RESULTS 2004-01-XX
**Occurrences Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<table>
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**Scientific Name:** *Thamnophis gigas*

**Common Name:** giant garter snake

**Listing Status:**
- Federal: Threatened
- State: Threatened

**CNNDDB Element Ranks:**
- Global: G2
- State: S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 2009-08-09

**Last Survey Date:** 2009-08-09

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
IRRIGATION DITCH 1 MILE NE OF THE JUCTION OF POWER LINE RD & DEL PASO RD, 1.1 MILES WSW OF I-5 AND HWY 99 INTERCHANGE.

**Detailed Location:**
MAPPED TO PROVIDED COORDINATES. LOCATION DESCRIBED AS "DRAINAGE CANAL APPROXIMATELY 0.8 KM SOUTH OF INTERSTATE 5, APPROXIMATELY 1.6 KM EAST OF POWERLINE RD."

**Ecological:**

**Threats:**
URBANIZATION, AGRICULTURE, FLOODING, WATER MANAGEMENT, VEGETATION CONTROL & MAINTENANCE, & INTRODUCED PREDATORS.

**General:**
1 FEMALE CAPTURED ON 3 JUN & 1 MALE CAPTURED ON 5 JUN 2005. 2 MALES & 1 FEMALE CAPTURED ON 30 MAY-8 AUG 2009. CAPTURED SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, PHOTOGRAPHED AND RELEASED.

**PLSS:** T09N, R04E, Sec. 05 (M)

**Accuracy:** specific area

**Area (acres):** 22

**UTM:** Zone-10 N4280420 E625323

**Latitude/Longitude:** 38.66350 / -121.55954

**Elevation (feet):** 15

**County Summary:**
Sacramento

Taylor Monument (3812165)

**Sources:**
- HAN05F0005  HANSEN, E.C. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2005-06-05
- HAN06D0001  HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEARS 2005 AND 2006. 2006-XX-XX
- HAN09D0002  HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2009 [SC-003881] 2009-XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

| Map Index Number: | 77066 |
| Key Quad: | Davis (3812156) |
| Occurrence Number: | 291 |
| EO Index: | 78011 |
| Element Code: | ARADB36150 |
| Occurrence Last Updated: | 2009-10-29 |

**Scientific Name:** Thamnophis gigas  
**Common Name:** giant garter snake

**Listing Status:**  
- Federal: Threatened  
- State: Threatened

**CNDDB Element Ranks:**  
- Global: G2  
- State: S2

**General Habitat:**  
PREFFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**  
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 2009-06-23  
**Last Survey Date:** 2009-06-23

**Presence:** Presumed Extant

**Location:**  
IRRIGATION CANAL, 2.86 MILES NNE OF THE JUNCTION OF I-80 & LEVEE ROAD, YOLO BYPASS.

**Detailed Location:**  
APPROXIMATLEY 0.4 MILES EAST OF THE WEST LEVEE.

**Ecological:**  
IRRIGATION CANAL, ~3 M WIDE, CHARACTERIZED BY MUD/SILT SUBSTRATE; STEEP SLOPES (>1:1); BANKS DENSELY VEGETATED WITH GRASSES & WEEDS; CHANNEL PROPER MOSTLY OPEN WATER; BANK MARGINS DENSELY VEGETATED WITH CATTAILS AND SOME BULRUSH.

**Threats:**  
FLOODING, LOSS/INTERRUPTION OF WATER SUPPLY, CANAL/LEVEE MAINTENANCE, VEGETATION CONTROL, & AG ACTIVITIES, POLLUTION.

**General:**  
10 SNAKES (5 MALES & 5 FEMALES) CAPTURED (3 RECAPTURED) IN JUN 2009. ALL SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, VENTRAL SCUTES MARKED, PHOTOGRAPHED, & RELEASED.

**PLSS:** T09N, R03E, Sec. 27 (M)  
**Accuracy:** specific area  
**Area (acres):** 21

**UTM:** Zone-10 N4273732 E619415  
**Latitude/Longitude:** 38.60406 / -121.62857  
**Elevation (feet):** 20

**County Summary:** Yolo  
Sacramento West (3812155), Davis (3812156)

**Sources:**  
HANSEN, E. - THAMNOPHIS GIGAS DATA FOR SURVEY YEAR 2009 - CONAWAY RANCH AND WHITE SLOUGH WILDLIFE AREA/COLDANI MARSH. 2009-XX-XX
### Scientific Name:
*Thamnophis gigas*

### Common Name:
giant garter snake

### Listing Status:
- **Federal:** Threatened
- **State:** Threatened

### Rare Plant Rank:
- **Global:** G2
- **State:** S2

### Other Lists:
IUCN_VU-Vulnerable

### General Habitat:
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES. THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

### Micro Habitat:

### Last Date Observed:
2009-06-04

### Last Survey Date:
2009-06-04

### Presence:
Presumed Extant

### Location:
**DRAINAGE CANAL, 2.82 MILES NNE OF THE JUNCTION OF I-80 & LEVEE RD, YOLO BYPASS.**

### Detailed Location:
APPROXIMATELY 1.28 MILES WEST OF THE TULE CANAL (0.87 MI EAST OF THE WEST LEVEE).

### Ecological:
DRAINAGE CANAL. ~10 M WIDE WIHT MUD/SILT SUBSTRATE; STEEP SLOPES (>1:1), BANKS DENSELY VEGETATED WITH GRASSES & WEEDS; CHANNEL PROPER MOSTLY OPEN WATER; BANK MARGINS MODERATELY TO DENSILY VEGETATED WITH SMARTWEED AND WATER PRIMROSE.

### Threats:
- FLOODING, LOSS/INTERRUPTION OF WATER SUPPLY, CANAL/LEVEE MAINTENANCE, VEGETATION CONTROL, & AG ACTIVITIES, POLLUTION.

### General:
4 SNAKES (2 MALES & 2 FEMALES) CAPTURED (2 RECAPTURED) IN MAY & JUN 2009. ALL SNAKES WERE WEIGHED, MEASURED, PIT TAGGED, VENTRAL SCUTES MARKED, PHOTOGRAPHED, & RELEASED.
**Scientific Name:** Thamnophis gigas  
**Common Name:** giant garter snake

**Listing Status:**  
- **Federal:** Threatened  
- **State:** Threatened

**Rare Plant Rank:**  
- **State:** G2

**CNDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals & irrigation ditches. This is the most aquatic of the garter snakes in California.

**Micro Habitat:**  
About 1.3 miles SE of County Rd 32 and I-80 Underpass, SW of Greens Lake, Yolo Bypass Wildlife Area, E of Davis.

**Detailed Location:**  
Mapped to provided coordinates and provided map. Coordinates derived from GoogleEarth. Rice fields were not flooded at the time of detection.

**Ecological:**  
Nearest wetted canal approximately 800 meters west. Snakes have been captured in this canal in previous years (Occ. No. 269). Location is part of a flood control basin also used for rice fields and waterfowl hunting.

**Threats:**  
Potential threat due to rice field preparation (heavy equipment use) and vehicle strikes.

**General:**  
1 adult giant garter snake observed at the edge of a dirt road on 7 May 2012; snake was large with an in tact tail and considered likely female by observer. It appeared to be sunning on the dirt road at 7:10 PM.

**PLSS:** T08N, R03E, Sec. 11 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4267884 E620226  
**Latitude/Longitude:** 38.55126 / -121.62027  
**Elevation (feet):** 15

**County Summary:** Yolo  
**Quad Summary:** Sacramento West (3812155)

**Sources:**  
OWE12F0001 OWENS, M. - FIELD SURVEY FORM FOR THAMNOPHIS GIGAS 2012-05-07
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 93225
EO Index: 94366
Key Quad: Rio Linda (3812164)
Element Code: ARADB36150
Occurrence Number: 315
Occurrence Last Updated: 2014-07-18

Scientific Name: Thamnophis gigas
Common Name: giant garter snake

Listing Status:
Federal: Threatened
State: Threatened

Rare Plant Rank:
Other Lists: IUCN_VU-Vulnerable

CNDDB Element Ranks:
Global: G2
State: S2

General Habitat:
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

Micro Habitat:
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

Last Date Observed: 2010-09-29
Last Survey Date: 2010-09-29
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Poor
Trend: Unknown
Presence: Presumed Extant

Location:
ALONG E LEVEE RD, ABOUT 0.83 MILE N OF ELVERTA RD INTERSECTION, 1.7 MILES S OF RIEGO RD, NW OF RIO LINDA.

Detailed Location:
MAPPED TO PROVIDED COORDINATES. PROVIDED LOCATION DESCRIPTION WAS "PAVED ROAD APPROXIMATELY 4.5 KM EAST OF SR-99/70; APPROXIMATELY 1.4 KM NORTH OF ELVERTA ROAD."

Ecological:
PAVED ROAD SURFACE WITH STEELHEAD CREEK TO THE EAST AND RICE FIELDS TO THE WEST.

Threats:
MODERATE VEHICULAR TRAFFIC.

General:
1 MALE SNAKE FOUND DEAD ON ROAD ON 29 SEP 2010.

PLSS: T10N, R04E, Sec. 13 (M)  Accuracy: 80 meters  Area (acres): 0
UTM: Zone-10 N4287488 E631347  Latitude/Longitude: 38.72629 / -121.48898  Elevation (feet): 30

County Summary: Sacramento
Quad Summary: Rio Linda (3812164)

Sources:
HAN10D0001 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2010 [SC-003881] 2010-XX-XX
Map Index Number: 93230
EO Index: 94370
Key Quad: Taylor Monument (3812165)
Element Code: ARADB36150
Occurrence Number: 316
Occurrence Last Updated: 2014-07-18

Scientific Name: *Thamnophis gigas*
Common Name: giant garter snake

Listing Status:
- Federal: Threatened
- State: Threatened

Rare Plant Rank:
- Global: G2
- State: S2

Other Lists:
- IUCN_VU-Vulnerable

CNDDDB Element Ranks:
- Global: G2
- State: S2

General Habitat:
- PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

Micro Habitat:
- THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

Last Date Observed: 2010-06-21
Last Survey Date: 2010-06-21
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Fair
Trend: Unknown
Owner/Manager: PVT-NATOMAS MUTUAL WATER CO
Presence: Presumed Extant

Location:
- ALONG LONE TREE RD, ABOUT 1 MILE N OF INTERSECTION WITH ELVERTA RD, BETWEEN POWER LINE RD AND HWY 99, N OF SACRAMENTO.

Detailed Location:
- MAPPED TO PROVIDED COORDINATES. PROVIDED LOCATION DESCRIPTION WAS "IRRIGATION CANAL APPROXIMATELY 1.2 KM EAST OF POWERLINE RD, APPROXIMATELY 1.2 KM NORTH OF ELVERTA RD."

Ecological:
- IRRIGATION CANAL WITH RICE TO THE NORTH, EAST, SOUTH, AND WEST.

Threats:
- AGRICULTURAL/MAINTENANCE OPERATIONS, LIGHT VEHICLE AND FARM EQUIPMENT TRAFFIC.

General:
- 1 FEMALE SNAKE AND 1 SNAKE OF UNKNOWN SEX DETECTED ON 21 JUN 2010. FEMALE WAS A YOUNG ADULT THAT WAS CAPTURED, WEIGHED, MEASURED, PIT TAGGED, VENTRAL SCUTES MARKED, PHOTOGRAPHED AND RELEASE. OTHER SNAKE OBSERVED BASKING AND NOT CAPTURED.

PLSS: T10N, R04E, Sec. 08 (M)
Accuracy: specific area
Area (acres): 10

UTM: Zone-10 N4287901 E625301
Latitude/Longitude: 38.73090 / -121.55844
Elevation (feet): 25

County Summary:

Sacramento
Taylor Monument (3812165)

Sources:
HAN10D0001 HANSEN, E. - EXCEL WORKBOOK CONTAINING INFORMATION ON GIANT GARTER SNAKES COLLECTED DURING 2010 [SC-003881] 2010-XX-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 93248  
**EO Index:** 94383

**Key Quad:** Taylor Monument (3812165)  
**Occurrence Number:** 317  
**Occurrence Last Updated:** 2014-12-17

**Scientific Name:** *Thamnophis gigas*  
**Common Name:** giant garter snake

**Listing Status:**
- **Federal:** Threatened  
- **State:** Threatened

**CNDDB Element Ranks:**
- **Global:** G2  
- **State:** S2

**General Habitat:**
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

**Micro Habitat:**
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

**Last Date Observed:** 2000-07-30  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2000-07-30  
**Occurrence Rank:** Poor

**Owner/Manager:** UNKNOWN, PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
BETWEEN METRO PKWY AND LONE TREE RD, ABOUT 0.7 MILE NNE OF ELKHORN RD & METRO PKWY INTERSECTION, E OF SAC INTL AIRPORT.

**Detailed Location:**
MAPPED TO PROVIDED COORDINATES. COORDINATES PLACE SNAKES ALONG A DRAINAGE CANAL. CANAL WAS VISIBLE IN 1993-2005 AERIAL PHOTOS. THE CANAL IS NO LONGER VISIBLE IN THE 2006-2014 PHOTOS AND APPEARS TO HAVE BEEN FILLED IN.

**Ecological:**

**Threats:**

**General:**
17 FEMALES, 14 MALES, AND 12 UNKNOWN SEX CAPTURED BETWEEN 26 JUN-17 AUG 1999; SEVERAL SNAKES WERE RECAPTURED MORE THAN ONCE. 2 MALES AND 1 FEMALE CAPTURED BETWEEN 28 JUN-30 JUL 2000; FEMALE WAS RECAPTURED ONCE.

**PLSS:**
- T10N, R04E, Sec. 29 (M)

**UTM:**
- Zone-10 N4283452 E624751

**County Summary:**
Sacramento  
Taylor Monument (3812165)

**Sources:**
USGS - BIOLOGICAL RESOURCES DISCIPLINE - SHAPEFILE FROM BIOS (DS94) OF GIANT GARTER SNAKE COLLECTION RECORDS FROM 21 APR 1995 THROUGH 9 SEP 2004. 2004-09-09

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Report Printed on Tuesday, September 15, 2015

Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch

Information Expires 3/1/2016
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<th><strong>General Habitat:</strong></th>
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<th><strong>Location:</strong></th>
<th>ABOUT 0.9 MI S OF ELVERTA RD AND METRO PKWY INTERSECTION, 1.8 MI NW OF HWY 99 AT ELKHORN RD, E OF SAC INTL AIRPORT.</th>
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<tr>
<td><strong>Detailed Location:</strong></td>
<td>MAPPED TO PROVIDED COORDINATES. COORDINATES PLACE SNAKES ALONG A DRAINAGE CANAL. CANAL WAS VISIBLE IN 1993-2005 AERIAL PHOTOS. THE CANAL IS NO LONGER VISIBLE IN THE 2006-2014 PHOTOS AND APPEARS TO HAVE BEEN FILLED IN.</td>
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<td><strong>Ecological:</strong></td>
<td>SUBSTRATE NEAR TRAPS WAS MOSTLY OPEN WATER AND BARE GROUND; VEGETATION DOMINATED BY WEEDY DICOTS, GRASSES, AND OTHER MISCELLANEOUS WETLAND VEGETATION. PREY DENSITY WAS MODERATE TO HIGH. N FEATURE SITE NAME: CENTRAL MAIN CANAL-MID SECTION.</td>
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<td><strong>Threats:</strong></td>
<td>4 FEMALES, 3 MALES, AND 4 OF UNKNOWN SEX CAPTURED BETWEEN 4-25 AUG 1999; 2 SNAKES CAPTURED TWICE DURING SURVEYS. 1 FEMALE CAPTURED ON 25 JUN AND 1 MALE CAPTURED ON 9 JUL 2003.</td>
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<td>WYLIE, G. ET AL. (U.S. GEOLOGICAL SURVEY-WESTERN ECLOGICAL RESEARCH CENTER) - MONITORING GIANT GARTER SNAKES IN THE NATOMAS BASIN: 2003 RESULTS 2004-01-XX</td>
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</table>
### Scientific Name:
*Thamnophis gigas*

### Common Name:
giant garter snake

### Listing Status:
- **Federal:** Threatened
- **State:** Threatened

### Scientific Name:
*Thamnophis gigas*

### Common Name:
giant garter snake

### Listing Status:
- **Federal:** Threatened
- **State:** Threatened

### CNDDB Element Ranks:
- **Global:** G2
- **State:** S2

### General Habitat:
PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

### Micro Habitat:
THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

### Last Date Observed:
2006-07-04

### Last Survey Date:
2006-07-04

### Owner/Manager:
UNKNOWN, PVT

### Presence:
Presumed Extant

### Location:
~1.25 MI SSE OF ELVERTA RD & METRO RD INTERSECTION, 1.3 MI NW OF HWY 99 & ELKHORN BLVD INTERSECTION, NW OF SACRAMENTO.

### Detailed Location:
MAPPED TO PROVIDED COORDINATES. DRAINAGE DITCH ADJACENT TO LONE TREE RD, NE OF SACRAMENTO INTERNATIONAL AIRPORT. SITE NAME WAS "LONE TREE." METRO AIR PARK DEVELOPMENT WAS IN PROCESS DURING 2006 SURVEYS.

### Ecological:

### Threats:
URBANIZATION, FLOODING, WATER MGMT, VEGETATION CONTROL AND MAINTENANCE ACTIVITIES, AND INTRODUCED PREDATORS.

### General:

### PLSS:
T10N, R04E, Sec. 28 (M)

### UTM:
Zone-10 N4284177 E625399

### Accuracy:
specific area

### Area (acres):
95

### Latitude/Longitude:
38.69733 / -121.55798

### Elevation (feet):
23

### Trend:
Unknown

### Presence:
Presumed Extant

### Location:
~1.25 MI SSE OF ELVERTA RD & METRO RD INTERSECTION, 1.3 MI NW OF HWY 99 & ELKHORN BLVD INTERSECTION, NW OF SACRAMENTO.

### Detailed Location:
MAPPED TO PROVIDED COORDINATES. DRAINAGE DITCH ADJACENT TO LONE TREE RD, NE OF SACRAMENTO INTERNATIONAL AIRPORT. SITE NAME WAS "LONE TREE." METRO AIR PARK DEVELOPMENT WAS IN PROCESS DURING 2006 SURVEYS.

### Ecological:

### Threats:
URBANIZATION, FLOODING, WATER MGMT, VEGETATION CONTROL AND MAINTENANCE ACTIVITIES, AND INTRODUCED PREDATORS.

### General:

### PLSS:
T10N, R04E, Sec. 28 (M)

### UTM:
Zone-10 N4284177 E625399

### Accuracy:
specific area

### Area (acres):
95

### Latitude/Longitude:
38.69733 / -121.55798

### Elevation (feet):
23

### Trend:
Unknown

### Presence:
Presumed Extant

### Location:
~1.25 MI SSE OF ELVERTA RD & METRO RD INTERSECTION, 1.3 MI NW OF HWY 99 & ELKHORN BLVD INTERSECTION, NW OF SACRAMENTO.

### Detailed Location:
MAPPED TO PROVIDED COORDINATES. DRAINAGE DITCH ADJACENT TO LONE TREE RD, NE OF SACRAMENTO INTERNATIONAL AIRPORT. SITE NAME WAS "LONE TREE." METRO AIR PARK DEVELOPMENT WAS IN PROCESS DURING 2006 SURVEYS.

### Ecological:

### Threats:
URBANIZATION, FLOODING, WATER MGMT, VEGETATION CONTROL AND MAINTENANCE ACTIVITIES, AND INTRODUCED PREDATORS.

### General:

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T10N, R04E, Sec. 28 (M)

### UTM:
Zone-10 N4284177 E625399

### Accuracy:
specific area

### Area (acres):
95

### Latitude/Longitude:
38.69733 / -121.55798

### Elevation (feet):
23

### Trend:
Unknown

### Presence:
Presumed Extant

### Location:
~1.25 MI SSE OF ELVERTA RD & METRO RD INTERSECTION, 1.3 MI NW OF HWY 99 & ELKHORN BLVD INTERSECTION, NW OF SACRAMENTO.

### Detailed Location:
MAPPED TO PROVIDED COORDINATES. DRAINAGE DITCH ADJACENT TO LONE TREE RD, NE OF SACRAMENTO INTERNATIONAL AIRPORT. SITE NAME WAS "LONE TREE." METRO AIR PARK DEVELOPMENT WAS IN PROCESS DURING 2006 SURVEYS.

### Ecological:

### Threats:
URBANIZATION, FLOODING, WATER MGMT, VEGETATION CONTROL AND MAINTENANCE ACTIVITIES, AND INTRODUCED PREDATORS.

### General:
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>NORTH OF SIMS ROAD, WEST OF FRANKLIN ROAD. (SACRAMENTO VICINITY).</td>
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<table>
<thead>
<tr>
<th>Detailed Location:</th>
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<tbody>
<tr>
<td>FRESHWATER MARSH AREAS PRESENT. APPROX 200 ACRES.</td>
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<table>
<thead>
<tr>
<th>Ecological:</th>
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<tbody>
<tr>
<td>LOW FLOOD PLAIN POOLS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.</td>
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<table>
<thead>
<tr>
<th>Threats:</th>
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<table>
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SEE WWW.DFG.CA.GOV/BIOGEOCDATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

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<tr>
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<tbody>
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<table>
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Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch

Report Printed on Tuesday, September 15, 2015

Information Expires 3/1/2016
**Occurrence Report**
*California Department of Fish and Wildlife*
*California Natural Diversity Database*

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<tr>
<td>Key Quad:</td>
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<td>EO Index:</td>
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<td>Element Code:</td>
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<td>1998-07-15</td>
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<th>Scientific Name:</th>
<th>Northern Hardpan Vernal Pool</th>
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<tr>
<td>Common Name:</td>
<td>Northern Hardpan Vernal Pool</td>
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<tr>
<th>General Habitat:</th>
<th>Micro Habitat:</th>
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| Last Date Observed: | 1983-XX-XX |
| Last Survey Date:   | 1983-XX-XX |
| Owner/Manager:      | UNKNOWN |
| Presence:           | Presumed Extant |

**Location:**
LARGE AREA BOUNDED BY JACKSON ROAD, EAGLES NEST, CALVINE, AND EXCELSIOR ROADS.

**Detailed Location:**
VAST AREA OF SPARSE VERNAL POOLS. EXTENDS NORTH TO JACKSON ROAD.

**Ecological:**
ON REDDING-CORNING ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

**Threats:**
HOUSING DEVELOPMENT IN AREA. SOME CATTLE USE.

**General:**
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:**
T08N, R06E, Sec. 35 (M)   Accuracy: 1 mile   Area (acres): 0
**UTM:**
Zone-10 N4263138 E649545   Latitude/Longitude: 38.50407 / -121.28495   Elevation (feet): 120

**County Summary:**
Sacramento   Elk Grove (3812143), Carmichael (3812153)

**Sources:**
GRIGGS, T. - FIELD SURVEY FORM FOR VERNAL POOLS IN SACRAMENTO COUNTY NEAR FLORIN ROAD, #TG81. 1980-05-13
<table>
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<td>34</td>
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**Scientific Name:** Northern Hardpan Vernal Pool  
**Common Name:** Northern Hardpan Vernal Pool

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S3.1

**General Habitat:**  
- [ ]

**Micro Habitat:**  
- [ ]

**Last Date Observed:** 1983-XX-XX  
**Last Survey Date:** 1983-XX-XX  
**Presence:** Presumed Extant

**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.

**Threats:**  
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**General:**  
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T07N, R05E, Sec. 26 (M)  
**UTM:** Zone-10 N4255091 E639339  
**Accuracy:** 1/5 mile  
**Latitude/Longitude:** 38.43323 / -121.40355  
**Area (acres):** 0  
**Elevation (feet):** 25

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
- GR80F0047 GRIGGS, T. - FIELD SURVEY FORM FOR VERNAL POOLS SACRAMENTO COUNTY, #TG79. 1980-05-13  
### Northern Hardpan Vernal Pool

**Map Index Number:** 11322  
**EO Index:** 26980  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 52  
**Occurrence Last Updated:** 1998-07-15  
**Occurrence Code:** CTT44110CA

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<th>Rare Plant Rank</th>
<th>CNDDB Element Ranks</th>
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**General Habitat:**  
**Micro Habitat:**  

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<th>Last Survey Date</th>
<th>Presence</th>
<th>Occurrence Type</th>
<th>Occurrence Rank</th>
<th>Trend</th>
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**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.

**Threats:**  
HEAVY CATTLE USE.

**General:**  
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T06N, R05E, Sec. 07 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0  
**UTM:** Zone-10 N4249172 E633955  
**Latitude/Longitude:** 38.38073 / -121.46635  
**Elevation (feet):** 15  
**Quad Summary:**  
Sacramento  
Bruceville (3812134), Florin (3812144)

**Sources:**  
GRI80F0059  
GRIGGS, T. - FIELD SURVEY FORM FOR VERNAL POOLS NEAR FRANKLIN, SACRAMENTO COUNTY. 1980-05-13
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11675  
EO Index: 26932  
Key Quad: Elk Grove (3812143)  
Element Code: CTT44110CA  
Occurrence Number: 55  
Occurrence Last Updated: 1998-07-15  

Scientific Name: Northern Hardpan Vernal Pool  
Common Name: Northern Hardpan Vernal Pool  

Listing Status:  
Federal: None  
State: None  

Rare Plant Rank:  
Other Lists:  

CNDDB Element Ranks:  
Global: G3  
State: S3.1  

General Habitat:  
Micro Habitat:  

Last Date Observed: 1983-XX-XX  
Occurrence Type: Natural/Native occurrence  
Last Survey Date: 1983-XX-XX  
Occurrence Rank: Unknown  
Owner/Manager: UNKNOWN  
Trend: Unknown  
Presence: Presumed Extant  

Location: NE OF ELK GROVE ALONG BRADSHAW ROAD. 1-2.5 MILES NORTH OF CALVINE ROAD ALONG EXCELSIOR ROAD.  
Detailed Location:  
LARGE AREA OF SPARSE VERNAL POOLS AS SEEN IN 1983 AERIAL PHOTOGRAPHS. ORCUTTIA TENUIS KNOWN FROM THIS AREA.  

Ecological:  
UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.  

Threats:  
AREA GRAZED, HOUSING IN VICINITY, PER 1980 SITE VISIT.  

General:  
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.  

PLSS: T07N, R06E, Sec. 11 (M)  
Accuracy: 1 mile  
Area (acres): 0  

UTM: Zone-10 N4260357 E649257  
Latitude/Longitude: 38.47906 / -121.28884  
Elevation (feet): 90  

County Summary:  
Sacramento  
Elk Grove (3812143)  

Sources:  
GR80F0051  
GRIGGS, T. - FIELD SURVEY FORM FOR VERNAL POOLS NE OF ELK GROVE ALONG BRADSHAW ROAD. #TG80. 1980-05-13  

HOL86M0005  
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<tr>
<th>Map Index Number:</th>
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<th>26982</th>
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<td>Occurrence Number:</td>
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<td>1998-07-15</td>
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**Scientific Name:** Northern Hardpan Vernal Pool  
**Common Name:** Northern Hardpan Vernal Pool  
**Listing Status:** Federal: None  
State: None  
**CNDDB Element Ranks:** Global: G3  
State: S3.1  

**General Habitat:**  
**Micro Habitat:**

**Last Date Observed:** 1980-05-13  
**Last Survey Date:** 1980-05-13  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  

**Location:**  
NE OF ELK GROVE ALONG BRADSHAW ROAD. (ACTUALLY NW OF INTERSECTION OF CALVINE & EXCELSIOR ROADS).  

**Detailed Location:**

**Ecological:**  
UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.  

**Threats:**  
GRAZING IN VICINITY.  

**General:**  
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T07N, R06E, Sec. 15 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4257688 E648264  
**Latitude/Longitude:** 38.45518 / -121.30079  
**Elevation (feet):** 70

**County Summary:** Elk Grove (3812143)  
**Quad Summary:**

**Sources:**

GRIGGS, T. - FIELD SURVEY FORM FOR VERNAL POOLS NE OF ELK GROVE ALONG BRADSHAW ROAD, #TG80. 1980-05-13
### Scientific Name:
Northern Hardpan Vernal Pool

### Common Name:
Northern Hardpan Vernal Pool

### Listing Status:
- **Federal:** None
- **State:** None

### CNDDDB Element Ranks:
- **Global:** G3
- **State:** S3.1

### General Habitat:

### Micro Habitat:

### Last Date Observed:
1987-06-17

### Occurrence Last Updated:
1998-07-15

### Presence:
Presumed Extant

### Location:
NE OF ELK GROVE ALONG BRADSHAW ROAD, WEST OF WATERMAN ROAD BETWEEN SHELDON & BOND ROADS.

### Detailed Location:
- **Ecological:** PORTIONS RETAIN NATURAL TOPOGRAPHY W/GOOD SPECIES DIVERSITY. ON REDDING-CORNING ASSOC. SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
- **Threats:** AREA GRAZED, WESTERN PORTIONS ONCE USED AS SMALL RESERVOIRS W/CHECK DAMS; OTHER AREAS W/SMALL CHECKS, TERRACES. PARCEL TO BE SOLD, 1987. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

### PLSS:
- **T07N, R06E, Sec. 30 (M):**
- **Zone-10 N4254915 E643319:**

### Accuracy:
1/5 mile

### Area (acres):
0

### Elevation (feet):
55

### Sacramento
- **County Summary:** Elk Grove (3812143)

### Sources:
- GRIGGS, T. - FIELD SURVEY FORM FOR VERNAL POOLS NE OF ELK GROVE ALONG BRADSHAW ROAD, #TG80. 1980-05-13
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11587
EO Index: 26930
Key Quad: Elk Grove (3812143)
Occurrence Number: 58
EO Index: 26930
Element Code: CTT44110CA
Occurrence Last Updated: 1998-07-15

Scientific Name: Northern Hardpan Vernal Pool
Common Name: Northern Hardpan Vernal Pool
Listing Status: Federal: None
State: None
Rare Plant Rank:
Other Lists:
CNDDB Element Ranks: Global: G3
State: S3.1

General Habitat:
Micro Habitat:

Last Date Observed: 1983-XX-XX
Last Survey Date: 1983-XX-XX
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Unknown
Trend: Unknown

Presence: Presumed Extant
Location:
NE OF ELK GROVE ALONG BRADSHAW ROAD.
Detailed Location:
>80 AC OF DENSE POOLS SEEN IN 1983 AERIAL PHOTOS. AREA OF SPARSE POOLS ALSO TO WEST IN 1/2 SECTION 17, EAST 1/2 SECTION 18.

Ecological:
ON REDDING-CORNING ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threats:
General:
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS:
T07N, R06E, Sec. 16 (M)
Accuracy: 1/5 mile
Area (acres): 0

UTM:
Zone-10 N4258119 E644886
Latitude/Longitude: 38.45962 / -121.33940
Elevation (feet): 65

County Summary:
Sacramento
Elk Grove (3812143)

Quad Summary:

Sources:
GRi80F0051 GRIGGS, T. - FIELD SURVEY FORM FOR VERNAL POOLS NE OF ELK GROVE ALONG BRADSHAW ROAD, #TG80. 1980-05-13
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

#### Map Index Number: 11433  
**EO Index:** 26870

**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 78  
**Occurrence Code:** CTT44110CA  
**Occurrence Last Updated:** 1998-07-15

<table>
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<th>Scientific Name</th>
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<tr>
<td>Common Name</td>
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| Listing Status  | Federal: None  
State: None |
| CNDDB Element Ranks | Global: G3  
State: S3.1 |

**General Habitat:**

| Micro Habitat: | |

**Last Date Observed:** 1983-XX-XX  
**Last Survey Date:** 1983-XX-XX

**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**
BETWEEN ELVERTA ROAD & U STREET, EAST OF 16TH STREET, WEST OF DRY CREEK, NE OF RIO LINDA.

**Detailed Location:**
SPARSE VERNAL POOLS AS SEEN IN 1983 AERIAL PHOTOS.

**Ecological:**
ON SAN JOAQUIN ASSOC SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

**Threats:**
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T10N, R05E, Sec. 22 (M)  
**Accuracy:** 1/5 mile  
**Quad Summary:** Sacramento  
**PLSS:** Rio Linda (3812164)  
**UTM:** Zone-10 N4285642 E637212  
**Accuracy:** 38.70878 / -121.42190  
**Area (acres):** 0  
**Elevation (feet):** 70  
**County Summary:**

**Sources:**
HOL86M0005  
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 11427  
**EO Index:** 21462  
**Element Code:** CTT44110CA  
**Occurrence Updated:** 1998-07-15

**Scientific Name:** *Northern Hardpan Vernal Pool*  
**Common Name:** *Northern Hardpan Vernal Pool*

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDDB Element Ranks:**  
**Global:** G3  
**State:** S3.1

**General Habitat:**  
**Micro Habitat:**

**Last Date Observed:** 1983-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1983-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
WEST OF MCCLELLAN AIR FORCE BASE BETWEEN MAGPIE CREEK & ASCOT AVE, NORTH OF SACRAMENTO.

**Detailed Location:**  
SPARSE VERNAL POOLS AS SEEN IN 1983 AERIAL PHOTOS. FIELD CHECKED BY WYMER AND ASSOCIATES IN 1987.

**Ecological:**  
ON SAN JOAQUIN ASSOC SOILS. NO RARE OR ENDANGERED PLANTS WERE FOUND DURING THE 1987 FIELD SURVEYS, HOWEVER, OVER 100 DIFFERENT SPECIES WERE FOUND AND ARE LISTED IN WYM87R02. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

**Threats:**

**General:**  
SOME POOLS MOVED BY WYMER AND ASSOC. PROCESS DESCRIBED IN WYM88R03. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T09N, R05E, Sec. 19 (M)  
**Accuracy:** specific area  
**Area (acres):** 321

**UTM:** Zone-10 N4280626 E637266  
**Latitude/Longitude:** 38.66358 / -121.42228  
**Elevation (feet):** 50

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**

- HOL86M0005  

- WYM87R0002  
  WYMER, N. - THREATENED & ENDANGERED SPECIES SURVEY AT MCCLELLAN AIR FORCE BASE. 1987-XX-XX

- WYM88R0003  
  WYMER, N. - VERNAL POOL RESTORATION PROJECT AT MCCLELLAN AIR FORCE BASE. 1988-XX-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11666
EO Index: 16243
Key Quad: Carmichael (3812153)
Element Code: CTT44110CA
Occurrence Number: 80
Occurrence Last Updated: 1998-07-15

Scientific Name: *Northern Hardpan Vernal Pool*
Common Name: *Northern Hardpan Vernal Pool*

Listing Status:
- Federal: None
- State: None

CNDDDB Element Ranks:
- Global: G3
- State: S3.1

General Habitat: [ ]
Micro Habitat: [ ]

Last Date Observed: 1983-XX-XX
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1983-XX-XX
Occurrence Rank: Unknown

Owner/Manager: DOD-MATHER AFB
Trend: Unknown

Presence: Presumed Extant

Location:
MATHER AIR FORCE BASE WEST OF KITTY HAWK SCHOOL.

Detailed Location:
DENSE VERNAL POOLS IN WEST PORTION, SPARSE VERNAL POOLS IN EAST PORTION AS SEEN IN 1983 AERIAL PHOTOS.

Ecological:
UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threats:
General:
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T08N, R06E, Sec. 14 (M)
Accuracy: specific area
Area (acres): 114

UTM: Zone-10 N4267901 E648794
Latitude/Longitude: 38.54710 / -121.29254
Elevation (feet): 70

County Summary:
Sacramento
Quad Summary:
Carmichael (3812153)

Sources:
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

<table>
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**Scientific Name:** Northern Hardpan Vernal Pool  
**Common Name:** Northern Hardpan Vernal Pool

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<th>Listing Status:</th>
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<th>Rare Plant Rank:</th>
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<td>Presence: Presumed Extant</td>
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**Location:**  
BOTH SIDES OF JACKSON ROAD ABOUT 1 MILE WEST OF EXCELSIOR ROAD, SOUTH OF MATHER AIR FORCE BASE.

**Detailed Location:**  
>80 ACRES OF DENSE VERNAL POOLS AS SEEN IN 1983 AERIAL PHOTOGRAPHS. PATCH OF SPARSE POOLS SOUTH OF ELDER CREEK ROAD ALSO.

**Ecological:**  
ON REDDING-CORNING AND SAN JOAQUIN ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

**Threats:**  
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

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<td>Elevation (feet): 65</td>
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**County Summary:**  
Sacramento

**Quad Summary:**  
Carmichael (3812153)

**Sources:**  
HOL86M0005  
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<td>88</td>
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<td><strong>Occurrence Last Updated:</strong></td>
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**Scientific Name:** Northern Hardpan Vernal Pool  
**Common Name:** Northern Hardpan Vernal Pool

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S3.1

**General Habitat:**  
**Micro Habitat:**

**Last Date Observed:** 1983-XX-XX  
**Last Survey Date:** 1983-XX-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
WEST OF BRADSHAW ROAD. SOUTH OF ELDER CREEK ROAD. ABOUT 3 MILES SW OF MATHER AIR FORCE BASE.

**Detailed Location:**  
TWO SMALL AREAS OF DENSE VERNAL POOLS AS SEEN IN 1983 AERIAL PHOTOS.

**Ecological:**  
UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

**Threats:**

**General:**  
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T08N, R06E, Sec. 32 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4263110 E644747  
**Latitude/Longitude:** 38.50461 / -121.33996  
**Elevation (feet):** 60

**County Summary:** Elk Grove (3812143), Carmichael (3812153)

**Sources:**  
HOL86M0005  
### Scientific Name: Northern Hardpan Vernal Pool

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### General Habitat:

### Micro Habitat:

### Last Date Observed: 1983-XX-XX

### Last Survey Date: 1983-XX-XX

### Owner/Manager: UNKNOWN

### Presence: Presumed Extant

### Location:

EAST & WEST OF BRADSHAW ROAD, NORTH OF GERBER ROAD. ABOUT 5 MILES NORTH OF ELK GROVE.

### Detailed Location:

EAST OF ROAD SPARSE VERNAL POOLS EXTEND FOR OVER 1 MILE. WEST OF ROAD SMALLER POOL AREA ON EAST SIDE OF CENTRAL CALIFORNIA TRACTION RAILROAD LINES.

### Ecological:

UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

### Threats:

SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

### PLSS:

T07N, R06E, Sec. 04 (M)

### UTM:

Zone-10 N4261557 E645745

### Accuracy:

1 mile

### Area (acres):

0

### Elevation (feet):

60

### Sources:

**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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<td>93</td>
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**Scientific Name:** Northern Hardpan Vernal Pool
**Common Name:** Northern Hardpan Vernal Pool

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDDB Element Ranks:**
- **Global:** G3
- **State:** S3.1

**General Habitat:**

**Micro Habitat:**

**Last Date Observed:** 1983-XX-XX
**Last Survey Date:** 1983-XX-XX
**Owner/Manager:** UNKNOWN
**Presence:** Presumed Extant

**Location:**
ELLIO T 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.

**Threats:**

**General:**
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T07N, R05E, Sec. 31 (M) 1 mile
**Area (acres):** 0

**UTM:** Zone-10 N4253060 E634035 38.41574 / -121.46468 15
**Latitude/Longitude:**

**County Summary:**
Sacramento
**Quad Summary:**
Florin (3812144)

**Sources:**
### Scientific Name: Northern Hardpan Vernal Pool

### Common Name: Northern Hardpan Vernal Pool

### Listing Status:
- **Federal:** None
- **State:** None

### CNDDDB Element Ranks:
- **Global:** G3
- **State:** S3.1

### General Habitat:

### Micro Habitat:

### Occurrence Report

#### Last Date Observed: 1983-XX-XX

#### Last Survey Date: 1983-XX-XX

#### Presence: Presumed Extant

#### 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.

#### Threats:

#### General:
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

#### PLSS:
- **T06N, R05E, Sec. 20 (M)**

#### UTM:
- **Zone-10 N4247079 E634635**

#### County Summary:
- **Sacramento**
- **Bruceville (3812134), Florin (3812144)**

#### Sources:
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Northern Hardpan Vernal Pool

**Common Name:** Northern Hardpan Vernal Pool

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S3.1

**General Habitat:**

**Micro Habitat:**

**Last Date Observed:** 1983-XX-XX

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1983-XX-XX

**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**

NORTH OF KIEFER BLVD WEST OF MATHER ROAD & SOUTH OF KIEFER BLVD EAST OF MATHER ROAD.

**Detailed Location:**

AREAS OF SPARSE VERNAL POOLS AS SEEN IN 1983 AERIAL PHOTOS.

**Ecological:**

PARTLY ON REDDING-CORNING ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

**Threats:**

**General:**

SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T08N, R06E, Sec. 24 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4265924 E650147  
**Latitude/Longitude:** 38.52906 / -121.27745  
**Elevation (feet):** 130

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**

HOL86M0005  
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** Northern Hardpan Vernal Pool  
**Common Name:** Northern Hardpan Vernal Pool

**Listing Status:**  
- Federal: None  
- State: None

**CNNDDB Element Ranks:**  
- Global: G3  
- State: S3.1

**General Habitat:**  
**Micro Habitat:**

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<td>Presumed Extant</td>
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**Last Date Observed:**  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Location:**  
WEST & SOUTH OF WEST END OF MATHER FIELD RUNWAYS & SMALL PATCH BETWEEN RUNWAYS AT WEST END.

**Detailed Location:**  
PATCHES OF SPARSE VERNAL POOLS SEEN IN 1983 AERIAL PHOTOS.

**Ecological:**  
ON SAN JOAQUIN ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

**Threats:**  
- General:
  SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURALCOMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T08N, R06E, Sec. 16 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4267575 E646023  
**Latitude/Longitude:** 38.54462 / -121.32440  
**Elevation (feet):** 65

**Sacramento Summary:** Carmichael (3812153)

**Sources:**  
Map Index Number: 11412
EO Index: 26718
Key Quad: Florin (3812144)
Occurrence Number: 97
Occurrence Last Updated: 1998-07-15

Scientific Name: Northern Hardpan Vernal Pool
Common Name: Northern Hardpan Vernal Pool

Listing Status: Federal: None
State: None

CNDDB Element Ranks: Global: G3
State: S3.1

General Habitat:  
Micro Habitat:  

Last Date Observed: 1983-XX-XX
Last Survey Date: 1983-XX-XX
Owner/Manager: UNKNOWN
Presence: Presumed Extant

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.

Threats:

General:
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T07N, R05E, Sec. 22 (M)  
Accuracy: 1 mile  
Area (acres): 0

UTM: Zone-10 N4255769 E637532  
Latitude/Longitude: 38.43962 / -121.42411  
Elevation (feet): 20

County Summary:
Sacramento

Quad Summary:
Florin (3812144)

Sources:

Report Printed on Tuesday, September 15, 2015
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<td>118</td>
<td>Occurrence Last Updated:</td>
<td>1998-07-15</td>
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**Scientific Name:** Northern Hardpan Vernal Pool  
**Common Name:** Northern Hardpan Vernal Pool

**Listing Status:**  
**Federal:** None  
**State:** None

**CNNDDB Element Ranks:**  
**Global:** G3  
**State:** S3.1

**General Habitat:**  
**Micro Habitat:**

**Last Date Observed:** 1983-XX-XX  
**Last Survey Date:** 1983-XX-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
EAST OF COSUMNES RIVER, NW OF DILLARD ROAD, SOUTH OF FREEMAN ROAD.

**Detailed Location:**  
DENSE DISTRIBUTION OF VERNAL POOLS.

**Ecological:**  
SAN JOAQUIN ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

**Threats:**  
**General:**  
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T06N, R06E, Sec. 11 (M)  
**Accuracy:** specific area

**UTM:** Zone-10 N4250133 E649616  
**Latitude/Longitude:** 38.38690 / -121.28690  
**Elevation (feet):** 65

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
HOL86M0005  
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11712
EO Index: 26512
Key Quad: Elk Grove (3812143)
Element Code: CTT44110CA
Occurrence Number: 119
Occurrence Last Updated: 1998-07-15

Scientific Name: Northern Hardpan Vernal Pool
Common Name: Northern Hardpan Vernal Pool

Listing Status:
  Federal: None
  State: None

CNDDDB Element Ranks:
  Global: G3
  State: S3.1

General Habitat:

Micro Habitat:

Last Date Observed: 1983-XX-XX
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1983-XX-XX
Occurrence Rank: Unknown
Owner/Manager: UNKNOWN
Trend: Unknown
Presence: Presumed Extant

Location:
SOUTH OF WALMORT ROAD, EAST OF NORTH BADGER CREEK.

Detailed Location:
SMALL AREA OF DENSE VERNAL POOLS.

Ecological:
SAN JOAQUIN ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threats:

General:
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS:
  T06N, R06E, Sec. 13 (M)
Accuracy: 1/5 mile

UTM:
  Zone-10 N4249147 E651627
Latitude/Longitude: 38.37768 / -121.26411
Elevation (feet): 65

County Summary:
Sacramento

Quad Summary:
Elk Grove (3812143)

Sources:
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11332  
EO Index: 26284
Key Quad: Rio Linda (3812164)  
Element Code: CTT44120CA
Occurrence Number: 30  
Occurrence Last Updated: 1998-07-15

Scientific Name: Northern Claypan Vernal Pool  
Common Name: Northern Claypan Vernal Pool
Listing Status: Federal: None  
Rare Plant Rank:
State: None  
Other Lists:
CNDDDB Element Ranks: Global: G1  
Occurrence Type: Natural/Native occurrence
State: S1.1  
Occurrence Rank: Unknown

General Habitat:  
Micro Habitat:

Last Date Observed: 1983-04-13  
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1984-04-13  
Occurrence Rank: Unknown
Owner/Manager: UNKNOWN  
Trend: Unknown
Presence: Presumed Extant

Location:
NORTH OF DRY CREEK, SOUTH OF ASCOT AVE, JUST EAST OF WESTERN PACIFIC RR TRACKS, SACRAMENTO.

Detailed Location:

Ecological:
VERNAL POOL COMPLEX W/SEASONAL & PERENNIAL FRESHWATER MARSH. ANNUAL GRASSLAND SURROUNDS. POOL TAXA INCL ERYNGIUM, DOWNINGIA, PLAGIOTHYRS, JUNCUS. ON CLAY SUBSTRATE. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threats:
MODERATELY GRAZED, EROSION THREATENING ONE POOL.

General:
AREA PROPOSED FOR REGIONAL PARK BY CITY OF SACRAMENTO PER SCHONHOLTZ. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T09N, R05E, Sec. 05 (M)  
Accuracy: 1/5 mile  
Area (acres): 0
UTM: Zone-10 N4281006 E632941  
Latitude/Longitude: 38.66767 / -121.47190  
Elevation (feet): 35

County Summary: Sacramento  
Quad Summary: Rio Linda (3812164)

Sources:
SCH84F0018 SCHONHOLTZ, R. - FIELD SURVEY FORM FOR "HANGEN (ER ?) PARK" VERNAL POOLS - NORTHERN CLAYPAN VERNAL POOLS. 1984-04-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 11782
EO Index: 16218
Key Quad: Roseville (3812173)
Element Code: CTT44132CA
Occurrence Number: 1
Occurrence Last Updated: 1998-07-16

Scientific Name: Northern Volcanic Mud Flow Vernal Pool
Common Name: Northern Volcanic Mud Flow Vernal Pool

Listing Status:
Federal: None
State: None

Rare Plant Rank:
Other Lists:

CNDDB Element Ranks:
Global: G1
State: S1.1

General Habitat:
Micro Habitat:

Last Date Observed: 1982-XX-XX
Last Survey Date: 1982-XX-XX
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
BETWEEN DOUGLAS BLVD & MINERS RAVINE JUST EAST OF ROSEVILLE.

Detailed Location:

Ecological:
DIVERSITY OF POOL TAXA PRESENT INCLUDES DICHELOSTEMMA LACUNA-VERNALIS. MOST OF THIS LARGE AREA IS ON VOLCANIC SUBSTRATE. <50 ACRES IN THE NW PORTION OF THE BOUNDED AREA IS LOW TERRACE FORMATION W/HARDPAN VERNAL POOLS.

Threats:
General:
UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS:
T10N, R07E, Sec. 06 (M)
UTM:
Zone-10 N4290690 E651693

Accuracy:
specific area
Latitude/Longitude:
38.75189 / -121.25431
Elevation (feet):
240

County Summary:
Placer
Quad Summary:
Folsom (3812162), Citrus Heights (3812163), Rocklin (3812172), Roseville (3812173)

Sources:
WES82R0001  WESCO - VERNAL POOL RESOURCES INVENTORY AND EVALUATION, CITY OF ROSEVILLE, CALIFORNIA. SUBMITTED TO CITY OF ROSEVILLE PLANNING DEPT. 1982-08-31
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**Location:**
YOLO SIDE OF SACRAMENTO RIVER AT BRODERICK FROM RM 59.8 TO RM 62.

**Detailed Location:**

**Ecological:**
MOSTLY MATURE FOREST OF POPULUS FREMONTII, FRAXINUS LATIFOLIA, SALIX SPP & QUERCUS LOBATA IN STRIP RANGING FROM <100 FT TO >200 FT WIDE. PARTS HIGHLY DISTURBED, OTHERS FAIRLY INTACT.

**Threats:**
THREATENED BY MARINA/DEVEL.

**General:**
RARE VALLEY ELDERBERRY LONGHORN BEETLE & SWAINSONS HAWK PRESENT. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:**
T09N, R04E, Sec. 26 (M)

**Accuracy:**
specific area

**Area (acres):**
65

**UTM:**
Zone-10 N4273126 E629752

**Latitude/Longitude:**
38.59715 / -121.51001

**Elevation (feet):**
15

**County Summary:**
Yolo

**Quad Summary:**
Sacramento West (3812155)

**Sources:**
COE84M0001 U.S. ARMY CORPS OF ENGINEERS - SACRAMENTO RIVER AERIAL ATLAS: COLLINSVILLE TO SHASTA DAM, CALIFORNIA. USACE SACRAMENTO DISTRICT WATER RESOURCES PLANNING BRANCH INVESTIGATIONS SECTION A. 1984-05-29

SCH85F0028 SCHONHOLTZ, R. - FIELD SURVEY FORM FOR GREAT VALLEY COTTONWOOD RIPARIAN FOREST (NC61410.037) 1985-09-29
<table>
<thead>
<tr>
<th>Map Index Number:</th>
<th>11610</th>
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<td>13</td>
<td>Occurrence Last Updated:</td>
<td>1998-07-23</td>
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<thead>
<tr>
<th>Scientific Name:</th>
<th>Great Valley Valley Oak Riparian Forest</th>
<th>Common Name:</th>
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<tr>
<td>Listing Status:</td>
<td>Federal: None</td>
<td>Rare Plant Rank:</td>
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<td></td>
<td>State: None</td>
<td>Other Lists:</td>
<td></td>
</tr>
<tr>
<td>CNDDB Element Ranks:</td>
<td>Global: G1</td>
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<td></td>
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<tr>
<td></td>
<td>State: S1.1</td>
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<tr>
<th>General Habitat:</th>
<th>Micro Habitat:</th>
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<thead>
<tr>
<th>Last Date Observed:</th>
<th>1985-07-16</th>
<th>Occurrence Type:</th>
<th>Natural/Native occurrence</th>
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<tr>
<td>Last Survey Date:</td>
<td>1985-07-16</td>
<td>Occurrence Rank:</td>
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<td>Owner/Manager:</td>
<td>PVT</td>
<td>Trend:</td>
<td>Unknown</td>
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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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<table>
<thead>
<tr>
<th>Location:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ALOONG DEER CREEK ABOUT 1 AIR MILE NE OF CONFLUENCE W/ COSUMNES RIVER. BETWEEN GRANT LINE &amp; DILLARD ROADS.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Detailed Location:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BOUNDARY INCLUDES SOME GRAZING-MAINTAINED SAVANNAH W/VALLEY OAKS 80-100 FT TALL, SOME W/&gt;6 FT DBH.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Ecological:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>80-90% CLOSED CANOPY; VALLEY OAK DOMINANT, WALNUTS SUBDOMINANT. DENSE BOX ELDER, SAMBUCUS; LIANAS IMPENETRABLE.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Threats:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SCS STREAM CLEARING THREATENS PART.</td>
<td></td>
</tr>
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<table>
<thead>
<tr>
<th>General:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DFG TRYING TO REFOREST. RAPTOR AND LONGHORN BEETLE HABITAT. DFG HAS A 34 ACRE CONSERVATION EASEMENT HERE. SEE <a href="http://WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP">WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.</td>
<td></td>
</tr>
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<th>PLSS:</th>
<th>T06N, R06E, Sec. 09 (M)</th>
<th>Accuracy:</th>
<th>specific area</th>
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<td>UTM:</td>
<td>Zone-10 N4249693 E646719</td>
<td>Latitude/Longitude:</td>
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<td>Elevation (feet):</td>
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<tr>
<th>County Summary:</th>
<th>Elk Grove (3812143)</th>
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</thead>
<tbody>
<tr>
<td>Sources:</td>
<td>HOL85U0007 Holland, R.F. - Trip Report for Cosumnes River Riparian Areas, Including Map. 1985-07-16</td>
</tr>
<tr>
<td><strong>Scientific Name:</strong> Elderberry Savanna</td>
<td><strong>Common Name:</strong> Elderberry Savanna</td>
</tr>
<tr>
<td><strong>Listing Status:</strong> Federal: None</td>
<td><strong>Rare Plant Rank:</strong> Other Lists:</td>
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<td><strong>CNDDDB Element Ranks:</strong> Global: G2</td>
<td><strong>State:</strong> S2.1</td>
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<tr>
<td><strong>General Habitat:</strong></td>
<td><strong>Micro Habitat:</strong></td>
</tr>
</tbody>
</table>

| **Last Date Observed:** 1987-XX-XX | **Occurrence Type:** Natural/Native occurrence |
| **Last Survey Date:** 1987-XX-XX | **Occurrence Rank:** Unknown |
| **Owner/Manager:** STATE (SAC COUNTY LEASE) | **Trend:** Unknown |
| **Presence:** Presumed Extant | **Location:** CAL EXPO, ON AMERICAN RIVER FLOODPLAIN FROM S.P. RR TRACKS EAST TO JUST BEYOND HWY 80. |

**Detailed Location:**
BOUNDARY GENERALIZED FROM MANAGEMENT PLAN TO INCLUDE MOST ELDERBERRY BUSHES IN THIS PORTION OF CAL EXPO.

**Ecological:**
SAMBUCUS MEXICANA, CENTAUREA SOLSTITIALIS, ELYMUS TRITICOIDES, BROMUS DIANDRUS, FOENICULUM VULGARE.

**Threats:**
LEASED BY SACRAMENTO COUNTY PARKS & RECREATION DEPT. MANAGEMENT PLAN EMPHASIZES PRESERVATION & RESTORATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T09N, R05E, Sec. 32 (M)
**Accuracy:** specific area
**Area (acres):** 51

**UTM:** Zone-10 N4272653 E635326
**Latitude/Longitude:** 38.59206 / -121.44612
**Elevation (feet):** 25

**County Summary:**
Sacramento

**Quad Summary:**
Sacramento East (3812154)

**Sources:**
SAC87R0001 SACRAMENTO COUNTY PARKS & RECREATION DEPT. - CAL EXPO FLOOD PLAIN MANAGEMENT PLAN - ELDERBERRY SAVANNA, VALLEY ELDERBERRY LONGHORN BEETLE, JUGLANS HINDSII, JUNCUS DIFFUSISSIMUS. 1987-11-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 11402
**Key Quad:** Sacramento East (3812154)
**Occurrence Number:** 3

**EO Index:** 15252
**Element Code:** CTT63440CA
**Occurrence Last Updated:** 1998-07-23

**Scientific Name:** *Elderberry Savanna*
**Common Name:** Elderberry Savanna

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G2
- **State:** S2.1

**General Habitat:**
- Micro Habitat:

**Last Date Observed:** 1987-XX-XX
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1987-XX-XX
**Occurrence Rank:** Unknown
**Trend:** Unknown

**Owner/Manager:** STATE (SAC COUNTY LEASE)

**Presence:** Presumed Extant

**Location:**
CAL EXPO, ON AMERICAN RIVER FLOODPLAIN, SOUTH & SOUTHEAST OF BUSHY LAKE.

**Detailed Location:**
BOUNDARY GENERALIZED FROM MANAGEMENT PLAN TO INCLUDE MOST ELDERBERRY BUSHES IN THIS PORTION OF CAL EXPO.

**Ecological:**
SAMBUCCUS MEXICANA, CENTAUREA SOLSTITALIS, ELYMUS TRICOIDES, BROMUS DIANDRUS, FOENICULUM VULGARE.

**Threats:**

**General:**
LEASED FROM STATE BY SACRAMENTO COUNTY PARKS & REC DEPT. MANAGEMENT PLAN EMPHASIZES PRESERVATION & RESTORATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**PLSS:** T09N, R05E, Sec. 33 (M)  
**Accuracy:** specific area  
**Area (acres):** 80

**UTM:** Zone-10 N4271815 E636488  
**Latitude/Longitude:** 38.58433 / -121.43294  
**Elevation (feet):** 35

**County Summary:**
Sacramento  
**Sacramento East (3812154)**

**Quad Summary:**

**Sources:**
SAC87R0001 SACRAMENTO COUNTY PARKS & RECREATION DEPT. - CAL EXPO FLOOD PLAIN MANAGEMENT PLAN - ELDERBERRY SAVANNA, VALLEY ELDERBERRY LONGHORN BEETLE, JUGLANS HINDSII, JUNCUS DIFFUSISSIMUS. 1987-11-XX
<table>
<thead>
<tr>
<th>Map Index Number:</th>
<th>21067</th>
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<tbody>
<tr>
<td>Key Quad:</td>
<td>Sacramento West (3812155)</td>
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<td>Occurrence Number:</td>
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<tr>
<td>EO Index:</td>
<td>9156</td>
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<td>Element Code:</td>
<td>CTT63440CA</td>
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<tr>
<td>Occurrence Last Updated:</td>
<td>1998-07-23</td>
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<td>Scientific Name:</td>
<td>Elderberry Savanna</td>
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<td>Elderberry Savanna</td>
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<tr>
<td>Listing Status:</td>
<td>Federal: None</td>
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<td>State: None</td>
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<td>CNDDB Element Ranks:</td>
<td>Global: G2</td>
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<td>State: S2.1</td>
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<td>General Habitat:</td>
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<td>Micro Habitat:</td>
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<td>Last Date Observed:</td>
<td>1985-09-04</td>
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<tr>
<td>Last Survey Date:</td>
<td>1985-09-04</td>
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<td>Owner/Manager:</td>
<td>PVT</td>
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<td>Presence:</td>
<td>Presumed Extant</td>
</tr>
<tr>
<td>Location:</td>
<td>WEST BANK OF SACRAMENTO RIVER, OPPOSITE MOUTH OF AMERICAN RIVER. NEXT TO MARINAS, BOATYARDS, LEVEE RD, RIPARIAN FOREST.</td>
</tr>
<tr>
<td>Detailed Location:</td>
<td>SCATTERED ELDERBERRY AND VALLEY OAKS WITHIN THE FLOODPLAIN.</td>
</tr>
<tr>
<td>Ecological:</td>
<td>DOMINANTS ARE SAMBUCUS SP., AND QUERCUS LOBATA. NEIGHBORING COMMUNITIES ARE GREAT VALLEY COTTONWOOD RIPARIAN FOREST, ANNUAL GRASSLAND/RUDERAL FORBS.</td>
</tr>
<tr>
<td>Threats:</td>
<td>VALLEY ELDERBERRY LONGHORN BEETLE FOUND HERE. SEE <a href="http://WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP">WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.</td>
</tr>
<tr>
<td>PLSS:</td>
<td>T09N, R04E, Sec. 26 (M)</td>
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<td>Accuracy:</td>
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<td>Area (acres):</td>
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<td>Latitude/Longitude:</td>
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<td>Elevation (feet):</td>
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<td>County Summary:</td>
<td>Yolo</td>
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<td>Quad Summary:</td>
<td>Sacramento West (3812155)</td>
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<tr>
<td>Sources:</td>
<td>SCH85F0035 SCHONHOLTZ, R. - FIELD SURVEY FORM FOR NC63440 1985-09-04</td>
</tr>
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Map Index Number: 23049
EO Index: 16973
Key Quad: Rio Linda (3812164)
Element Code: ICBRA03030
Occurrence Number: 3
Occurrence Last Updated: 1993-03-24

Scientific Name: Branchinecta lynchi
Common Name: vernal pool fairy shrimp

Listing Status:
Federal: Threatened
State: None

Rare Plant Rank:

CNDDDB Element Ranks:
Global: G3
State: S2S3

General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 1993-02-11
Last Survey Date: 1993-02-11
Occurrence Type: Natural/Native occurrence

Owner/Manager: PVT
Occurrence Rank: Fair
Trend: Unknown

Presence: Presumed Extant

Location:
0.5 MILE WEST OF THE JUNCTION OF WEST 6TH STREET AND "U" STREET, RIO LINDA.

Detailed Location:

Ecological:
HABITAT CONSISTS OF TWO DISTURBED VERNAL POOLS. BURROWING OWLS ALSO FOUND AT THIS LOCATION.

Threats:
POSSIBLY THREATENED BY PROPOSED CONSTRUCTION OF AN ACCESS ROAD LEADING TO A NEW POWER PLANT.

General:
FAIRY SHRIMP IDENTIFIED BY STEPHANIE MYERS (JSA); ALTHOUGH NOT COMMON, THERE WERE TOO MANY TO COUNT.

PLSS: T10N, R05E, Sec. 19 (M) Accuracy: nonspecific area
UTM: Zone-10 N4285335 E631918 Latitude/Longitude: 38.70682 / -121.48283

County Summary: Quad Summary:
Sacramento
Rio Linda (3812164)

Sources:
YOR93F0003 YORK, R. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1993-02-11
Map Index Number: 23050
EO Index: 29284
Key Quad: Rio Linda (3812164)
Element Code: ICBRA03030
Occurrence Number: 4
Occurrence Last Updated: 1996-09-04

Scientific Name: Branchinecta lynchi

Listing Status: Federal: Threatened
State: None

CNDDDB Element Ranks: Global: G3
State: S2S3

General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL
COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED
POOLS.

Last Date Observed: 1996-02-13
Last Survey Date: 1996-02-13
Owner/Manager: PVT, UNKNOWN
Presence: Presumed Extant

Location:
EAST SIDE OF WESTERN PACIFIC RAILROAD TRACKS, SOUTH OF JUNCTION OF ELVERTA RD AND SORENTO RD, 2.0 KM WEST OF ELVERTA.

Detailed Location:
1993: 1 DISTURBED POND ADJACENT TO RR TRACKS SAMPLED, SHRIMP IDENTIFIED BY S. MEYERS (USA); ALTHOUGH NOT COMMON, TOO MANY TO COUNT. 1996: 3 POOLS SAMPLED BY S. LEACH; TOTAL APPROXIMATE SIZE OF POOLS AND SWALES ARE 250 SQ. METERS.

Ecological:
HABITAT IS COMPLEX OF SEASONAL POOLS AND SWALES; SAN JOAQUIN SOIL SERIES; ASSOCIATED PLANTS: CRASSULA AQUATICA, LOLLUM MULTIFLORUM, CALLITRICHIC MARGINATA, LILAEA SCILLOIDES, LYTHRUM HYSSOPIFOLIUM, MIMULUS GUTTATUS, MONTIA FONTANA ET AL.

Threats:
THREAT: HIGH POTENTIAL FOR DEGRADATION OF WATER QUALITY; POSSIBLE HERBICIDE USE; SEDIMENTATION OF POOLS, RR ROW, ET AL.

General:
1993: SHRIMP OBS BY S. MEYERS. 2/13/1996: >50 ADULTS OBS IN SMALL (93 SQ. METERS) ISOLATED POOL ABOUT 1000 FT S OF ELVERTA RD; 50-100 ADULTS OBS IN POOL 800 FT E OF SORENTO RD; 50-100 ADULTS OBS IN 92 SQ. METER POOL 230 FT S OF ELVERTA RD.

PLSS:
T10N, R05E, Sec. 19 (M) Accuracy: 1/5 mile Area (acres): 0
UTM:
Zone-10 N4286031 E631833 Latitude/Longitude: 38.71310 / -121.48367 Elevation (feet): 35

County Summary:
Sacramento
Rio Linda (3812164)

Sources:
LEA96F0001 LEACH, S. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-02-13
LEA96F0002 LEACH, S. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-02-13
LEA96F0003 LEACH, S. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-02-13
YOR93F0003 YORK, R. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1993-02-11
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 33179
EO Index: 2804

Key Quad: Carmichael (3812153)
Element Code: ICBRA03030

Occurrence Number: 13
Occurrence Last Updated: 2014-12-22

FIE95F0002
FIELDS, W. (HYDROZOOLOGY) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1995-04-03

FIE95S0010
FIELDS, W. - CASIZ #102871, COLLECTED FROM "RMC LONESTAR PROPERTY, ABOUT 1000' W OF FOLSOM SOUTH CANAL ON MATHER AFB BOUNDARY." 1995-04-03

FIE95U0001
FIELDS, W. (HYDROZOOLOGY) - FORMAL LETTER TO DFG FOR VERNAL POOL CRUSTACEAN SURVEY ON RMC LONESTAR LAND - ATTACHED TO FIE95F0001 & FIE95F0002. 1995-05-30

Sources:

Map Index Number: 33179
EO Index: 2804

Key Quad: Carmichael (3812153)
Element Code: ICBRA03030

Occurrence Number: 13
Occurrence Last Updated: 2014-12-22

Scientific Name: Branchinecta lynchi
Common Name: vernal pool fairy shrimp

Listing Status: Federal: Threatened
State: None

Rare Plant Rank:
Other Lists: IUCN_VU-Vulnerable

CNDBB Element Ranks: Global: G3
State: S2S3

General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 1995-04-03
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1995-04-03
Occurrence Rank: Poor

Owner/Manager: PVT-RMC LONESTAR
Trend: Unknown

Presence: Presumed Extant

Location:
0.6 MILE NNW OF THE INTERSECTION OF EAGLES NEST ROAD AND DOUGLAS ROAD, NE OF (FORMER) MATHER AIR FORCE BASE.

Detailed Location:
MAPPED TO PROVIDED COORDINATES AND MAP.

Ecological:
HABITAT CONSISTED OF A VERNAL POOL ON RED BLUFF LOAM SOIL; DOMINANT PLANTS INCLUDE RANUNCULUS BONARIENSIS VAR. TRISEPALUS, ERYNGIUM VASEYI, LIMNANTHES ALBA, AND ELEOCHARIS MACROSTACHYA.

Threats:
SITE WAS OWNED BY GRAVEL MINING COMPANY. AERIALS SHOW THAT LAND WAS USED FOR AG, AND THEN WAS PAVED OVER IN 2011.

General:
1 EXUVIUM COLLECTED ON 3 APRIL 1995 AND DEPOSITED AT CAS (CASIZ #102871).

PLSS: T08N, R06E, Sec. 12 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4270325 E651241
Latitude/Longitude: 38.56852 / -121.26395
Elevation (feet): 125

County Summary: Sacramento
Quad Summary: Carmichael (3812153)

Sacramento
Carmichael (3812153)

Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch
Report Printed on Tuesday, September 15, 2015
Page 508 of 843
Information Expires 3/1/2016
### Scientific Name: Branchinecta lynchi

**Common Name:** vernal pool fairy shrimp

**Listing Status:**
- Federal: Threatened
- State: None

**Micro Habitat:**
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**General Habitat:**
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Macro Habitat:**
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1995-02-08

**Last Survey Date:** 2011-03-16

**Presence:** Possibly Extirpated

**Location:**
ABOUT 0.3 MILES E OF THE INTERSECTION OF ELDER CREEK ROAD AND THE SOUTHERN PACIFIC TRACTION RR CROSSING, SAC ARMY DEPOT.

**Detailed Location:**
DETECTIONS IN VICINITY OF ARMY RESERVE TRAINING CENTER RUNNING TRACK.

**Ecological:**
SEASONAL WETLANDS, SHALLOW SWALES, TIRE TRACKS, PONDED AREAS IN RUNNING TRACK & BASEBALL DIAMOND, FIELD & ROADSIDE DRAINAGE DITCHES. LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI ALSO FOUND.

**Threats:**
AERIALS SHOW THAT HABITAT HAS BEEN ELIMINATED BY DEVELOPMENT, INCLUDING INSTALLATION OF SOLAR PANELS OVER FIELDS.

**General:**
TENS FOUND IN 3 OF 53 SITES BETWEEN 31 JAN & 8 FEB 1995. 11 ADULTS COLLECTED AND DEPOSITED IN CAS. NONE FOUND IN REMAINING HABITAT SURVEYED FEB-MAR 2011.
### Branchinecta lynchi: Vernal Pool Fairy Shrimp

**Scientific Name:** *Branchinecta lynchi*  
**Common Name:** Vernal pool fairy shrimp

**Listing Status:**  
- **Federal:** Threatened  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3

**General Habitat:**  
Endemic to the grasslands of the Central Valley, Central Coast Mountains, and South Coast Mountains, in astatic rain-filled pools.

**Micro Habitat:**  
Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.

**Last Date Observed:**  
- 2005-01-21

**Location:**  
Vicinity of the intersection of Eagles Nest Road and Highway 16 (Jackson Road), south of Mather Air Force Base.

**Detailed Location:**  

**Ecological:**  

**Threats:**  

**General:**  

### Reporting Information

- **PLSS:** T08N, R07E, Sec. 31 (M)  
- **UTM:** Zone-10 N4263363 E652329  
- **County Summary:** Sacramento

- **Accuracy:** nonspecific area  
- **Area (acres):** 445

- **Latitude/Longitude:** 38.50562 / -121.25298  
- **Elevation (feet):** 120

- **Owner/Manager:** PVT  
- **Presence:** Presumed Extant  
- **Location:** Vicinity of the intersection of Eagles Nest Road and Highway 16 (Jackson Road), south of Mather Air Force Base.

- **Occurrence Report:** California Department of Fish and Wildlife  
- **Report Printed on:** Tuesday, September 15, 2015  
- **Information Expires:** 3/1/2016
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Sources:

LSA06R0001  LSA ASSOCIATES, INC. - 2005 ANNUAL REPORT TO THE U.S. FISH AND WILDLIFE SERVICE FOR SECTION 10 (A) (R) (A) PERMIT NUMBER TE-797234-6 ISSUED TO LSA ASSOCIATES, INC. 2006-01-31
MUT00F0008  MUTH, D. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI (VERNAL POOL FAIRY SHRIMP) 2000-03-15
MUT96F0007  MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-XX-XX
MUT96F0008  MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-XX-XX
MUT96F0009  MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-XX-XX
MUT96F0010  MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-XX-XX
MUT96F0011  MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-XX-XX
MUT96F0012  MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-XX-XX
MUT97F0001  MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1997-XX-XX
MUT97F0002  MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1997-XX-XX
MUT97F0003  MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1997-XX-XX
SUG95R0001  SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
SUG95R0002  SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1994-95. 1995-10-30
**Branchinecta lynchi**

**Scientific Name:** Branchinecta lynchi

**Common Name:** vernal pool fairy shrimp

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**CNDDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:**
Endemic to the grasslands of the central valley, central coast mtns, and south coast mtns, in astatic rain-filled pools.

**Micro Habitat:**
Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.

**Last Date Observed:** 1995-01-05

**Owner/Manager:** PVT-PIPE TRADES TRUST FUND

**Location:**
About 0.5 miles SW of Elder Creek Rd at S Watt Ave, SE of the former Sacramento Army Depot.

**Detailed Location:**
Elder Creek Property. Mapped to locations given for pools #46 and #51, 2 of 90 sampled wetlands.

**Ecological:**
Hardpan vernal pool in annual grassland.

**Threats:**
Rural agriculture; urban development occurring in vicinity.

**General:**
Tens to over 50 observed in 2 of 90 wetlands, 21 Dec 1994-5 Jan 1995. 3 specimens collected and deposited in CAS (CASIZ #103119).

**PLSS:** T08N, R05E, Sec. 36 (M)

**UTM:** Zone-10 N4263194 E641436

**Accuracy:** 80 meters

**Latitude/Longitude:** 38.50589 / -121.37789

**Elevation (feet):** 40

**Area (acres):** 0

**County Summary:** Sacramento

**Quad Summary:** Sacramento East (3812154)

**Sources:**
- CAP95S0002 CAPELL, S. - CASIZ #103119, COLLECTED FROM "SE 1/4 OF SE 1/4 SECTION 36; T08N R0E." 1995-01-05
- SUG95R0001 SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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| EO Index: | 1012 |
| Element Code: | ICBRA03030 |
| Occurrence Last Updated: | 2014-12-24 |

**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp

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**CNDDB Element Ranks:***  
**Global:** G3  
**State:** S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1995-02-05  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1995-02-05  
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT-GRANITE CONSTRUCTION CO  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
ABOUT 0.8 MILES W OF EXCELSIOR RD AT KIEFER BLVD AND 1.6 MILES NE OF BRADSHAW RD AT JACKSON RD, S OF MATHER AIRPORT.

**Detailed Location:**  
GRANITE-TEICHERT PILOT PROJECT SITE (SW PARCEL).

**Ecological:**  
PREVIOUSLY (1990S), CONSTRUCTED & HISTORIC HARDPAN VERNAL POOLS IN ANNUAL GRASSLAND; WETLAND COMPENSATION/MITIGATION PRESERVE. AERIALS FROM 2002-2012 SHOW A SIGNIFICANT CHANGE IN THE LANDSCAPE INCL. REDIRECTING MORRISON CREEK & MINING.

**Threats:**  
HISTORICALLY USED FOR GRAZING. MORE RECENTLY THE AREA APPEARS TO HAVE BEEN MINED & LANDSCAPE RE-ENGINEERED.

**General:**  
OVER 50 FOUND IN 6 OF 10 POOLS SAMPLED FEB 1995 (POOLS #1, 2, 4, 5, 6, & 7); 13 COLLECTED & DEPOSITED IN CAS (CASIZ#103108, 103112, 103115, 103123, & 103132).

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**County Summary:**  
Sacramento  
Carmichael (3812153)

**Sources:**

**BAL95S0004**  
BALFOUR, P. - CASIZ #103108, 103112, 103115, 103123, & 103132, COLLECTED FROM "SW1/4 OF NE1/4 SECTION 22; T08N R06E."  
1995-02-24

**SUG95R0001**  
SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX

**SUG95R0002**  
SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1994-95. 1995-10-30
Map Index Number: 53920
Key Quad: Carmichael (3812153)
Occurrence Number: 47

Scientific Name: *Branchinecta lynchi*
Common Name: vernal pool fairy shrimp

Listing Status: Federal: Threatened
State: None

CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro Habitat: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 2010-02-03
Last Survey Date: 2010-02-03
Owner/Manager: PVT
Presence: Presumed Extant

Location: SW END OF THE RUNWAY OF OLD MATHER AIR FORCE BASE, 1 MILE NE OF THE INTERSECTION OF BRADSHAW ROAD AND JACKSON ROAD.

Detailed Location: LOCATION OF 1991 DETECTIONS GIVEN AS "...BORDERED BY JACKSON RD (S), KIEFER BLVD (N), BRADSHAW RD (W) & EXCELSIOR RD (W);" EXACT LOCATIONS UNKNOWN. MAPPED TO GRANITE I PRESERVE, LOCATION OF 1997-2002 DETECTIONS.


PLSS: T08N, R06E, Sec. 16 (M) Accuracy: specific area
UTM: Zone-10 N4267058 E646210 Latitude/Longitude: 38.53993 / -121.32235 Area (acres): 44 Elevation (feet): 65

County Summary: Sacramento

Sacramento County Summary: Carmichael (3812153)

Sources:

FAR02F0002 FARMER, M. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2002-03-15
HEL09U0006 HELM, B. - SOIL EXAMINATIONS FOR THE PRESENCE OF FEDERALLY LISTED LARGE BRANCHIOPODS AT THE SMUD EAST CAMPUS-OPERATIONS CENTER. 2009-11-XX
HUB91F0001 HUBER, A. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORMS FOR BRANCHINECTA LYNCHI (VERNAL POOL FAIRY SHRIMP) 1991-03-XX
HUB91S0001 HUBER, A. - USNM #1144049, COLLECTED FROM "VERNAL POOL GRASSLAND JUST SOUTH OF MATHER AIR FORCE BASE." 1991-03-27
SUG93U0001 SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
WHI97F0001 WHITNEY, K. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI (VERNAL POOL FAIRY SHRIMP) 1997-01-24
WHI98F0001 WHITNEY, K. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI (VERNAL POOL FAIRY SHRIMP) 1998-01-XX
WHI99F0001 WHITNEY, K. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI (VERNAL POOL FAIRY SHRIMP) 1999-02-23
## Occurrence Report

**Map Index Number:** 94697  
**EO Index:** 2087

**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 90

**Occurrence Last Updated:** 2014-12-16

### Scientific Name: Branchinecta lynchi

**Common Name:** vernal pool fairy shrimp

**Listing Status:** Federal: Threatened  
**Rare Plant Rank:** None

**CNDDB Element Ranks:** Global: G3  
**Other Lists:** IUCN_VU-Vulnerable

### General Habitat:

ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

### Micro Habitat:

INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1996-02-16

**Last Survey Date:** 1996-02-16

**Owner/Manager:** DOD-MCCLELLAN AFB

**Presence:** Presumed Extant

### Location:

0.2 MILE SE OF INTERSECTION OF ASCOT AVE AND 20TH STREET, WEST SIDE OF MCCLELLAN AIRFIELD, SACRAMENTO.

**Detailed Location:** MAPPED TO OCCUPIED POOL MCC95B (=M95B), PER PROVIDED MAPS AND COORDINATES.

**Ecological:**

VERNAL POOL WITH ALGAE AND GRASS BOTTOM. POOL ESTIMATED TO BE 25 FEET LONG AND 15 FEET WIDE WITH A MAXIMUM DEPTH OF 10 INCHES; SURROUNDED BY ANNUAL GRASSLAND. OSTRACODS, COPEPODS, AND LINDERIELLA OCCIDENTALIS ALSO PRESENT.

**Threats:**

EXPANSION OF BASE FACILITIES; MODIFICATION OF WATERSHED; AIRCRAFT REPAIR, DEVELOPMENT (1996).

**General:**


**PLSS:** T09N, R05E, Sec. 03 (M)  
**Accuracy:** 80 meters

**Source:** LACY, T. (WESCO-RMI) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1995-03-15

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**

LAC95F0001  
LACY, T. (WESCO-RMI) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1995-03-15

LAC95R0001  
LACY, T. (WESCO-RMI) - 1995 VERNAL POOL CRUSTACEAN SURVEY RESULTS - MCCLELLAN AFB AND LINCOLN & DAVIS COMMUNICATIONS FACILITIES; CONSERVATION PLAN INCLUDED. 1995-XX-XX

LAC95S0002  
LACY, T. - CASIZ #102858, COLLECTED FROM "8 MILES NORTH OF SACRAMENTO, NATURAL AREA, WEST SIDE OF BASE, NORTH OF DON JULIO CREEK, WEST OF PATROL ROAD, POOL #MCC 95B." 1995-03-16

LAC96F0004  
LACY, T. (RMI CONSULTING) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1996-01-22

LAC96S0002  
LACY, T. - CASIZ #106746, COLLECTED "WEST OF PATROL RD, BETWEEN DON JULIO CREEK AND ASCOT AVE. QUAD RIO LINDA." 1996-02-16

LYN95S0001  
LYNCH, S. - CASIZ #102856, COLLECTED AT "NATURAL AREA, WEST OF BASE, NORTH OF DON JULIO CREEK." 1995-02-11
Map Index Number: 32550
EO Index: 1418
Key Quad: Elk Grove (3812143)
Element Code: ICBRA03030
Occurrence Number: 100
Occurrence Last Updated: 1997-08-27

Scientific Name: Branchinecta lynchi
Common Name: vernal pool fairy shrimp

Listing Status: Federal: Threatened
State: None

Rare Plant Rank:
Other Lists: IUCN_VU-Vulnerable

CNDDB Element Ranks:
Global: G3
State: S2S3

General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 1997-02-11
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1997-03-14
Occurrence Rank: Excellent

Owner/Manager: PVT-WINNCREST HOMES
Trend: Unknown

Presence: Presumed Extant

Location:
0.5 MILE SOUTH OF CALVINE ROAD AND IMMEDIATELY WEST OF WATERMAN ROAD, 2 MILES NORTH OF ELK GROVE.

Detailed Location:
PERRY RANCH MITIGATION AREA IS A 37-ACRE PRESERVE, CONSISTING OF NORTHERN HARDPAN VERNAL POOLS (NATURAL AND CREATED), SEASONAL WETLANDS, WET SWALES, AND NON-NATIVE ANNUAL GRASSLANDS.

Ecological:
NORTHERN HARDPAN VERNAL POOL HABITAT WITH CONSTRUCTED AND NATURAL POOLS; DOMINANT UPLAND CONSISTING OF NON-NATIVE ANNUAL GRASSLAND. SOIL TYPES: CORNING-REDDING COMPLEX (8-30% SLOPES) AND REDDING GRAVELLY LOAM (0-8% SLOPES).

Threats:
WETLAND PRESERVE IS PROTECTED BY EXISTING PERIMETER FENCE AND NO DISTURBANCES NOTED.

General:

PLSS:
T07N, R06E, Sec. 19 (M)
Accuracy: specific area
Area (acres): 29

UTM:
Zone-10 N4256646 E643504
Latitude/Longitude: 38.44658 / -121.35553
Elevation (feet): 60

County Summary: Sacramento
Elk Grove (3812143)

Quad Summary:

Sources:
GIB95R0004 GIBSON & SKORDAL, WETLAND CONSULTANTS - MITIGATION MONITORING REPORT - PERRY RANCH/FALLBROOK (THIRD GROWING SEASON). 1995-09-XX
GIB96F0004 GIBSON & SKORDAL, WETLAND CONSULTANTS - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI AT PERRY RANCH/FALLBROOK. 1996-01-08
GIB96F0005 GIBSON & SKORDAL, WETLAND CONSULTANTS - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI AT PERRY RANCH/FALLBROOK. 1996-02-07
GIB96F0006 GIBSON & SKORDAL, WETLAND CONSULTANTS - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI AT PERRY RANCH/FALLBROOK. 1996-03-13
GIB96R0004 GIBSON & SKORDAL, WETLAND CONSULTANTS - ANNUAL REPORTING OF VERNAL POOL CRUSTACEAN SURVEY DATA - PERRY RANCH/FALLBROOK PROJECT (FOURTH GROWING SEASON) 1996-08-XX
GIB97F0001 GIBSON & SKORDAL, WETLAND CONSULTANTS - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1997-01-08
GIB97F0002 GIBSON & SKORDAL, WETLAND CONSULTANTS - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1997-02-11
GIB97F0003 GIBSON & SKORDAL, WETLAND CONSULTANTS - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1997-03-14
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**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
- Federal: Threatened  
- State: None

**CNDDB Element Ranks:**  
- Global: G3  
- State: S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1996-03-10  
**Occurrence Type:** Natural/Native occurrence

**Location:**  
ALONG RAILROAD RIGHT-OF-WAY, AT NORTH END OF 83RD STREET, 0.1 MILE NORTH OF INTERSECTION WITH 24TH AVENUE, SACRAMENTO.

**Detailed Location:**  
LOCATED IN A SERIES OF PONDED DEPRESSIONS ALONG THE RAILROAD RIGHT-OF-WAY. SPECIMEN LOCALITY GIVEN AS "PONDED DEPRESSION #63 AT PROCTOR AND GAMBLE RR TRACK, RIGHT OF WAY."

**Ecological:**  
HABITAT CONSISTS OF PONDED DEPRESSIONS. OTHER RARE SPECIES FOUND INCLUDE BRANCHINECTA MESOVALLENSIS AND LINDERIELLA OCCIDENTALIS.

**Threats:**  
CONSTANT DISTURBANCE BY RAILROAD TRUCKS AND OTHERS DRIVING THROUGH POOLED AREAS. ALSO TIRES AND DEBRIS IN POOLED AREAS.

**General:**  
MORE THAN 50 INDIVIDUALS OBSERVED IN FIVE OF 27 DEPRESSIONS SAMPLED DURING SURVEYS CONDUCTED FROM 6 FEBRUARY TO 10 MARCH 1996. COLLECTIONS IN CAS (CASIZ #105591, 105593, 105594, AND 105596).

**PLSS:** T08N, R05E, Sec. 23 (M)  
**Accuracy:** specific area  
**Area (acres):** 6

**UTM:** Zone-10 N4266068 E639528  
**Latitude/Longitude:** 38.53209 / -121.39920  
**Elevation (feet):** 40

**County Summary:** Sacramento  
Sacramento East (3812154)

**Sources:**  
MAR96F0001 MARTIN, D. (BIOTA) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & LINDERIELLA OCCIDENTALIS 1996-03-10  
MAR96S0007 MARTIN, D. - CASIZ #105591, 105593, 105594, & 105596, COLLECTED FROM "PONDED DEPRESSION[S]... AT PROCTOR AND GAMBLE RR TRACK, RIGHT OF WAY." 1996-03-10
### Branchinecta lynchi

**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp  
**Map Index Number:** 34789  
**EO Index:** 14402  
**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 130  
**Occurrence Last Updated:** 1996-06-18  
**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp  
**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 130  
**Occurrence Last Updated:** 1996-06-18

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<th>KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS &amp; LEPIDURUS PACKARDI 1992-04-XX</th>
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**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.  
**Micro Habitat:** INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1992-04-01  
**Last Survey Date:** 1992-04-01  
**Owner/Manager:** PVT-UNION PACIFIC RR  
**Presence:** Presumed Extant  
**Location:**  
ALONG UNION PACIFIC RAILROAD (USED TO BE WESTERN PACIFIC RR?); 0.2 MILE SOUTH OF ELKHORN BLVD, RIO LINDA.

**Detailed Location:**  
Ecological:  
**Threats:**

KOFORD OBSERVED B. LYNCHI DURING SURVEY IN SPRING OF 1992; LINDERIELLA OCCIDENTALIS ALSO OBSERVED.

**Accuracy:** 80 meters  
**Area (acres):** 0  
**Latitude/Longitude:** 38.68218 / -121.47949  
**Elevation (feet):** 40  
**PLSS:** T10N, R05E, Sec. 31 (M)  
**UTM:** Zone-10 N4282605 E632253  
**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)  
**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)
Map Index Number: 94757
EO Index: 95863
Key Quad: Sacramento East (3812154)
Element Code: ICBRA03030
Occurrence Number: 131
Occurrence Last Updated: 2014-12-29

Scientific Name: *Branchinecta lynchi*
Common Name: vernal pool fairy shrimp

Listing Status:
- Federal: Threatened
- State: None

Rare Plant Rank:
- Other Lists: IUCN_VU-Vulnerable

CNNDDB Element Ranks:
- Global: G3
- State: S2S3

General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 1992-04-03
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1992-04-03
Occurrence Rank: Unknown

Owner/Manager: PVT
Trend: Unknown

Presence: Presumed Extant

Location:
INTERSECTION OF ELDER CREEK ROAD AND SOUTHERN PACIFIC TRACTION RAILROAD.

Detailed Location:
LOCALITY GIVEN AS "RAILROAD DITCH AT CORNER OF 47TH [=ELDER CREEK RD] AND SPTRR," IN TRS SEC 35.

Ecological:
RAILROAD DITCH.

Threats:

General:
DETECTED IN 1 OF 1 FEATURES SAMPLED ON 3 APR 1992 (SUGNET ID #69).

PLSS:
- T08N, R05E, Sec. 35 (M)
- Zone-10 N4263661 E639314
Accuracy: 1/10 mile
Area (acres): 0

UTM:
- Latitude/Longitude: 38.51043 / -121.40213
Elevation (feet): 35

County Summary:
Sacramento
Sacramento East (3812154)

Sources:
- KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
- SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
Map Index Number: 34812  
Key Quad: Florin (3812144)  
Occurrence Number: 138  
EO Index: 29267  
Element Code: ICBRA03030  
Occurrence Last Updated: 2014-07-31  

Scientific Name: Branchinecta lynchii  
Common Name: vernal pool fairy shrimp  
Listing Status:  
Federal: Threatened  
State: None  
CNDDB Element Ranks:  
Global: G3  
State: S2-S3  

General Habitat:  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.  
Micro Habitat:  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.  

Last Date Observed: 1997-01-14  
Last Survey Date: 1997-01-14  
Occurrence Type: Natural/Native occurrence  
Occurrence Rank: Unknown  
Owner/Manager: PVT-GRUPE DEVELOPMENT CO  
Trend: Unknown  
Presence: Presumed Extant  

Location:  
BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF BILBY ROAD, ELK GROVE.  

Detailed Location:  

Ecological:  
NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS IN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.  

Threats:  
General:  

PLSS:  
T06N, R05E, Sec. 06 (M)  
Accuracy: specific area  
Area (acres): 570  
UTM: Zone-10 N4250798 E633934  
Latitude/Longitude: 38.39538 / -121.46627  
Elevation (feet): 15  

Sacramento  

Sources:  
KWA95S0001 KWA, K. - CASIZ #103111, COLLECTED FROM "NE1/4 OF SW 1/4 SECTION 7; T6N R5E." 1995-02-14  
KWA95S0003 KWA, K. - CASIZ #103130, COLLECTED FROM "SW 1/4 OF SW 1/4 SECTION 5; T6N R5E." 1995-02-14  
KWA95S0004 KWA, K. - CASIZ #103133, COLLECTED FROM "NE 1/4 OF NW 1/4 SECTION 7; T6N R5E." 1995-02-14  
SUG95R0001 SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX  
SUG95R0002 SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1994-95. 1995-10-30  
SUG96R0001 SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED BRANCHIPODS CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933. 1996-XX-XX  
SUG97R0001 SUGNET & ASSOCIATES - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA CONDUCTED AT THE ELLIOTT RANCH MITIGATION SITE WATERFOWL STUDY AREA, SACRAMENTO COUNTY, CALIFORNIA. 1997-05-03  
SUG98R0003 SUGNET & ASSOCIATES - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA AT THE ELLIOTT RANCH MITIGATION SITE WATERFOWL STUDY AREA, SACRAMENTO COUNTY, CALIFORNIA. 1998-10-08
### Branchinecta lynchi

#### Listing Status
- **Federal:** Threatened
- **State:** None

#### Rare Plant Rank
- Other Lists: IUCN_VU-Vulnerable

#### General Habitat
- **ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.**
- **INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.**

#### Last Date Observed
- 1995-01-14

#### Ecological
- **LONG POOL (14 FEET WIDE AND 275 FEET LONG, DEPTH=0.15 M) IN TIRE RUTS FROM VEHICLES. VERY TURBID WATER. FLAT, INUNDATED AREA DEVOID OF VEGETATION. SANDY CLAY LOAM SOIL.**

#### Threats
- MAINTENANCE ROAD FOR WESTERN PACIFIC RAILROAD, AREA IMPACTED BY SACRAMENTO AREA FLOOD CONTROL AGENCY (1995).

#### General
- **2 SITES IN SAME POOL SAMPLED 14 JAN 1995. AT SOUTH SITE FEWER THAN 50 ADULTS WERE OBSERVED, AT NORTH SITE MORE THAN 50 ADULTS WERE OBSERVED. VOUCHER SPECIMENS COLLECTED AND DEPOSITED IN CAS (CASIZ #106792).**

#### PLSS
- **T09N, R05E, Sec. 03 (M)**

#### UTM
- **Zone-10 N4277052 E633139**

#### County Summary
- **Sacramento**
- **Rio Linda (3812164)**

#### Sources
- WAL95F0003 WALKER, R. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1995-01-14
- WAL95F0004 WALKER, R. (EIP ASSOCIATES) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1995-01-14
- WAL95S0019 WALKER, R. & D. WOLFF - CASIZ #106792, COLLECTED FROM "LONG NARROW POOL EAST OF NEMOC, WEST OF RAILROAD TRACKS, 200 FT. NORTH OF SILVER EAGLE RD. BRIDGE." 1995-01-14
## Branchinecta lynchi

**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp  
**Listing Status:** Federal: Threatened  
**Rare Plant Rank:** None  
**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3  
**Micro Habitat:** INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**General Habitat:** ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.  
**Habitat:** INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1995-02-22  
**Last Survey Date:** 1995-02-22  
**Presence:** Presumed Extant  
**Location:** APPROX. 1500 FEET NORTHEAST OF NATOMAS EAST MAIN DRAINAGE CANAL AT DRY CREEK; 700 FEET SE OF ASCOT AVE AT WEST 6TH ST.  
**Detailed Location:** SEASONAL POND (500 FEET LONG X 45 FEET WIDE), AVERAGE DEPTH=6 INCHES; MAX. DEPTH=20 INCHES; TEMP=21.5 DEGREES CELSIUS; TURBIDITY=98%; CONDUCTIVITY=98 MICROHMS/CM.

**Threats:** CATTLE GRAZING AND CITY PLANS FOR GOLF COURSE DEVELOPMENT (HANSEN RANCH).

**PLSS:** T09N, R05E, Sec. 05 (M)  
**UTM:** Zone-10 N4281035 E632742  
**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
WAL95F0005 WALKER, R. (EIP ASSOCIATES) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1995-02-22
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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<th>Map Index Number:</th>
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<td>160</td>
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<td>EO Index:</td>
<td>30615</td>
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<tr>
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<td>Occurrence Last Updated:</td>
<td>2015-03-04</td>
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<th>General Habitat:</th>
<th>ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.</th>
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<tbody>
<tr>
<td>Micro Habitat:</td>
<td>INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.</td>
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| Last Date Observed: | 1993-03-02 |
| Last Survey Date:   | 1993-03-02 |
| Owner/Manager:      | PVT |
| Presence:           | Presumed Extant |
| Location:           | VICINITY OF GRANT LINE ROAD AT MOSHER RD INTERSECTION, ABOUT 1.25 MILES NE OF I-99 AT GRANT LINE, ELK GROVE. |
| Ecological:         | NATURAL SEASONAL WETLANDS. AERIAL PHOTOS SHOW DEVELOPMENT IN THE NW 1/4 OF SECTION 8 SINCE THE 1993 AND 2006 SURVEYS. |

| PLSS: T06N, R06E, Sec. 08 (M) | Accuracy: 3/5 mile |
| UTM: Zone-10 N4250327 E644472 | Area (acres): 0 |
| Latitude/Longitude: 38.38950 / -121.34574 | Elevation (feet): 50 |

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<td>Elk Grove (3812143)</td>
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<td>HEL05U00008</td>
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<td>HEL06U0010</td>
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<td>SUG93U0001</td>
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</table>
### Scientific Name: Branchinecta lynchi

**Common Name:** vernal pool fairy shrimp

**Listing Status:** Federal: Threatened

**Rare Plant Rank:** None

**CNDDB Element Ranks:** Global: G3

**State:** S2S3

**General Habitat:** ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:** INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2013-01-16

**Last Survey Date:** 2013-01-16

**Owner/Manager:** SRCSD-BUFFERLANDS, PG&E, PVT

**Presence:** Presumed Extant

**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 INVADED BY WEEDS. LEPIDURUS PACKARDI & LINDERIELLA OCCIDENTALIS CO-OCCURRED.

**Threats:**

UTILITY AND RAILROAD MAINTENANCE, ORV TRAFFIC, WEEDS (2012).

**General:**


**Accuracy:** nonspecific area

**Area (acres):** 33

**Latitude/Longitude:** 38.44580 / -121.45917

**Elevation (feet):** 15

**PLSS:** T07N, R05E, Sec. 20 (M)

**UTM:** Zone-10 N4256403 E634460

**County Summary:** Sacramento

**Presumed Extant**

**Sources:**

- LEACH, S. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1993-02-23
- PETRASH, S. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2000-XX-XX
- PIMENTEL, E. (AECOM) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2012-12-28
- PIMENTEL, E. - CASIZ #192828, COLLECTED FROM SACRAMENTO COUNTY, (35.4405114 [SIC], -121.45806), 2012-12-28
- SLOAT, T. - CASIZ #115430 & 115431, COLLECTED AT "I-5 ON LAGUNA BLVD. ON FRANKLIN BLVD TO THE SACRAMENTO WASTE WATER TREATMENT PLANT." 1998-04-04
- WALKER, R. & R. KOFORD - CASIZ #104239, COLLECTED "EAST OF SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, WEST OF WESTERN UNION RAILROAD TRACKS, 400 FEET NORTH OF PLANT ENTRANCE." 1995-01-06
- WALKER, R. & E. KOFORD - CASIZ #103316, COLLECTED FROM "SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, EAST OF PLANT, WEST OF UNION PACIFIC RAILROAD TRACKS." 1995-01-18
Map Index Number: 93676
EO Index: 30621
Key Quad: Elk Grove (3812143)
Element Code: ICBRA03030
Occurrence Number: 162
Occurrence Last Updated: 2014-09-04

Scientific Name: *Branchinecta lynchi*
Common Name: *vernal pool fairy shrimp*

Listing Status:
Federal: Threatened
State: None

Rare Plant Rank:

Other Lists: IUCN_VU-Vulnerable

CNDDDB Element Ranks:
Global: G3
State: S2S3

General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 1993-02-12
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1993-02-12
Occurrence Rank: Unknown
Owner/Manager: PVT
Trend: Unknown
Presence: Presumed Extant

Location:
BETWEEN GERBER ROAD AND FLORIN ROAD, WEST OF BRADSHAW ROAD, SE OF SACRAMENTO.

Detailed Location:
DETECTION LOCATION DESCRIBED ONLY AS T7N, R6E, SECTION 5. EXACT LOCATION NOT GIVEN.

Ecological:
HABITAT CHARACTERIZED AS "MANMADE OTHER."

Threats:

General:
OBSERVED IN THE 1 FEATURE SURVEYED IN SECTION 5 (SUGNET RECORD #60) ON 12 FEB 1993.

PLSS: T07N, R06E, Sec. 05 (M)  Accuracy: nonspecific area  Area (acres): 621
UTM: Zone-10 N4261347 E644423  Latitude/Longitude: 38.48877 / -121.34403  Elevation (feet): 60

County Summary: Sacramento
Quad Summary: Elk Grove (3812143)

Sources:
SUG93U0001  SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
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<th><strong>Rare Plant Rank:</strong></th>
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<th><strong>General Habitat:</strong></th>
<th>ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.</th>
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<td><strong>Micro Habitat:</strong></td>
<td>INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.</td>
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<th><strong>Location:</strong></th>
<th>EAST OF ELK GROVE-FLORIN ROAD, WEST OF EXCELSIOR RD, AND NORTH OF SHELDON RD, NNE OF ELK GROVE.</th>
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<td><strong>Detailed Location:</strong></td>
<td>VERNAL POOLS LOCATED SOMEWHERE IN SECTIONS 17 &amp; 19. A PORTION OF SEC 17 APPEARS TO BE PROTECTED (EO #343) AND A PORTION OF SEC 19 APPEARS TO BE PROTECTED (EO #100).</td>
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<th>NATURAL VERNAL POOLS. AERIAL PHOTOS SHOW EXTENSIVE RESIDENTIAL DEVELOPMENT IN THE AREA SINCE THE TIME OF SURVEY. A PORTION OF SEC 17 APPEARS TO BE PROTECTED (EO #343) AND A PORTION OF SEC 19 APPEARS TO BE PROTECTED (EO #100).</th>
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<th>OBSERVED IN 1 FEATURE INSPECTED IN SECTION 17 ON 23 JAN 1993, AND IN 1 FEATURE INSPECTED IN SECTION 19 ON 6 FEB 1993. SUGNET RECORD NUMBERS 62 &amp; 64.</th>
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<td><strong>Elevation (feet):</strong> 65</td>
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| **County Summary:** Sacramento Elk Grove (3812143) |

| **Sources:** SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX |
Map Index Number: 33688
EO Index: 30617
Key Quad: Elk Grove (3812143)
Element Code: ICBRA03030
Occurrence Number: 164
Occurrence Last Updated: 1997-03-07

Scientific Name: Branchinecta lynchi
Common Name: vernal pool fairy shrimp

Listing Status:
Federal: Threatened
State: None

Rare Plant Rank:
State: None

Other Lists: IUCN_VU-Vulnerable

CNDDB Element Ranks:
Global: G3
State: S2S3

General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL
COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED
POOLS.

Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS
AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW
DEPRESSION POOLS.

Last Date Observed: 1993-03-02
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1993-03-02
Occurrence Rank: Unknown
Owner/Manager: UNKNOWN
Trend: Unknown
Presence: Presumed Extant

Location:
NORTH OF ELK GROVE BLVD, SOUTH OF BOND ROAD, EAST OF WATERMAN RD, AND WEST OF BRADSHAW ROAD, EAST OF ELK GROVE.

Detailed Location:
VERNAL POOLS AND SEASONAL WETLANDS LOCATED SOMEWHERE IN SECTION 32.

Ecological:
NATURAL VERNAL POOLS AND NATURAL SEASONAL WETLANDS.

Threats:
B. LYNCHI OBSERVED IN 19 OF 24 INSPECTED VERNAL POOLS AND 2 OF 13 INSPECTED SEASONAL WETLANDS ON 2/2/93, AND IN 1 OF 23
INSPECTED VERNAL POOLS ON 3/2/93. SUGNET RECORD NUMBERS 65, 66, & 67.

PLSS: T07N, R06E, Sec. 32 (M)
Accuracy: 3/5 mile
Area (acres): 0

UTM: Zone-10 N4253310 E644573
Latitude/Longitude: 38.41635 / -121.34397
Elevation (feet): 50

Sacramento Elk Grove (3812143)

Sources:
SUG93U0001 SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND
WILDLIFE SERVICE) 1993-XX-XX
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
Federal: Threatened  
State: None  

**CNNDDB Element Ranks:**  
Global: G3  
State: S2S3

**General Habitat:**  
Endemic to the grasslands of the Central Valley, Central Coast MTNS, and South Coast MTNS, in astatic rain-filled pools.

**Micro Habitat:**  
Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.

**Last Date Observed:** 1992-04-01  
**Last Survey Date:** 1992-04-01  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
SOUTH OF ELKHORN BLVD, WEST OF WEST 6TH ST, EAST OF NATOMAS EAST MAIN DRAINAGE CANAL, SOUTHWEST OF RIO LINDA.

**Detailed Location:**  
LOCATED SOMEWHERE IN SECTION 31.

**Ecological:**  
MANMADE ROADSIDE DITCH.

**Threats:**  
**General:**  
UNKNOWN NUMBER OF B. LYNCHI OBSERVED IN THE ONE FEATURE INSPECTED. SUGNET RECORD #82. NO LEPIDURUS PACKARDI OBSERVED.

**PLSS:** T10N, R05E, Sec. 31 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 301

**UTM:** Zone-10 N4282147 E632236  
**Latitude/Longitude:** 38.67805 / -121.47978  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
SUG93U0001  
SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Branchinecta lynchi*

**Common Name:** vernal pool fairy shrimp

**Listing Status:**
- Federal: Threatened
- State: None

**CNDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1997-01-22

**Last Survey Date:** 1997-01-22

**Owner/Manager:** WESTERN AREA POWER ADMIN

**Presence:** Presumed Extant

**Location:**
0.25 MILE SOUTH OF ELVERTA ROAD AND 0.4 MILE EAST OF SORENTO ROAD, WEST OF ELVERTA.

**Detailed Location:**
HABITAT CONSISTS OF A VERNAL POOL (12-14 IN DEEP); ASSOCIATED PLANT SPECIES INCLUDE CALLITRICHE MARGINATA, ELEOCHARIS MACROSTACHYA, LASTHENIA GLABRATA, LILEA SCILLOIDES, LIMNANTHES ALBA, AND OTHERS. LINDERIELLA OCCIDENTALIS ALSO PRESENT.

**Threats:**
POSSIBLY THREATENED BY CONTAMINATED RUNOFF FROM A CEMENT MIXING FACILITY SE OF THE SITE.

**General:**
30 ADULTS OBSERVED ON 22 JAN 1997.

**PLSS:** T10N, R05E, Sec. 19 (M)  | Accuracy: 80 meters  | Area (acres): 0
**UTM:** Zone-10 N4285824 E632363 | Latitude/Longitude: 38.71116 / -121.47762 | Elevation (feet): 31

**County Summary:**
Sacramento
Rio Linda (3812164)

**Sources:**
LEA97F0001 LEACH, S. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1997-01-22
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Branchinecta lynchi*

**Common Name:** vernal pool fairy shrimp

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:**
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1991-04-06

**Last Survey Date:** 1991-04-06

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
0.25 MILE EAST OF THE INTERSECTION OF EXCELSIOR ROAD AND JACKSON HIGHWAY, SOUTH OF (OLD) MATHER AIR FORCE BASE.

**Detailed Location:**
LOCATED ON THE NORTH SIDE OF JACKSON HIGHWAY.

**Ecological:**
HABITAT CONSISTS OF VERNAL POOLS.

**Threats:**
UNKNOWN NUMBER COLLECTED BY CHRIS NAGANO AND JAMIE KING; SENT TO DENTON BELK (DB #990) FOR IDENTIFICATION.

**PLSS:** T08N, R06E, Sec. 26 (M)

**Accuracy:** 1/10 mile

**Area (acres):** 0

**UTM:** Zone-10 N4264728 E648763

**Latitude/Longitude:** 38.51852 / -121.29357

**Elevation (feet):** 115

**County Summary:** Sacramento

**Quad Summary:** Carmichael (3812153)

**Sources:**
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Branchinecta lynchi*  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
- Federal: Threatened  
- State: None

**CNDDDB Element Ranks:**  
- Global: G3  
- State: S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1991-04-06  
**Last Survey Date:** 1991-04-06  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
GENE ANDAL PARK, 0.7 MILE ESE OF THE INTERSECTION OF EXCELSIOR ROAD AND FLORIN ROAD, SE OF SACRAMENTO.

**Detailed Location:**  
1991 LOCALITY GIVEN AS "SOUTH OF MATHER AIR FORCE BASE, MULTI-CULTURE PARK (FORMERLY FLORIN PARK);" T7N R6E SEC 2; EXACT COLLECTION LOCATION UNKNOWN. MAPPED TO COORDINATES GIVEN FOR 2010 DETECTION.

**Ecological:**  
2010: ISOLATED VERNAL POOL IN AREA PRESERVED AS A COUNTY PARK.

**Threats:**  
**General:**  
19 COLLECTED BY CHRIS NAGANO AND JAMIE KING ON 6 APRIL 1991; IDENTIFIED BY DENTON BELK (DB #991, USNM #1072678). ABOUT 10 DIP-NETTED ON 21 FEB 2010.

**PLSS:** T07N, R06E, Sec. 02 (M)  
**UTM:** Zone-10 N4261914 E649565  
**Accuracy:** 80 meters  
**Latitude/Longitude:** 38.49304 / -121.28498  
**Area (acres):** 0  
**Elevation (feet):** 100

**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Sources:**
- CAL10F0002: CALDERARO, A. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2010-02-21
- NAG91S0001: NAGANO, C. & J. KING - USNM #1072678, COLLECTED "SOUTH OF MATHER AIR FORCE BASE, MULTI-CULTURE PARK (FORMERLY FLORIN PARK);" 1991-04-06
### Scientific Name: Branchinecta lynchi

**Common Name:** vernal pool fairy shrimp

**Listing Status:**
- Federal: Threatened
- State: None

**CNDDB Element Ranks:**
- Global: G3
- State: S2S3

### General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

### Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1993-02-04

**Last Survey Date:** 1993-02-04

**Owner/Manager:** PVT

**Presence:** Extirpated

**Location:**
UP TO 2 MILES EAST OF I-5, 4 MILES SOUTH OF SACRAMENTO.

**Detailed Location:**

**Ecological:**

### Threats:
2008 AERIAL PHOTO SHOWS THAT THIS AREA HAS BEEN COMPLETELY DEVELOPED.

### 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).

**PLSS:** T07N, R05E, Sec. 32 (M)

**Accuracy:** nonspecific area

**UTM:** Zone-10 N4252753 E634254

**Latitude/Longitude:** 38.41294 / -121.46223

**County Summary:**
Sacramento

**Florin (3812144)**

**Area (acres):** 953

**Elevation (feet):** 10

**Sources:**
- MUT91S0001 MUTH, D. - USNM #1072653, COLLECTED "4.0 MILES SOUTH OF SACRAMENTO, 2 MILES EAST OF INTERSTATE 5." 1991-03-13
- SUG93U0001 SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
### Scientific Name: Branchinecta lynchi
### Common Name: vernal pool fairy shrimp

### General Habitat:
Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains, in astatic rain-filled pools.

### Micro Habitat:
Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.

### Last Date Observed:
2011-02-12

### Owner/Manager:
PVT

### Presence:
Presumed Extant

### Location:
SACRAMENTO PRAIRIE VERNAL POOL PRESERVE & ARROYO SECO MITIGATION BANK; FROM 0.6-1.1 MI NE OF EXCELSIOR RD AT FLORIN RD.

### Detailed Location:
1998 detections on county's Arroyo Seco (or Florin) mitigation bank site (s half of section), 2005, 2008, 2011 detections on Sacramento Valley Conservancy's Kassis parcel, Sacramento Prairie Vernal pool preserve (n half of section).

### Ecological:
Natural vernal pools in area characterized by gently rolling topography, grazed annual grassland. Lindieriella occidentalis, Cyzicus Californicus, & Lepidurus Packardi also found.

### Threats:
The grass Glyceria declinata is becoming problematic in the general area (2005).

### General:

### PLSS:
T08N, R06E, Sec. 35 (M)

### UTM:
Zone-10 N4263150 E649617

### County Summary:
Sacramento

### Quad Summary:
Elk Grove (3812143), Carmichael (3812153)

### Sources:
- WHITNEY, K. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI (VERNAL POOL FAIRY SHRIMP) 1998-01-28
- WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI. ATTACHED TO REPORT, WIT05R01. 2005-02-20
- WIT05R0001 - SACRAMENTO PRAIRIE VERNAL POOL PRESERVE, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
- WIT08F0006 - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & BRANCHINECTA MESOVALLENSIS & LINDIERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 2008-02-18
- WIT11U0005 - KASSIS AND SYLVA PARCELS, BRANCHIOPOD MONITORING, 90-DAY REPORT, RECOVERY PERMITS TE-799570-3, 2010-TA-0243 2011-05-17
**Source:**

**CAP01S0003**

CAPELL, S. - CASIZ #158787, COLLECTED "BETWEEN STATE HIGHWAY 99 & ELK GROVE FLORIN RD. IN SOUTHERN SACRAMENTO CO." 2001-03-11

**ECO01R0001**

ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA FOR SHELDON ESTATES II 2001-07-25

**RAM01F0005**

RAMONES, S. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2001-03-11

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**Map Index Number:** 46122  
**EO Index:** 46122  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 312

**Occurrence Last Updated:** 2014-12-30

**Scientific Name:** *Branchinecta lynchi*  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
**Federal:** Threatened  
**State:** None

**Rare Plant Rank:** None  
**Other Lists:** IUCN_VU-Vulnerable

**CNDDDB Element Ranks:**  
**Global:** G3  
**State:** S2S3

**General Habitat:**  
ENDEM TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2001-03-11  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2001-03-11  
**Occurrence Rank:** None

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Possibly Extirpated

**Location:**  
NW ELK GROVE; ABOUT 0.75 MILES 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

**Threats:**  
AERIAL PHOTOS SINCE 2001 SHOW DEVELOPMENT ON EAST SIDE OF ROAD (SHELDON ESTATES PROJECT).

**General:**  
FEWER THAN 100 INDIVIDUALS OBSERVED ON 11 MAR 2001, 8 COLLECTED (CASIZ #158787).

**PLSS:** T07N, R05E, Sec. 25 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4255371 E640723  
**Latitude/Longitude:** 38.43553 / -121.38764  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**

- **CAP01S0003** CAPELL, S. - CASIZ #158787, COLLECTED "BETWEEN STATE HIGHWAY 99 & ELK GROVE FLORIN RD. IN SOUTHERN SACRAMENTO CO." 2001-03-11
- **ECO01R0001** ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA FOR SHELDON ESTATES II 2001-07-25
- **RAM01F0005** RAMONES, S. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2001-03-11
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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**Scientific Name:** *Branchinecta lynchi*  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
**Federal:** Threatened  
**State:** None

**Rare Plant Rank:**  
**Global:** G3  
**State:** S2S3

**CNDDB Element Ranks:**  
**Global:** G3  
**State:** S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2002-01-12  
**Last Survey Date:** 2002-01-31  
**Owner/Manager:** SAC COUNTY-PARKS & REC  
**Presence:** Presumed Extant

**Location:**  
MATHER LAKE REGIONAL PARK, NE SIDE OF MATHER LAKE, SOUTH OF DOUGLAS ROAD AND WEST OF SUNRISE BLVD.

**Detailed Location:**  
OBSERVED IN ALL OF THE SAMPLED WETLANDS (A, B, C, D, E, F AND G).

**Ecological:**  
HABITAT CONSISTS OF ANNUAL GRASSLAND DOMINATED BY NON-NATIVE PLANTS WITH NATURALLY OCCURRING & POSSIBLY ARTIFICIAL SEASONAL WETLANDS, INCLUDING VERNAL POOLS. PLANTS WITHIN WETLANDS: CARTER'S BUTTERCUP, WINGED WATER-STARWORT, POPCORN FLOWER.

**Threats:**  
**General:**  
INDIVIDUALS OBSERVED ON 12 JAN 2002. VOUCHER SPECIMENS TO BE COLLECTED ON 31 JAN 2002, HOWEVER NO INDIVIDUALS WERE OBSERVED.

**PLSS:** T08N, R07E, Sec. 07 (M)  
**Accuracy:** specific area  
**Area (acres):** 16

**UTM:** Zone-10 N4269103 E652367  
**Latitude/Longitude:** 38.55732 / -121.25130  
**Elevation (feet):** 135

**County Summary:**  
Sacramento: Buffalo Creek (3812152), Carmichael (3812153)

**Sources:**  
EC002R0002  ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING FEDERALLY-LISTED BRANCHIOPods FOR MATHER LAKE REGIONAL PARK, SACRAMENTO COUNTY, CALIFORNIA, 2002-04-17
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**Scientific Name:** *Branchinecta lynchi*  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
**Federal:** Threatened  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G3  
**State:** S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2002-01-21  
**Last Survey Date:** 2004-XX-XX  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
CHURCHILL DOWNS WETLAND PRESERVE, 4 MILES NNE OF ELK GROVE.

**Detailed Location:**  
1 MILE SOUTH GERBER ROAD, 0.5 MILE NORTH OF CALVINE RD AND EXTENDING 0.4 MILE WEST OF BRADSHAW RD. INDIVIDUALS DETECTED IN POOL NUMBERS 12 & 15 (NE 1/4 OF THE NE 1/4 OF SECTION 17).

**Ecological:**  
HABITAT CONSISTS OF A VERNAL POOL IN A GRASSLAND. LINDERIELLA OCCIDENTALIS AND LEPIDURUS PACKARDI ALSO IN VICINITY.

**Threats:**  
**General:**  

**PLSS:** T07N, R06E, Sec. 17 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 94

**UTM:** Zone-10 N4258529 E645058  
**Latitude/Longitude:** 38.46329 / -121.33734  
**Elevation (feet):** 65

**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Quad Summary:**

**Sources:**  
ECO02F0003 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2002-01-21  
ECO02F0004 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2002-01-21  
ECO02R0008 ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE. 2002-04-16  
ECO03R0002 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE 2003-06-06  
ECO04R0001 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE (SACRAMENTO COUNTY, CALIFORNIA) 2004-06-02
Map Index Number: 48534
EO Index: 48536
Key Quad: Elk Grove (3812143)
Element Code: ICBRA03030
Occurrence Number: 344
Occurrence Last Updated: 2004-08-19

Scientific Name: Branchinecta lynchi
Common Name: vernal pool fairy shrimp

Listing Status: Federal: Threatened
State: None

CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro Habitat: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 2004-03-04
Last Survey Date: 2004-03-04

Owner/Manager: PVT

Presence: Presumed Extant

Location: CHURCHILL DOWNS WETLAND PRESERVE, 4.5 MILES NORTH OF ELK GROVE.

Detailed Location: 0.5 MILE SOUTH OF GERBER RD, 1.2 MILES NORTH OF CALVINE RD AND 0.5 MILE EAST OF ELK GROVE FLORIN RD. INDIVIDUALS OBSERVED IN POOL NUMBER 9 (NE 1/4 OF THE SE 1/4 OF SECTION 7).

Ecological: HABITAT CONSISTS OF A VERNAL POOL WITHIN A GRASSLAND. LINDERIELLA OCCIDENTALIS AND LEPIDURUS PACKARDI ALSO IN VICINITY.

Threats:


PLSS: T07N, R06E, Sec. 07 (M)
Accuracy: nonspecific area
Area (acres): 55

UTM: Zone-10 N4259578 E643059
Latitude/Longitude: 38.47306 / -121.36003
Elevation (feet): 50

County Summary:
Sacramento
Elk Grove (3812143)

Sources:
ECOR02F0007 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2002-01-21
ECOR02R0008 ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIOPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE 2002-04-16
ECOR03R0002 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIOPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE 2003-06-08
ECOR04F0002 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI - POOL 5. 2004-03-04
ECOR04F0003 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2004-03-04
ECOR04R0001 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIOPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE (SACRAMENTO COUNTY, CALIFORNIA) 2004-06-02
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**Scientific Name:** *Branchinecta lynchi*

**Common Name:** vernal pool fairy shrimp

**Listing Status:** Federal: Threatened

**Rare Plant Rank:** None

**CNDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2011-02-12

**Last Survey Date:** 2011-02-12

**Owner/Manager:** PVT-SACRAMENTO VLY CONSERVANCY

**Presence:** Presumed Extant

**Location:** SACRAMENTO PRAIRIE VERNAL POOL PRESERVE; ABOUT 150' TO 0.5 MI NORTH OF FLORIN ROAD, 0.6 MI WEST OF EAGLES NEST RD.

**Detailed Location:** MAPPED TO LOCATIONS OF OCCUPIED POOLS ON SYLVA PARCEL OF SACRAMENTO VALLEY CONSERVANCY'S SACRAMENTO PRAIRIE VERNAL POOL PRESERVE.

**Ecological:**
NATURAL VERNAL POOLS IN AREA CHARACTERIZED BY GENTLY ROLLING TOPOGRAPHY, GRAZED ANNUAL GRASSLAND. LINDERIELLA OCCIDENTALIS, CYZICUS CALIFORNICUS, & LEPIDURUS PACKARDI ALSO FOUND.

**Threats:**

**General:**
FOUND IN 5 POOLS (3 MAPPED HERE), FEB 2005. FOUND IN LOW TO MEDIUM ABUNDANCE IN 19 POOLS IN 2008 AND 2011.

**PLSS:** T08N, R06E, Sec. 36 (M)

**Accuracy:** specific area

**Area (acres):** 32

**UTM:** Zone-10 N4262659 E650574

**Latitude/Longitude:** 38.49957 / -121.27325

**Elevation (feet):** 120

**County Summary:** Sacramento

**Quad Summary:** Elk Grove (3812143), Carmichael (3812153)

**Sources:**
- WIT05F0001 WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI. ATTACHED TO REPORT, WIT05R01. 2005-02-20
- WIT05R0001 WITHAM, C. - SACRAMENTO PRAIRIE VERNAL POOL PRESERVE, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
- WIT08F0006 WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & BRANCHINECTA MESOVALLENSI & LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 2008-02-18
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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| General Habitat:        | ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS. |
|                        | INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS. |

| Last Date Observed:     | 2006-01-06                    | Occurrence Type:   | Natural/Native occurrence |
| Last Survey Date:       | 2006-01-06                    | Occurrence Rank:   | Good                      |
| Owner/Manager:          | PVT                           | Trend:             | Unknown                   |
| Presence:               | Presumed Extant               |                    |                          |

Location:
ABOUT 0.35 MILES WEST OF PALLADAY ROAD AND 0.58 MILES SOUTH OF BASE LINE ROAD.

Detailed Location:
MAPPED TO LOCATION OF 2006 DETECTION AT VP-29. POOL SW-57 IN WHICH CYSTS FOUND IN 2005 ABOUT 0.5 MILES TO SW (NOT MAPPED).

Ecological:
SITE CONSISTS OF ANNUAL GRASSLAND COMPRISED OF NATURALIZED MEDITERRANEAN GRASSES AND NUMEROUS ASSOCIATED VERNAL POOLS (OVER 200), SEASONAL WETLANDS, AND SEASONAL WETLAND SWALES.

Threats:
COMMERCIAL & RESIDENTIAL DEVELOPMENT. SITE IS DISTURBED BY DUMPED GARBAGE AND NUMEROUS TIRE TRACKS FROM ORV ACTIVITY.

General:
BRANCHINECTA CYSTS FOUND IN POOL SW-57 ON 11 OCT 2005 (NOT IDED TO SPECIES). ABOUT 10 ADULTS OBSERVED IN VP-29 ON 6 JAN 2006.

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**County Summary:**
Placer  
Rio Linda (3812164)

**Sources:**
BEC05F0002 BECCIO, M. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2005-10-11
BEC06F0007 BECCIO, M. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2006-01-06
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**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
- **Federal:** Threatened  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2006-01-05  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2006-01-05  
**Occurrence Rank:** Good

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:**  
JUST EAST OF LOCUST ROAD ABOUT 0.63 MILE SOUTH OF BASE LINE ROAD.

**Detailed Location:**  
MAPPED TO SW-57, WHERE ADULTS WERE DETECTED IN 2006. LOCATION OF BASIN WHERE CYSTS WERE FOUND IN 2005 WAS TO THE SOUTHEAST (NOT MAPPED).

**Ecological:**  
NON-NATIVE ANNUAL GRASSLAND WITH NUMEROUS ASSOCIATED VERNAL POOLS (OVER 200), SEASONAL WETLANDS, AND SEASONAL WETLAND SWALES. SITE APPEARS TO BE DISKED ANNUALLY FOR VEGETATION CONTROL.

**Threats:**  
COMMERCIAL AND RESIDENTIAL DEVELOPMENT. DISTURBANCE FROM GARBAGE DUMPING AND ORV ACTIVITY.

**General:**  
BRANCHINECTA CYSTS FOUND IN 1 BASIN ON 11 OCT 2005 (NOT IDED TO SPECIES). ABOUT 1000 ADULTS OBSERVED IN SW-281 AREA, 6 JAN 2006.

**PLSS:** T10N, R05E, Sec. 08 (M)  
**Accuracy:** 1/10 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4289432 E633579  
**Latitude/Longitude:** 38.74347 / -121.46294  
**Elevation (feet):** 48

**County Summary:**  
Placer  
Rio Linda (3812164)

**Sources:**  
BEC05F0002 BECCIO, M. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2005-10-11  
BEC06F0006 BECCIO, M. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2006-01-05
### Scientific Name: Branchinecta lynchi

**Common Name:** Vernal pool fairy shrimp

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**CNDDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
- Endemic to the grasslands of the Central Valley, Central Coast MTNs, and South Coast MTNs, in astatic rain-filled pools.

**Micro Habitat:**
- Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.

**Occurrence Last Updated:** 2014-08-26

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<td>Owner/Manager</td>
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<tr>
<td>Presence</td>
<td>Presumed Extant</td>
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**Location:**
- Along the RR tracks on NW side of Roseville Rd about 450' N of the I-80 overpass, 0.6 mi S of Dudley Blvd at Forcum Ave.

**Detailed Location:**
- MCCLELLAN BUSINESS PARK. MAPPED TO GIVEN COORDINATES FOR POOLS #9 AND 32.

**Ecological:**
- Disturbed RR/roadside ditches surrounded by non-native grassland in an industrial area of former MCCLELLAN AIR FORCE BASE. Linderiella occidentalis present. Disturbance from trash, transients, & oil noted.

**Threats:**
- General:
  - About 200 adults & 50 juveniles found in pool #9 on 8 Jan 2007; of 10 vouchers collected, 9 are in CAS (CASIZ #174967). None found in pool 32 during wet survey, but 1000s of cysts detected on 27 Jul 2007; 25 identified in CAS (CASIZ #175318).

**PLSS:**
- T09N, R05E, Sec. 14 (M)

**UTM:**
- Zone-10 N4277878 E638745

**Accuracy:**
- 80 meters

**Latitude/Longitude:**
- 38.63860 / -121.40582

**Elevation (feet):**
- 59

**Area (acres):**
- 0

---

**Sources:**
- MAR07F0002 MARTIN, D. (BIOTA) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2007-01-08
- MAR07F0020 MARTIN, D. (BIOTA) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2007-07-27
- MAR07S0006 MARTIN, D. - CASIZ #174967, COLLECTED FROM "RAILROAD SIDE DITCH, POOL #9." 2007-01-08
- MAR07S0007 MARTIN, D. - CASIZ #175318, COLLECTED FROM "MCCLELLAN BUSINESS PARK, POOL #32." 2007-07-26
### Scientific Name: Branchinecta lynchi
### Common Name: vernal pool fairy shrimp

#### Listing Status:
- **Federal:** Threatened
- **State:** None

#### CNDDDB Element Ranks:
- **Global:** G3
- **State:** S2S3

#### General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

#### Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

#### Last Date Observed:
2013-03-29

#### Last Survey Date:
2013-03-29

#### Owner/Manager:
ENVIRO STEWARDSHIP FOUNDATION

#### Presence:
Presumed Extant

#### Location:
FROM ABOUT 0.1 TO 0.9 MILE NE OF EXCELSIOR RD AT SPIVA RD IN THE VICINITY OF LAGUNA CREEK, NORTH OF SHELDON.

#### Detailed Location:

#### Ecological:
319 AC KLOTZ PROPERTY A PRESERVE; LAGUNA PARCEL UNDER CONSERVATION EASMENT. CHARACTERIZED BY VERNAL POOLS IN GRAZED ANNUAL GRASSLAND SURROUNDED BY AG & GRAZING LAND. LEPIDURUS PACKARDI, LINDERIELLA OCCIDENTALIS, B. MESOVALLENSIS ALSO FOUND.

#### Threats:

#### PLSS:
- **T07N, R06E, Sec. 11 (M)**

#### UTM:
- **Zone-10 N4260107 E649284**

#### County Summary:
Sacramento

#### Quad Summary:
Elk Grove (3812143)
## Sources

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<td>BAR08R0001</td>
<td>BARTLEY, N. (ECORP CONSULTING, INC.) - 90-DAY REPORT OF FINDINGS REGARDING BRANCHIOPOD ASSESSMENT SURVEY KLOTZ PROPERTY OPEN SPACE PRESERVE 2008-02-01</td>
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<tr>
<td>ECO06R0008</td>
<td>ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING BRANCHIOPOD ASSESSMENT SURVEY, KLOTZ PROPERTY OPEN SPACE PRESERVE. 2006-03-27</td>
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<td>ECO07F0002</td>
<td>ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2007-02-27</td>
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<td>ECO07F0003</td>
<td>ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2007-02-27</td>
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<td>ECO07R0001</td>
<td>ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING BRANCHIOPOD ASSESSMENT SURVEY, KLOTZ PROPERTY OPEN SPACE PRESERVE 2007-05-11</td>
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<td>ECO09R0022</td>
<td>ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY LISTED BRANCHIOPODS FOR KLOTZ PROPERTY OPEN SPACE PRESERVE SACRAMENTO COUNTY, CALIFORNIA 2009-04-23</td>
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<tr>
<td>PAP13D0001</td>
<td>PAPATHAKIS, C. (VOLLMAR CONSULTING) - SPECIAL STATUS SPECIES COMPILATION BY VOLLMAR NATURAL LANDS CONSULTING 2013-01-29</td>
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<td>WIT08F0007</td>
<td>WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI &amp; LINDERIELLA OCCIDENTALIS &amp; LEPIDURUS PACKARDI 2008-03-22</td>
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<td>WIT11U0004</td>
<td>WITHAM, C. - LAGUNA AND WERRE SOUTH PARCELS, BRANCHIOPOD MONITORING, 90-DAY REPORT, RECOVERY PERMITS TE-799570-3, SERVICE FILE NO. 1-1-04-F-096, 2010-TA-0243 2011-05-17</td>
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### Scientific Name: Branchinecta lynchi

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### General Habitat:

**Endemic to the grasslands of the Central Valley, Central Coast Mountains, and South Coast Mountains, in astatic rain-filled pools.**

### Scientific Name: Branchinecta lynchi

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### Scientific Name: Branchinecta lynchi

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<th>Micro Habitat</th>
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<td>Endemic to the grasslands of the Central Valley, Central Coast Mountains, and South Coast Mountains, in astatic rain-filled pools. INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.</td>
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### Last Date Observed: 2009-03-10

### Listing Status: Federal: Threatened

### Owner/Manager: PVT, DWR

### Presence: Presumed Extant

### 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, LULUM MULTIFLORUM, PLAGIOBOTHRYS STIPITATUS & LASTHENIA GLABERRIMA. HISTORICAL GRADING CAUSED POOLS TO BE POORLY DEFINED & SHALLOW. DEEPEST POOLS OCCUR BY BERMS & ROADS.

### Threats:

ABOUT 100 BREEDING ADULTS OBSERVED AMONG 7 POOLS; ASSOCIATED MUSEUM RECORDS INCLUDE: CAS-Izia #180491-180495 ON 6 MAR, AND #18496 & 18497 ON 10 MAR 2009 COLLECTED BY E. PIMENTEL ET AL.

### PLSS:

T06N, R04E, Sec. 13 (M)

### Accuracy:

specific area

### Area (acres):

71

### UTM:

Zone-10 N4248466 E631310

### Latitude/Longitude:

38.37476 / -121.49674

### Elevation (feet):

10

### County Summary:

Sacramento

Bruceville (3812134), Courtland (3812135), Florin (3812144), Clarksburg (3812145)

### Sources:

- CAS09S0005 CALIFORNIA ACADEMY OF SCIENCES - CAS INVERTEBRATE SPECIMEN #180491 COLLECTED BY E. PIMENTEL AND T. WALKER 2009-03-06
- CAS09S0006 CALIFORNIA ACADEMY OF SCIENCES - CAS INVERTEBRATE SPECIMEN #180492 COLLECTED BY E. PIMENTEL ET AL. 2009-03-06
- CAS09S0007 CALIFORNIA ACADEMY OF SCIENCES - CAS INVERTEBRATE SPECIMEN #180493 COLLECTED BY E. PIMENTEL ET AL. 2009-03-06
- CAS09S0008 CALIFORNIA ACADEMY OF SCIENCES - CAS INVERTEBRATE SPECIMEN #180494 COLLECTED BY E. PIMENTEL ET AL. 2009-03-06
- CAS09S0009 CALIFORNIA ACADEMY OF SCIENCES - CAS INVERTEBRATE SPECIMEN #180495 COLLECTED BY E. PIMENTEL ET AL. 2009-03-06
- CAS09S0010 CALIFORNIA ACADEMY OF SCIENCES - CAS INVERTEBRATE SPECIMEN #180496 COLLECTED BY E. PIMENTEL ET AL. 2009-03-10
- CAS09S0011 CALIFORNIA ACADEMY OF SCIENCES - CAS INVERTEBRATE SPECIMEN #180497 COLLECTED BY E. PIMENTEL ET AL. 2009-03-10
- DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
- PIM09F0002 PIMENTEL, E. (EDAW, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2009-03-06
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**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
Federal: Threatened  
State: None

**Rare Plant Rank:**  
Other Lists: IUCN_VU-Vulnerable

**CNDDB Element Ranks:**  
Global: G3  
State: S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2013-01-16  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2013-01-16  
**Occurrence Rank:** Unknown

**Owner/Manager:** SRCSD-BUFFERLANDS, PG&E, PVT  
**Trend:** Unknown

**Presence:** Presumed Extant  
**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.

**Threats:**  
UTILITY AND RAILROAD MAINTENANCE, ORV TRAFFIC, WEEDS (2012).

**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).

**PLSS:** T07N, R05E, Sec. 29 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4255156 E634605  
**Latitude/Longitude:** 38.43454 / -121.45776  
**Elevation (feet):** 20

**County Summary:**  
Sacramento  
Florin (3812144)
Map Index Number: 93281
EO Index: 94480
Key Quad: Florin (3812144)
Element Code: ICBRA03030
Occurrence Number: 672
Occurrence Last Updated: 2014-07-31

Scientific Name: Branchinecta lynchi
Common Name: vernal pool fairy shrimp

Listing Status: Federal: Threatened
State: None
Rare Plant Rank: None
Other Lists: IUCN_VU-Vulnerable

CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro Habitat: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 1995-01-31
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1995-01-31
Occurrence Rank: Unknown
Owner/Manager: SRCSD-STONE LAKES NWP
Trend: Unknown
Presence: Presumed Extant

Location: NORTH SIDE OF MORRISON CREEK, ABOUT 0.9 MILES 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.

Threats:
General:
1 COLLECTED ON 31 JAN 1995 (CASIZ #104243).

PLSS: T07N, R04E, Sec. 24 (M)
Accuracy: 2/5 mile
Area (acres): 0
UTM: Zone-10 N4256935 E632399
Latitude/Longitude: 38.45089 / -121.48269
Elevation (feet): 0

County Summary: Sacramento
Quad Summary: Florin (3812144)

Sources:
WAL95S0016 WALKER, R. & E. KOFORD - CASIZ #104243, COLLECTED FROM "INUNDATED WHEAT FIELD NORTH OF MORRISON CREEK LEVEE ROAD, 50 FEET EAST OF PUMPING STATION. 7/8 MILE EAST OF INTERSTATE 5." 1995-01-31
Map Index Number: 93335
Key Quad: Florin (3812144)
Occurrence Number: 673
EO Index: 94482
Element Code: ICBRA03030
Occurrence Last Updated: 2014-08-13

Scientific Name: Branchinecta lynchi
Common Name: vernal pool fairy shrimp

Listing Status: Federal: Threatened
State: None

CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 1995-01-25
Last Survey Date: 1995-01-25
Owner/Manager: PVT-UNION PACIFIC RR
Presence: Presumed Extant

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.

Threats:

General:

PLSS: T07N, R05E, Sec. 06 (M)
Accuracy: 1/10 mile
Area (acres): 0

UTM: Zone-10 N4261242 E633514
Latitude/Longitude: 38.48953 / -121.46909
Elevation (feet): 15

County Summary: Sacramento
Quad Summary: Florin (3812144)

Sources:
MAR95S0001 MARTIN, D. & J. MARTINI - CASIZ #94832, COLLECTED "S OF FLORIN RD, W OF UNION PACIFIC RAILROAD, E OF POCKET SUBSTATION IN A SEASONALLY PONDED DEPRESSION." 1995-01-25
Occurrence Report  
California Department of Fish and Wildlife  
California Natural Diversity Database

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<tr>
<th>Map Index Number:</th>
<th>93357</th>
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<tr>
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**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
- Federal: Threatened  
- State: None

**CNNDDB Element Ranks:**  
- Global: G3  
- State: S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2008-02-08  
**Last Survey Date:** 2008-02-08  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
SOUTHWEST CORNER OF WALMORT ROAD AND DAVIS ROAD, SOUTH OF WILTON.

**Detailed Location:**  
MAPPED GENERALLY TO COORDINATES GIVEN FOR CENTER OF SURVEYED PROPERTY. EXACT DETECTION LOCATIONS UNKNOWN.

**Ecological:**  
ANNUAL GRASSLAND AND VERNAL POOL FLORA, ADJACENT TO BADGER CREEK. LAND USED FOR GRAZING AND AGRICULTURE.

**Threats:**  
**General:**  
THOUSANDS OBSERVED ON 8 FEB 2008.

**PLSS:** T06N, R06E, Sec. 13 (M)  
**Accuracy:** 2/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4248977 E651511  
**Latitude/Longitude:** 38.37617 / -121.26547  
**Elevation (feet):** 65

**County Summary:**  
Sacramento  
Galt (3812133), Elk Grove (3812143)

**Sources:**  
FAR08F0001 FARMER, M. & B. BARKER - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2008-02-08
<table>
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<tr>
<th>Map Index Number:</th>
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**Scientific Name:** *Branchinecta lynchi*

**Common Name:** vernal pool fairy shrimp

**Listing Status:**
- Federal: Threatened
- State: None

**CNDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2007-07-27

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-07-27

**Occurrence Rank:** Unknown

**Owner/Manager:** PVT

**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
MCCLELLAN BUSINESS PARK, 0.2 MILE ESE OF THE INTERSECTION OF DUDLEY BLVD AND FORCUM AVENUE, SACRAMENTO.

**Detailed Location:**
MAPPED TO GIVEN COORDINATES.

**Ecological:**
DISTURBED VERNAL POOL IN NON-NATIVE GRASSLAND PERIODICALLY MECHANICALLY TREATED FOR WEEDS.

**Threats:**
SOILS IN THE AREA ARE KNOWN TO BE CONTAMINATED.

**General:**
BRANCHIOPOD CYSTS COLLECTED ON 27 JUL 2007 WERE IDENTIFIED AS BRANCHINECTA LYNCHI AND ACCESSIONED TO CAS (CASIZ #175319).

**PLSS:**
- T09N, R05E, Sec. 11 (M)
- Accuracy: 80 meters
- Area (acres): 0

**UTM:**
- Zone-10 N4278716 E639045
- Latitude/Longitude: 38.64610 / -121.40221
- Elevation (feet): 65

**County Summary:**
Sacramento

**Quad Summary:**
Rio Linda (3812164)

**Sources:**
- MAR07F0019 MARTIN, D. (BIOTA) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2007-07-27
- MAR07S0008 MARTIN, D. - CASIZ #175319, COLLECTED FROM "MCCLELLAN BUSINESS PARK, POOL #17." 2007-07-27
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<th>Map Index Number: 93588</th>
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<td>Occurrence Number: 740</td>
<td>Occurrence Last Updated: 2014-11-19</td>
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**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
- Federal: Threatened  
- State: None

**CNNDDB Element Ranks:**  
- Global: G3  
- State: S2S3

**General Habitat:** ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:** INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2010-02-11  
**Occurrence Type:** Natural/Native occurrence

**Owner/Manager:** PVT  
**Occurrence Rank:** Unknown

**Presence:** Presumed Extant  
**Trend:** Unknown

**Location:**  
ABOUT 0.5 MILE NNW OF INTERSECTION OF ELVERTA ROAD AND RIVERGREEN DR AND 0.6 MILE SSE OF KASSER RD AT 16TH ST, ELVERTA.

**Detailed Location:**  
“D.R. STEPHENS CENTRAL PROPERTY” WITHIN THE ELVERTA SPECIFIC PLAN PROPERTIES. MAPPED TO LOCATION GIVEN FOR POOL SW3.

**Ecological:** SEASONAL WETLAND IN GRAZED PROPERTY WITH SOME OHV DISTURBANCE.

**Threats:**  
**General:** RARE (ONLY 1 OR 2 DIPNETTED) IN SW3 ON 11 FEB 2010.

**PLSS:** T10N, R05E, Sec. 15 (M)  
**UTM:** Zone-10 N4287061 E637023  
**Accuracy:** 80 meters  
**Area (acres):** 0

**Latitude/Longitude:** 38.72159 / -121.42379  
**Elevation (feet):** 75

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
HEL10R0018 HELM BIOLOGICAL CONSULTING - WET-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE ELVERTA SPECIFIC PLAN PROPERTIES (2009-2010) 2010-07-XX

---

**Sacramento**

**Rio Linda (3812164)**
Map Index Number: 93589
EO Index: 94732
Key Quad: Rio Linda (3812164)
Occurrence Number: 741
Occurrence Last Updated: 2014-08-26

Scientific Name: Branchinecta lynchi
Common Name: vernal pool fairy shrimp

Listing Status: Federal: Threatened
State: None
CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 2010-02-12
Last Survey Date: 2010-02-12
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Unknown
Trend: Unknown

Presence: Presumed Extant
Location:
0.2 TO 0.3 MILE NW AND NNW OF THE INTERSECTION OF ELVERTA ROAD AND 16TH STREET, ELVERTA.

Detailed Location:
2006: MAPPED TO OCCUPIED POOL 15 ON GRIMSMAN PROPERTY (NORTH END OF FEATURE). 2010: MAPPED TO OCCUPIED POOL SW5 ON "ELVERTA 59 1/2 PROPERTY" FROM ELVERTA SPECIFIC PLAN (SOUTH END OF FEATURE).

Ecological:
2006: BASIN 15 A LARGE VERNAL POOL, HABITAT QUALITY FAIR, CALIFORNIA CLAMP SHRIMP ALSO PRESENT. 2010: SEASONAL WETLAND ON PROPERTY WITH SOME DISTURBANCE FROM GRAZING AND OHV USE.

Threats:
General:
FEWER THAN 24 DETECTED JAN 2006, IN 1 OF 20 BASINS SAMPLED. PRESENT IN POOL SW5 ON 12 FEB 2010.

PLSS: T10N, R05E, Sec. 16 (M) Accuracy: specific area
UTM: Zone-10 N4286636 E636335 Latitude/Longitude: 38.71787 / -121.43179 Elevation (feet): 70

County Summary:
Sacramento Quad Summary:
Rio Linda (3812164)

Sources:
HEL06F0009 HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2006-02-19
HEL06R0001 HELM, B. (HELM BIOLOGICAL CONSULTING) - WET SEASON SAMPLING FOR FEDERALLY-LISTED BRANCHIPODS AT THE ELVERTA SPECIFIC PLAN, 2006 2006-07-26
HEL10R0018 HELM BIOLOGICAL CONSULTING - WET-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIPODS AT THE ELVERTA SPECIFIC PLAN PROPERTIES (2009-2010) 2010-07-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<th>ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.</th>
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<td>Micro Habitat:</td>
<td>INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.</td>
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<table>
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<tr>
<th>Location:</th>
<th>AT THE NORTHWEST CORNER OF PALLADAY ROAD AND ELVERTA ROAD IN ELVERTA.</th>
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<td>Detailed Location:</td>
<td>&quot;ELVERTA PALLADAY PROPERTY&quot; FROM ELVERTA SPECIFIC PLAN. MAPPED TO LOCATION GIVEN FOR OCCUPIED POOLS V21, POND, AND D2.</td>
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<tr>
<td>Ecological:</td>
<td>A DITCH, A POND, AND A VERNAL POOL IN GRASSLAND WITH SOME OHV AND GRAZING DISTURBANCE.</td>
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<td>Elevation (feet):</td>
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<td>Quad Summary:</td>
<td>Rio Linda (3812164)</td>
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</table>

**Sources:**

- HEL07F0019 HELM, B. (HELM BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2007-12-11
- HEL08R0017 HELM, B. & T. WOOD (HELM BIOLOGICAL CONSULTING) - WET SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE ELVERTA SPECIFIC PLAN PROPERTIES 2008-05-17
Map Index Number: 93591  
EO Index: 94741  
Key Quad: Rio Linda (3812164)  
Element Code: ICBRA03030  
Occurrence Number: 743  
Occurrence Last Updated: 2014-11-20

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<th>CNDDB Element Ranks</th>
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**General Habitat:**
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2008-02-18  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2008-02-18  
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
BETWEEN 16TH STREET AND PALLADAY ROAD, ABOUT 0.8 MILE NORTH OF ELVERTA ROAD, ELVERTA.

**Detailed Location:**
FROM W TO E: "TLC-ELVERTA 24", "MITIGATION AREA 1," & "SPORTS PARK" PARCELS FROM ELVERTA SPECIFIC PLAN PROPERTIES. MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS.

**Ecological:**
FOUND IN VERNAL POOLS. 2 OCCUPIED POOLS ON ELVERTA 24 PROPERTY PROBABLY CONNECT IN HIGH RAIN YEARS. MITIGATION AREA 1 PROPOSED AS MITIGATION BANK AS OF 2007. CALIFORNIA FAIRY SHRIMP AND CALIFORNIA CLAM SHRIMP ALSO FOUND.

**Threats:**
BRANCHINECTA CYSTS FOUND IN 1 POOL ON TLC-ELVERTA PROPERTY, AUG 2005. FEWER THAN 24 FOUND IN 2 OF 53 WETLANDS SAMPLED ON ELVERTA 24 PROPERTY, JAN-FEB 2006. FOUND IN 14 BASINS IN "MITIGATION AREA 1" & "SPORTS PARK" PARCELS, 4 & 18 FEB 2008.

**PLSS:**
T10N, R05E, Sec. 16 (M)  
**Accuracy:** specific area  
**Area (acres):** 37

**UTM:**
Zone-10 N4287541 E635867  
**Latitude/Longitude:** 38.72609 / -121.43699  
**Elevation (feet):** 70

**County Summary:**
Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**
- HEL05F0025 HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2005-08-11
- HEL06F0009 HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2006-02-19
- HEL06R0001 HELM, B. (HELM BIOLOGICAL CONSULTING) - WET SEASON SAMPLING FOR FEDERALLY-LISTED BRANCHIOPODS AT THE ELVERTA SPECIFIC PLAN, 2006 2006-07-26
- HEL07F0019 HELM, B. (HELM BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2007-12-11
- HEL08R0017 HELM, B. & T. WOOD (HELM BIOLOGICAL CONSULTING) - WET SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE ELVERTA SPECIFIC PLAN PROPERTIES 2008-05-17
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 93634  
**EO Index:** 94764  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 750  
**Occurrence Last Updated:** 2014-08-29  
**Element Code:** ICBRA03030

---

**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp  
**Listing Status:** Federal: Threatened  
**Rare Plant Rank:** None  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Occurrence Last Updated:** 2014-08-29  
**Occurrence Number:** 750

---

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

---

**Last Date Observed:** 1989-03-01  
**Last Survey Date:** 1989-03-01  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

---

**Location:**  
VICINITY OF MATHER AIR FORCE BASE (NOW SACRAMENTO MATHER AIRPORT), SACRAMENTO.

**Detailed Location:**  
MAPPED BY CNDDB BASED ON THE VAGUE COLLECTION LOCALITY, "VERNAL POOLS OF MATHER AIR FORCE BASE." EXACT COLLECTION LOCATION UNKNOWN.

---

**Ecological:**  
THREATS:

6 COLLECTED ON 1 MAR 1989 (USNM #1072677).

**PLSS:** T08N, R06E, Sec. 10 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4269013 E648241  
**Latitude/Longitude:** 38.55720 / -121.29864  
**Elevation (feet):** 80

---

**County Summary:**  
Sacramento  
Carmichael (3812153)

---

**Sources:**  
ANO89S0006  
ANONYMOUS - USNM #1072677, COLLECTED FROM "VERNAL POOLS OF MATHER AIR FORCE BASE." 1989-03-01
**Occurrence Report**

*California Department of Fish and Wildlife*

*California Natural Diversity Database*

**Map Index Number:** 93639  
**EO Index:** 94769  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 751  
**Occurrence Last Updated:** 2014-08-29

**Scientific Name:** *Branchinecta lynchi*  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
Federal: Threatened  
State: None

**CNDDB Element Ranks:**  
Global: G3  
State: S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2011-01-26  
**Occurrence Type:** Natural/Native occurrence

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown  
**Presence:** Presumed Extant

**Location:**  
0.3 MILE NW OF INTERSECTION OF EXCELSIOR ROAD AND ELDER CREEK ROAD, SOUTH OF HIGHWAY 16, SE OF SACRAMENTO.

**Detailed Location:**  
ASPEN VII SOUTH PROPERTY. MAPPED TO COORDINATES GIVEN FOR OCCUPIED POOL DSW4.

**Ecological:**  
"CLASSIC VERNAL POOL" COVERING 3500 SQ FEET, 14 INCHES DEEP, IN FALLOW CATTLE PASTURAGE CHARACTERIZED BY NON-NATIVE ANNUAL GRASSLAND SPECIES. LINDERIELLA OCCIDENTALIS AND LEPIDURUS PACKARDI ALSO FOUND.

**Threats:**

**General:**  
DETECTED IN HIGH ABUNDANCE IN 1 POOL ON 26 JAN 2011, OUT OF ABOUT 2.7 ACRES OF WETLANDS SURVEYED.

**PLSS:** T08N, R06E, Sec. 27 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4264044 E647950  
**Latitude/Longitude:** 38.51249 / -121.30304  
**Elevation (feet):** 80

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**

GIB11R0001  
GIBSON & SKORDAL, LLC - LISTED VERNAL POOL BRANCHIOPODS WET SEASON SURVEY 90-DAY REPORT ASPEN VII SOUTH, SACRAMENTO COUNTY, CALIFORNIA 2011-05-XX
**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp

**Listing Status:** Federal: Threatened  
State: None

**Rare Plant Rank:**  
State: None  
Other Lists: IUCN_VU-Vulnerable

**CNDDB Element Ranks:**  
Global: G3  
State: S2S3

**General Habitat:** Endemic to the grasslands of the Central Valley, Central Coast Mtns, and South Coast Mtns, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.

**Micro Habitat:**

**Last Date Observed:** 2013-01-15  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Location:** 14TH AVENUE EXTENSION STE, 0.1 MILE NORTH OF BELVEDERE AVE, FROM 0.2 TO 0.5 MILE WEST OF FLORIN PERKINS RD, SACRAMENTO.

**Detailed Location:** MAPPED TO LOCATIONS OF OCCUPIED POOLS.

**Ecological:** VERNAL POOLS AND SEASONAL WETLANDS IN ANNUAL GRASSLAND SURROUNDED BY URBAN DEVELOPMENT. LINDERIELLA OCCIDENTALIS ALSO FOUND.

**Threats:** ROAD CONSTRUCTION.

**General:**

DETECTED IN 5 VERNAL POOLS AND 1 SEASONAL WETLAND DURING SURVEYS BETWEEN 18 DEC 2012 AND 15 JAN 2013.

**PLSS:** T08N, R05E, Sec. 14 (M)  
**Accuracy:** specific area  
**Area (acres):** 15

**UTM:** Zone-10 N4266911 E639628  
**Latitude/Longitude:** 38.53966 / -121.39788  
**Elevation (feet):** 40

**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:**

WO013R0004  WOOD, T. (ECORP CONSULTING, INC.) - 2012 - 2013 WET SEASON REPORT OF FINDINGS REGARDING FEDERALLY-LISTED LARGE BRANCHIOPods FOR 14TH AVENUE EXTENSION SACRAMENTO COUNTY, CALIFORNIA 2013-06-13
**Map Index Number:** 93641  
**EO Index:** 94781

**Key Quad:** Sacramento East (3812154)  
**Element Code:** ICBRA03030

**Occurrence Number:** 753  
**Occurrence Last Updated:** 2014-09-05

**Scientific Name:** *Branchinecta lynchi*  
**Common Name:** vernal pool fairy shrimp

**Listing Status:**  
- **Federal:** Threatened  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 1982-01-01

**Last Survey Date:** 1982-01-01

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**  
VICINITY OF SOUTHERN PACIFIC RAILROAD TRACKS SOUTH OF HIGHWAY 50, SACRAMENTO.

**Detailed Location:**  
MAPPED AS BEST GUESS FOR 1982 LOCALITY "JOHN TAYLOR FERTILIZER POOL, SOUTH OF HIGHWAY 50 ALONG SOUTHERN PACIFIC TRANSPORTATION COMPANY RAILROAD TRACKS." DRY SEASON SAMPLES FROM 2005 TAKEN ALONG RAILROAD, FROM 0.1 TO 0.3 MI S OF HWY 50.

**Ecological:**  
1982: SEASONALLY ASTATIC VERNAL POOL IN GRASSLAND. 2005: SEASONAL WETLANDS.

**Threats:**  
1 COLLECTED ON 1 JAN 1982 (BELK #404, USNM #1156051). BRANCHINECTA CYSTS FOUND IN SAMPLES FROM 5 SEASONAL WETLANDS TAKEN ALONG RAILROAD TRACKS 16 JUN 2005, CYSTS NOT HATCHED OR IDENTIFIED TO SPECIES.

**PLSS:** T08N, R05E, Sec. 15 (M)  
**Accuracy:** 3/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4267670 E637740  
**Latitude/Longitude:** 38.54679 / -121.41938  
**Elevation (feet):** 40

**County Summary:**  
Sacramento  
Sacramento East (3812154)

**Sources:**

BEL88D0001 BELK, D. - DELTON BELK'S DATABASE OF CRUSTACEAN COLLECTIONS 1988-09-XX

ENG82S0012 ENG, L. - USNM #1156051, COLLECTED AT "JOHN TAYLOR FERTILIZER POOL, SOUTH OF HWY 50 ALONG SOUTHERN PACIFIC TRANSPORTATION COMPANY TRACKS." 1982-01-01

HEL05F0011 HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2005-06-16
### Branchinecta lynchi

**Scientific Name:** Branchinecta lynchi  
**Common Name:** vernal pool fairy shrimp  

**Listing Status:**  
- **Federal:** Threatened  
- **State:** None  

**Occurrence Last Updated:** 2014-09-03

**General Habitat:**  
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**  
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

**Last Date Observed:** 2011-02-XX  
**Last Survey Date:** 2011-02-XX  
**Presence:** Presumed Extant  
**Location:** WERRE PARCEL, FROM ABOUT 0.5 MILE ESE TO 0.75 MILE SE OF EXCELSIOR ROAD AT DIERKS ROAD, NE OF ELK GROVE.

**Detailed Location:** MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS.

**Ecological:**  
VERNAL POOLS IN ANNUAL GRASSLAND ON GENTLY ROLLING TOPOGRAPHY. PRESERVE OWNED BY SACRAMENTO VALLEY CONSERVANCY.

**Threats:**  
**General:**  
FOUND IN LOW TO MEDIUM ABUNDANCE IN 12 POOLS (8 MAPPED HERE, SEE ALSO OCCURRENCE #532), FEB-MAR 2008. FOUND IN LOW ABUNDANCE IN 10 POOLS, FEB 2011.

**PLSS:** T07N, R06E, Sec. 14 (M)  
**Accuracy:** specific area  
**Area (acres):** 31

**UTM:** Zone-10 N4258720 E649419  
**Latitude/Longitude:** 38.46429 / -121.28733  
**Elevation (feet):** 95

**Sources:**  
- WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 2008-03-22  
### Branchinecta lynchi

#### Scientific Name: Branchinecta lynchi

- **Common Name:** vernal pool fairy shrimp

#### Listing Status:
- **Federal:** Threatened
- **State:** None

#### CNDDDB Element Ranks:
- **Global:** G3
- **State:** S2S3

#### General Habitat:
Endemic to the Grasslands of the Central Valley, Central Coast Mtns, and South Coast Mtns, in Astatic Rain-Filled Pools.

#### Micro Habitat:
Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.

#### Last Date Observed:
- **2007-02-28**

#### Owner/Manager:
- **PVT**

#### Presence:
- **Presumed Extant**

#### Location:
About 0.7 miles NE of Bradshaw Rd at Gerber Rd and 1.6 miles WSW of Excelsior Rd at Florin Rd, SE of Sacramento.

#### Detailed Location:
Detected in 1993 in TRS Sec 4, exact location not given. Mapped to locations given for VP-7 (occupied in 2006), V16, & V5 (occupied in 2007). No B. lynchi were found at 4 other properties surveyed in 2006 in NW, NE, & SE Quarter Sections.

#### Ecological:

#### Threats:

#### PLSS:
- **T07N, R06E, Sec. 04 (M)**

#### UTM:
- **Zone-10 N 4261301 E 646043**

#### Accuracy:
- **specific area**

#### Area (acres):
- **13**

#### Latitude/Longitude:
- **38.48809 / -121.32547**

#### Elevation (feet):
- **60**

#### quad summary:
- **Sacramento**
- **Elk Grove (3812143)**
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Sources:

HEL05U0006  HELM, B. - DRY-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE TLC-NORTH VINEYARD/CASTALANO PROPERTY. 2005-12-XX
HEL06F0002  HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2006-03-14
HEL06F0008  HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2006-01-15
HEL06F0059  HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2006-06-01
HEL06U0002  HELM, B. - WET-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE ASTON PROPERTY. 2006-06-XX
HEL06U0003  HELM, B. - WET-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE HAYNES PROPERTY. 2006-06-XX
HEL06U0004  HELM, B. - WET-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE NORTH VINEYARD STATION 80 PROPERTY. 2006-06-XX
HEL06U0007  HELM, B. - WET-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE NORTH VINEYARD STATION PROPERTY. 2006-06-XX
HEL07F0013  HELM, B. (HELM BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2007-02-28
HEL07R0026  HELM, B. (HELM BIOLOGICAL CONSULTING) - WET-SEASON SAMPLING FOR FEDERALLY-LISTED BRANCHIOPODS AT THE EBIG 40-REYEN PROPERTY 2007-04-XX
SUG93U0001  SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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| Last Date Observed:    | 2006-03-14 |
| Last Survey Date:      | 2006-03-14 |
| Owner/Manager:         | PVT |
| Presence:              | Presumed Extant |
| Location:              | SOUTH SIDE OF GERBER ROAD FROM 0.1 TO 0.3 MILE WEST OF THE BRADSHAW ROAD INTERSECTION, SOUTHERN SACRAMENTO. |

**Detailed Location:**

BRADSHAW SOUTHWEST PROPERTY. 2005 DRY-SEASON SURVEY INTAYLOR-LOPEZ PROPERTY ON OPPOSITE SIDE OF BRADSHAW RD (NOT MAPPED). MAPPED TO DETECTION LOCATIONS FROM 2006 AT POOLS SW6 AND SW7.

| Ecological:            | SEASONAL WETLANDS ON 19.6-ACRE PARCEL. LINDERIELLA OCCIDENTALIS ALSO FOUND. NEW HOUSING DEVELOPMENT ACROSS THE STREET, AROUND 2009. |

| Threats:               | BRANCHINECTA CYSTS FOUND IN SOIL TAKEN FROM POOL VP2 ON 9 AUG, & FROM 1 POOL ON TAYLOR-LOPEZ SITE ON 17 SEP 2005 (NOT HATCHED/NOT IDED TO SPECIES). ADULTS DETECTED IN 2 POOLS AT CONCENTRATIONS OF 10/25L ON 26 JAN & IN 1 POOL ON 14 MAR 2006. |

| General:               |
| PLSS:                  | T07N, R06E, Sec. 08 (M) |
| UTM:                   | Zone-10 N4260520 E644991 |
| Accuracy:              | specific area |
| Area (acres):          | 10 |
| Latitude/Longitude:    | 38.48124 / -121.33769 |
| Elevation (feet):      | 55 |

| County Summary:        | Elk Grove (3812143) |

| Sources:               |
| HEL05F0013             | HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2005-08-09 |
| HEL05U0018             | HELM, B. - DRY-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIPODS AT THE TAYLOR LOPEZ PROPERTY. 2005-09-XX |
| HEL06F0007             | HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2006-01-26 |
| HEL06R0011             | HELM, B. (HELM BIOLOGICAL CONSULTING) - WET-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIPODS AT THE BRADSHAW SW PROPERTY 2006-05-XX |
### Map Index Number: 94759
### Key Quad: Carmichael (3812153)
### Occurrence Number: 886
### EO Index: 95864
### Element Code: ICBRA03030
### Occurrence Last Updated: 2015-02-23

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<td>INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.</td>
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### General Habitat:
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

### Micro Habitat:
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

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### Owner/Manager: SMUD
### Presence: Extirpated
### Location:
SMUD EAST CAMPUS OPERATIONS CENTER, ON THE SE CORNER OF BRADSHAW & KIEFER, ROSEMONT, SACRAMENTO.

### Detailed Location:
MAPPED TO LOCATION PROVIDED FOR POOL DP-4, FOUND OCCUPIED DURING WET-SEASON SURVEYS.

### Ecological:
THE SE CORNER OF KIEFER & BRADSHAW HAS BEEN DISTURBED SINCE 1993, PRIMARILY AS A SURFACE MINING OPERATION. AROUND 2011 SMUD STARTING BUILDING A NEW FACILITY HERE. THERE APPEARS TO BE CONSTRUCTED VERNAL POOLS ADJACENT TO THE SE.

### Threats:
AIR PHOTOS INDICATE THAT SITE HAS BEEN DEVELOPED BY SMUD SINCE THE TIME OF SURVEY.

### General:
BRANCHINECTA CYSTS FOUND IN 2 POOLS, SEP 2009. 10S OF MATURE B. LYNCHI FOUND IN 1 POOL, 3 FEB 2010. NONE FOUND DURING DRY SAMPLING OF AN ADDITIONAL 23 BASINS IN JULY 2010.

### PLSS:
T08N, R06E, Sec. 16 (M) Accuracy: 80 meters Area (acres): 0

### UTM:
Zone-10 N4267211 E645663 Latitude/Longitude: 38.54140 / -121.32860 Elevation (feet): 65

### County Summary:
Sacramento Carmichael (3812153)

### Sources:
- BUR10R0001 BURLESON CONSULTING, INC. - 90-DAY REPORT FOR FINDINGS REGARDING BRANCHIOPOD SURVEYS FOR SACRAMENTO MUNICIPAL UTILITY DISTRICT'S EAST CAMPUS-OPERATIONS CENTER, SACRAMENTO COUNTY, CALIFORNIA 2010-07-XX
- HEL09R0008 HELM, B. (HELM BIOLOGICAL CONSULTING) - SOIL EXAMINATIONS FOR THE PRESENCE OF FEDERALLY LISTED LARGE BRANCHIOPODS AT THE SMUD EAST CAMPUS-OPERATIONS CENTER 2009-11-30
- HEL09R0009 HELM, B. (HELM BIOLOGICAL CONSULTING) - ADDENDUM SOIL EXAMINATIONS FOR THE PRESENCE OF FEDERALLY LISTED LARGE BRANCHIOPODS AT THE SMUD EAST CAMPUS-OPERATIONS CENTER 2009-11-19
- HEL10R0006 HELM, B. (HELM BIOLOGICAL CONSULTING) - SOIL EXAMINATIONS FOR THE PRESENCE OF FEDERALLY LISTED LARGE BRANCHIOPODS AT THE SMUD EAST CAMPUS-OPERATIONS CENTER (2010) 2010-08-XX
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**General Habitat:**
ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:**
INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

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**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.

**Threats:**
General:
10 CYSTS FOUND IN 2 OF 11 SITES EXAMINED IN APR 1998, COLLECTED AND DEPOSITED IN CAS (CASIZ #115430 & 115431).

**PLSS:**
T07N, R05E, Sec. 19 (M)

**Accuracy:**
non specific area

**Area (acres):**
27

**UTM:**
Zone-10 N 4256138 E 633802

**Latitude/Longitude:**
38.44351 / -121.46676

**Elevation (feet):**
10

**County Summary:**
Sacramento

**Quad Summary:**
Florin (3812144)

**Sources:**
MAR98F0003 MARTINE, A. & T. SLOAT - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI (VERNAL POOL FAIRY SHRIMP) 1998-04-30
**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

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**Map Index Number:** 95363

**EO Index:** 96493

**Key Quad:** Elk Grove (3812143)

**Occurrence Number:** 893

**Occurrence Code:** 96493

**Occurrence Last Updated:** 2015-03-03

---

**Scientific Name:** Branchinecta lynchi

**Common Name:** vernal pool fairy shrimp

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**CNDDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:** ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

**Micro Habitat:** INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

---

**Last Date Observed:** 1993-03-02

**Last Survey Date:** 1993-03-02

**Owner/Manager:** UNKNOWN

**Presence:** Possibly Extirpated

**Location:** NORTH SIDE OF CALVINE ROAD BETWEEN EXCELSIOR RD AND VINEYARD RD, NE OF ELK GROVE.

**Detailed Location:**
LOCATION GIVEN ONLY TO TRS SECTION; T7N R6E SEC 15. MOST LIKELY LOCATION BASED ON 1993 AERIALS IS AREA ALONG WEST SIDE OF EXCELSIOR RD.

**Ecological:** NATURAL VERNAL POOL. AERIAL PHOTOS SHOW EXTENSIVE RESIDENTIAL DEVELOPMENT IN THE AREA SINCE THE TIME OF SURVEY. IT APPEARS THAT SOME HABITAT MAY EXIST. UNKNOWN WHAT AFFECT EXTENSIVE DEVELOPMENT ACROSS REST OF SECTION MAY HAVE.

**Threats:** DEVELOPMENT MAY HAVE ELIMINATED HABITAT.

**General:** OBSERVED IN 4 OF 49 FEATURES INSPECTED IN SECTION 15 ON 2 MAR 1993 (SUGNET RECORD #61). NEEDS RESEARCH.

**PLSS:** T07N, R06E, Sec. 15 (M)

**Accuracy:** nonspecific area

**Area (acres):** 689

**UTM:** Zone-10 N4258238 E647714

**Latitude/Longitude:** 38.46023 / -121.30697

**Elevation (feet):** 70

**County Summary:**

**Quad Summary:**

Sacramento

Elk Grove (3812143)

---

**Sources:**

SUG93U0001 SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
Scientific Name: Branchinecta lynchi
Common Name: vernal pool fairy shrimp

Listing Status:
Federal: Threatened
State: None

Rare Plant Rank:
Other Lists: IUCN_VU-Vulnerable

CNDDB Element Ranks:
Global: G3
State: S2S3

General Habitat: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro Habitat: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Last Date Observed: 2014-10-08
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2014-10-08
Occurrence Rank: Unknown

Owner/Manager: SOUTHGATE RPD
Trend: Unknown

Presence: Presumed Extant

Location: ABOUT 0.1 MILE SW OF WILDHAWK W DR AT WINGED FOOT DR, 0.6 MILES SE OF BRADSHAW RD AT DARON LN, NE OF ELK GROVE.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: SEASONAL WETLAND AT THE BOTTOM OF A SMALL RETENTION BASIN IN A VACANT LOT, DOMINATED BY ELEOCHARIS MACROSTACHYA. VISIBLE DISTURBANCE FROM OHV TRACKS NOTED.

Threats: DEVELOPMENT.

General:
10 CYSTS FOUND THROUH DRY-SAMPLING 8 OCT 2014 WERE IDENTIFIED AS BRANCHINECTA LYNCHI THROUGH GENETIC ANALYSIS.

PLSS: T07N, R06E, Sec. 09 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4259108 E646110
Latitude/Longitude: 38.46833 / -121.32516
Elevation (feet): 60

County Summary:
Sacramento

Quad Summary:
Elk Grove (3812143)

Sources:
HEL14F0012 HELM, B. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2014-10-08
### Scientific Name:
*Branchinecta mesovallensis*

### Common Name:
midvalley fairy shrimp

### Listing Status:
- Federal: None
- State: None

### CNDDB Element Ranks:
- Global: G2
- State: S2

### General Habitat:
VERNAL POOLS IN THE CENTRAL VALLEY.

### Micro Habitat:

### Last Date Observed:
2011-02-XX

### Last Survey Date:
2011-02-XX

### Owner/Manager:
PVT, SACTO VALLEY CONSERVANCY

### Presence:
Presumed Extant

### Location:
ABOUT 0.2 MILE WEST OF EAGLES NEST ROAD AND SOUTH OF JACKSON ROAD, 1.2 MILES SOUTH OF MATHER REGIONAL PARK.

### Detailed Location:

### Ecological:
2000: A SHALLOW POOL IN NON-NATIVE GRASSLAND WITH VERNAL POOLS. 2008 & 2011: VERNAL POOLS IN ANNUAL GRASSLAND ON GENTLY ROLLING TOPOGRAPHY; AREA PROTECTED AS A PRESERVE.

### Threats:
General:
SEVERAL FOUND IN 1 POOL DURING SURVEYS ON 24 FEB AND 15 MAR 2000. DETECTED IN HIGH ABUNDANCE IN 1 POOL, 18 FEB 2008; SPECIMENS COLLECTED FOR USFWS. DETECTED IN HIGH ABUNDANCE IN 1 POOL, FEB 2011.

### PLSS:
- T08N, R06E, Sec. 36 (M)

### UTM:
- Zone-10 N4263415 E650935

### County Summary:
Sacramento

### Quad Summary:
Elk Grove (3812143), Carmichael (3812153)

### Sources:
- MUT00F0009  MUTH, D. - FIELD SURVEY FORM FOR BRANCHINECTA MESOVALLENSIS (MIDVALLEY FAIRY SHRIMP) 2000-03-15
- WIT08F0006  WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & BRANCHINECTA MESOVALLENSIS & LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 2008-02-18

---

**Map Index Number:** 43418  
**EO Index:** 43418  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 1  
**Occurrence Last Updated:** 2014-11-25  
**Element Code:** ICBRA03150  
**Occurrence Code:** 1  
**Occurrence Last Updated:** 2014-11-25  
**Scientific Name:** *Branchinecta mesovallensis*  
**Common Name:** midvalley fairy shrimp  
**Listing Status:**  
- Federal: None  
- State: None  
**Rare Plant Rank:**  
- State: None  
- Other Lists:  
**CNDDB Element Ranks:**  
- Global: G2  
- State: S2  
**General Habitat:**  
VERNAL POOLS IN THE CENTRAL VALLEY.  
**Micro Habitat:**  

### Last Date Observed:
2011-02-XX  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Excellent  
**Trend:** Unknown  
**Presence:** Presumed Extant  
**Location:**  
ABOUT 0.2 MILE WEST OF EAGLES NEST ROAD AND SOUTH OF JACKSON ROAD, 1.2 MILES SOUTH OF MATHER REGIONAL PARK.  
**Detailed Location:**  
**Ecological:**  
2000: A SHALLOW POOL IN NON-NATIVE GRASSLAND WITH VERNAL POOLS. 2008 & 2011: VERNAL POOLS IN ANNUAL GRASSLAND ON GENTLY ROLLING TOPOGRAPHY; AREA PROTECTED AS A PRESERVE.  
**Threats:**  
General:  
SEVERAL FOUND IN 1 POOL DURING SURVEYS ON 24 FEB AND 15 MAR 2000. DETECTED IN HIGH ABUNDANCE IN 1 POOL, 18 FEB 2008; SPECIMENS COLLECTED FOR USFWS. DETECTED IN HIGH ABUNDANCE IN 1 POOL, FEB 2011.  
**PLSS:**  
- T08N, R06E, Sec. 36 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 99  
**UTM:**  
- Zone-10 N4263415 E650935  
**Latitude/Longitude:** 38.50633 / -121.26894  
**Elevation (feet):** 125  
**County Summary:**  
Sacramento  
**Quad Summary:**  
Elk Grove (3812143), Carmichael (3812153)  
**Sources:**  
- MUT00F0009  MUTH, D. - FIELD SURVEY FORM FOR BRANCHINECTA MESOVALLENSIS (MIDVALLEY FAIRY SHRIMP) 2000-03-15  
- WIT08F0006  WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & BRANCHINECTA MESOVALLENSIS & LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 2008-02-18  
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 46082
EO Index: 46082
Key Quad: Florin (3812144)
Element Code: ICBRA03150
Occurrence Number: 18
Occurrence Last Updated: 2014-07-21

Scientific Name: Branchinecta mesovallensis
Common Name: midvalley fairy shrimp

Listing Status:
- Federal: None
- State: None

CNDDB Element Ranks:
- Global: G2
- State: S2

General Habitat:
VERNAL POOLS IN THE CENTRAL VALLEY.

Micro Habitat:

Last Date Observed: 2007-03-08
Last Survey Date: 2007-03-08
Owner/Manager: PVT
Presence: Presumed Extant

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:

Threats:
THREATENED BY DEVELOPMENT.

General:
MORE THAN 100 FOUND IN VERNAL POOL #5, 11 MAR 2001. 100S OBSERVED ON 25 JAN 2006. 100S OBSERVED ON 8 MAR 2007.

PLSS: T07N, R05E, Sec. 25 (M)
Accuracy: specific area
Area (acres): 8

UTM: Zone-10 N4254814 E640785
Latitude/Longitude: 38.43050 / -121.38704
Elevation (feet): 30

County Summary: Sacramento
Quad Summary: Florin (3812144)

Sources:
BAL06F0003 BALLARD, A. & S. ROPER - FIELD SURVEY FORM FOR BRANCHINECTA MESOVALLENSIS 2006-01-25
BAL07F0005 BALLARD, A. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA MESOVALLENSIS 2007-03-08
ECO01R0001 ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA FOR SHELDON ESTATES II 2001-07-25
RAM01F0004 RAMONES, S. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR BRANCHINECTA MESOVALLENSIS 2001-03-11
Sources:


MUT91S0002  MUTH, D. - USNM #1084032, COLLECTED "5.0 MILES SOUTH OF SACRAMENTO ALONG I-5." 1991-03-13

SUG95R0002  SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1995-96. 1996-XX-XX

SUG96R0001  SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED BRANCHIOPODS CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933. 1996-XX-XX


SUG97R0002  SUGNET & ASSOCIATES - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA AT THE ELLIOTT RANCH MITIGATION SITE WATERFOWL STUDY AREA, SACRAMENTO COUNTY, CALIFORNIA. 1997-05-03

SUG98R0003  SUGNET & ASSOCIATES - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA AT THE ELLIOTT RANCH MITIGATION SITE WATERFOWL STUDY AREA, SACRAMENTO COUNTY, CALIFORNIA. 1998-10-08
**Scientific Name:** Branchinecta mesovallensis  
**Common Name:** midvalley fairy shrimp

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G2  
**State:** S2

**General Habitat:** VERNAL POOLS IN THE CENTRAL VALLEY.

**Last Date Observed:** 1991-03-13  
**Occurrence Type:** Natural/Native occurrence

**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.

**Threats:**  
DEVELOPMENT.

**General:**  
10 COLLECTED ON 13 MAR 1991 (BELK #1021, USNM #1144062).

**PLSS:** T07N, R05E, Sec. 32 (M)  
**Accuracy:** 1/10 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4252377 E635652  
**Latitude/Longitude:** 38.40934 / -121.44630  
**Elevation (feet):** 10

**County Summary:**  
Sacramento  
Florin (3812144)

**Sources:**


MUT91S0003 MUT, D. - USNM #1144062, COLLECTED "4.0 MILES SOUTH OF SACRAMENTO, 2 MILES EAST OF INTERSTATE 5." 1991-03-13

ROG01M0001 ROGERS, D. (ECOANALYSTS, INC.) - MAPS WITH LOCATION INFORMATION FOR BRANCHINECTA MESOVALLENSIS. DATES FOR LOCATIONS UNKNOWN. 2001-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>Occurrence Number:</td>
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**Scientific Name:** *Branchinecta mesovallensis*

**Common Name:** midvalley fairy shrimp

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
VERNAL POOLS IN THE CENTRAL VALLEY.

**Micro Habitat:**

**Last Date Observed:** 1991-03-28

**Last Survey Date:** 1991-03-28

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
NE OF JACKSON RD AT EXCELSIOR RD AND S OF SACRAMENTO RACEWAY PARK, BOUT 2-2.5 MILES S OF MATHER AIRPORT, RANCHO CORDOVA.

**Detailed Location:**
SOME MAPPED LOCATION INFORMATION FROM D. ROGERS BASED ON VARIOUS SOURCES.

**Ecological:**
VERNAL POOL COMPLEX IN GRASSLAND.

**Threats:**

**General:**
3 COLLECTED 1 APR 1989 (BELK #895, USNM #1144020). 10 COLLECTED MAR 1991 (BELK #1006 & 1010-1013; USNM #1144050, 1144054-1144057). UNKNOWN # OBSERVED/COLLECTED AT SITES #001, 002 & 027 ON UNKNOWN DATE (D. ROGERS); INFO FROM VARIOUS SOURCES.

**PLSS:** T08N, R06E, Sec. 26 (M)
**Accuracy:** nonspecific area
**Area (acres):** 234

**UTM:** Zone-10 N4264954 E649000
**Latitude/Longitude:** 38.52052 / -121.29081
**Elevation (feet):** 100

**County Summary:** Sacramento

**Quad Summary:** Carmichael (3812153)

**Sources:**
- ANONYMOUS - USNM #1144020, COLLECTED FROM "VERNAL POOLS SOUTH OF MATHER AIR FORCE BASE." 1989-04-01
- HUBER, A. - USNM #1144050, COLLECTED FROM "VERNAL POOL GRASSLAND JUST SOUTH OF MATHER AIR FORCE BASE." 1991-03-27
- HUBER, A. - USNM #1144054 & 1144055, COLLECTED AT "GRANITE I AREA SOUTH OF MATHER AIR FORCE BASE." 1991-03-28
- HUBER, A. - USNM #1144056, COLLECTED SOUTH OF MATHER AIR FORCE BASE. 1991-03-14
- HUBER, A. - USNM #1144057, COLLECTED FROM "GRANITE AREA SOUTH OF MATHER AIR FORCE BASE." 1991-03-28
- ROGERS, D. (ECOANALYSTS, INC.) - MAPS WITH LOCATION INFORMATION FOR BRANCHINECTA MESOVALLENSIS. DATES FOR LOCATIONS UNKNOWN. 2001-XX-XX
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**Scientific Name:** *Branchinecta mesovallensis*  
**Common Name:** midvalley fairy shrimp

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G2  
**State:** S2

**General Habitat:**  
VERNAL POOLS IN THE CENTRAL VALLEY.

**Micro Habitat:**

**Last Date Observed:** 1991-03-19

**Last Survey Date:** 1991-03-19

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**  
JUST NW OF CALVINE ROAD AT BRADSHAW ROAD, ELK GROVE.

**Detailed Location:**  
SITE NOTED AS BELMONT ESTATES (OGDEN RANCH), JUST SOUTH OF BRADSHAW CHRISTIAN SCHOOL (DEVELOPED ABOUT 1998) AND 0.5 MILES EAST OF SHELDON HIGH SCHOOL (DEVELOPED MID 1990S).

**Ecological:**  
VERNAL POOLS. SITE APPEARS TO BE REGULARLY DISCED IN AERIALS FROM 1993-2014. ADDITIONAL SITES NEARBY MAY HARBOR REFUGE.

**Threats:**

**General:**  
2 COLLECTED 19 MAR 1991 BY BRENT HELM (BELK #1014, USNM #1084031). UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #003 (D. ROGERS) ON AN UNKNOWN DATE; ROGERS’ LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.

**PLSS:** T07N, R06E, Sec. 17 (M)  
**UTM:** Zone-10 N4257435 E645221  
**Accuracy:** 1/10 mile  
**Latitude/Longitude:** 38.45341 / -121.33570  
**Area (acres):** 0  
**Elevation (feet):** 60

**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Quad Summary:**

**Sources:**


HEL91S0002 HELM, B. - USNM #1084031, COLLECTED FROM "BELMONT ESTATES (OGDEN RANCH) VERNAL POOL, NORTHWEST OF INTERSECTION OF BRADSHAW ROAD AND CALVINE ROAD." 1991-03-19

ROG01M0001 ROGERS, D. (ECOANALYSTS, INC.) - MAPS WITH LOCATION INFORMATION FOR BRANCHINECTA MESOVALLENSIS. DATES FOR LOCATIONS UNKNOWN. 2001-XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** Branchinecta mesovallensis  
**Common Name:** midvalley fairy shrimp

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
VERNAL POOLS IN THE CENTRAL VALLEY.

**Last Date Observed:** XXXX-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** XXXX-XX-XX  
**Occurrence Rank:** None

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Extirpated  
**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.

**Threats:**

**General:**  
UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #015. DATE OF COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.

**PLSS:** T07N, R05E, Sec. 32 (M)  
**Accuracy:** 1/10 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4252358 E634611  
**Latitude/Longitude:** 38.40933 / -121.45822  
**Elevation (feet):** 20

**County Summary:**  
Sacramento  
**Quad Summary:**  
Florin (3812144)

**Sources:**
ROG01M0001 ROGERS, D. (ECOANALYSTS, INC.) - MAPS WITH LOCATION INFORMATION FOR BRANCHINECTA MESOVALLENSIS. DATES FOR LOCATIONS UNKNOWN. 2001-XX-XX
### Map Index Number: 48349
### Key Quad: Florin (3812144)
### Occurrence Number: 41
### EO Index: 48349
### Element Code: ICBRA03150
### Occurrence Last Updated: 2002-07-24

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<th>Scientific Name: Branchinecta mesovallensis</th>
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**General Habitat:**
VERNAL POOLS IN THE CENTRAL VALLEY.

**Micro Habitat:**

**Last Date Observed:** XXXX-XX-XX

**Last Survey Date:** XXXX-XX-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**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:**

**Threats:**

**General:**
UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #005. DATE OF COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.

**PLSS:** T07N, R05E, Sec. 29 (M)

**Accuracy:** 1/10 mile

**Area (acres):** 0

**UTM:** Zone-10 N4254026 E635629

**Latitude/Longitude:** 38.42421 / -121.44625

**Elevation (feet):** 20

**County Summary:**
Sacramento

**Quad Summary:**
Florin (3812144)

**Sources:**
- ROG01M0001 ROGERS, D. (ECOANALYSTS, INC.) - MAPS WITH LOCATION INFORMATION FOR BRANCHINECTA MESOVALLENSIS. DATES FOR LOCATIONS UNKNOWN. 2001-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Branchinecta mesovallensis*  
**Common Name:** midvalley fairy shrimp

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
VERNAL POOLS IN THE CENTRAL VALLEY.

**Last Date Observed:** XXXX-XX-XX  
**Last Survey Date:** XXXX-XX-XX  
**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant  
**Location:**  
SSE OF MATHER REGIONAL PARK, 0.3 MILE NORTH OF KIEFER BLVD AND 0.25 MILE WEST OF EAGLES NEST RD.

**Detailed Location:**

**Ecological:**  
**Threats:**

**General:**  
UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #017. DATE OF OBSERVATION/COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES. ONE COLLECTION BY P. BALFOUR SAYS ONLY "MATHER AIR FORCE BASE."

**PLSS:** T08N, R06E, Sec. 24 (M)  
**Accuracy:** 1/10 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4266418 E651162  
**Latitude/Longitude:** 38.53334 / -121.26570  
**Elevation (feet):** 140

**County Summary:**

| Sacramento | Carmichael (3812153) |

**Sources:**

- **ROG01M0001**  
  ROGERS, D. (ECOANALYSTS, INC.) - MAPS WITH LOCATION INFORMATION FOR BRANCHINECTA MESOVALLENSIS. DATES FOR LOCATIONS UNKNOWN, 2001-XX-XX

- **ROG04U0002**  
  ROGERS, D. - EMAIL WITH LOCALITY RECORDS FOR LEPIDURUS PACKARDI, BRANCHINECTA CONSERVATIO, B. LONGIANTENNA, B. LYNCHI, B. MESOVALLENSIS, B. SANDEGONENSIS AND STREPTOCEPHALUS WOOTTONI 2004-10-08
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<td>55</td>
<td>Occurrence Last Updated:</td>
<td>2014-12-15</td>
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**Scientific Name:** Branchinecta mesovallensis  
**Common Name:** midvalley fairy shrimp

**Listing Status:**  
- Federal: None  
- State: None

**CNDDDB Element Ranks:**  
- Global: G2  
- State: S2

**General Habitat:** VERNAL POOLS IN THE CENTRAL VALLEY.

**Micro Habitat:**

- [ ]

**Last Date Observed:** 2005-01-21  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2005-01-21  
**Occurrence Rank:** Fair

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:**
SW OF JACKSON ROAD AT FOLSOM SOUTH CANAL/SUNRISE BLVD, & E OF EAGLES NEST ROAD, ABOUT 4.5 MILES SE OF MATHER AIRPORT.

**Detailed Location:**
TRIANGLE ROCK GRECH PROPERTY.

**Ecological:**
HARDPAN VERNAL POOLS AND SEASONAL WETLANDS WITHIN NON-NATIVE ANNUAL GRASSLAND. FROM AERIALS, MINING BEGAN AT THE SITE AROUND 1998 AND EXPANDED BY 2005 AND AGAIN BY 2009, THOUGH IT APPEARS SOME POOLS PRESERVED NEAR LAGUNA CREEK.

**Threats:**
SURFACING MINING HAS VISIBLY MODIFIED A LARGE AREA; PARTS OF SITE ARE LIKELY EXTINGUISHED, BUT SOME PROBABLY PRESERVED.

**General:**
SPECIES OBSERVED IN UNKNOWN NUMBER OF 80 SAMPLED POOLS DURING FEB - MAY 1995. DETECTED IN UP TO 21 OF 31 POOLS, 21 JAN 2005.

**PLSS:** T08N, R07E, Sec. 31 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 177

**UTM:** Zone-10 N4262928 E652750  
**Latitude/Longitude:** 38.50163 / -121.24825  
**Elevation (feet):** 110

**County Summary:** Sacramento  
**Quad Summary:** Sloughhouse (3812142), Elk Grove (3812143), Buffalo Creek (3812152), Carmichael (3812153)

**Sources:**
- LSA06R0001 LSA ASSOCIATES, INC. - 2005 ANNUAL REPORT TO THE U.S. FISH AND WILDLIFE SERVICE FOR SECTION 10 (A) (R) (A) PERMIT NUMBER TE-797234-6 ISSUED TO LSA ASSOCIATES, INC. 2006-01-31
- SUG95R0001 SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
- SUG95R0002 SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1994-95. 1995-10-30
Map Index Number: 32447
EO Index: 51363
Key Quad: Carmichael (3812153)
Element Code: ICBRA03150
Occurrence Number: 56
Occurrence Last Updated: 2014-11-26

Scientific Name: Branchinecta mesovallensis
Common Name: midvalley fairy shrimp

Listing Status:
Federal: None
State: None

CNDDB Element Ranks:
Global: G2
State: S2

General Habitat: VERNAL POOLS IN THE CENTRAL VALLEY.
Micro Habitat:

Last Date Observed: 1995-02-XX
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1995-02-XX
Occurrence Rank: Unknown
Trend: Unknown

Owner/Manager: PVT-GRANITE CONSTRUCTION CO
Presence: Presumed Extant

Location:
1.3 KM W OF KIEFER BLVD AND MATHER PARKWAY, SOUTH OF FORMER MATHER AFB.

Detailed Location:

Ecological:
HABITAT CONSISTS OF HARDPAN VERNAL POOLS WITHIN A NON-NATIVE GRASSLAND.

Threats:
General:
4 COLLECTED FROM VICINITY ON 3 MAR 1993 (BELK #1298, USNM #1084043). SPECIES OBSERVED IN UNKNOWN NUMBER OF 10 SAMPLED POOLS BETWEEN THIS SITE AND A SITE TO THE NE (OCC #57), FEB 1995.

PLSS: T08N, R06E, Sec. 22 (M)
Accuracy: specific area
Area (acres): 5

UTM: Zone-10 N4266606 E647513
Latitude/Longitude: 38.53565 / -121.30751
Elevation (feet): 70

County Summary:
Carmichael (3812153)

County Summary:
Sacramento

SOURCES:
BALFOUR, P. - USNM #1084043, COLLECTED "JUST SOUTH OF KIEFER ROAD, 1 MILE WEST OF EXCELSIOR ROAD." 1993-03-03
SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1994-95. 1995-10-30
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 32455
EO Index: 51364
Key Quad: Carmichael (3812153)
Element Code: ICBRA03150
Occurrence Number: 57
Occurrence Last Updated: 2003-05-21

Scientific Name: Branchinecta mesovallensis
Common Name: midvalley fairy shrimp

Listing Status: Federal: None
State: None

CNDDDB Element Ranks: Global: G2
State: S2

General Habitat: VERNAL POOLS IN THE CENTRAL VALLEY.
Micro Habitat: 

Last Date Observed: 1995-02-XX
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1995-02-XX
Occurrence Rank: Unknown

Owner/Manager: PVT-GRANITE CONSTRUCTION CO
Trend: Unknown

Presence: Presumed Extant

Location:
ALONG NORTH EDGE OF KIEFER BLVD, 0.7 KM WNW OF KIEFER BLVD AND MATHER PARKWAY.

Detailed Location:
GRANITE-TEICHERT PILOT PROJECT SITE (PART).

Ecological:
HABITAT CONSISTS OF HARDPAN VERNAL POOLS WITHIN A NON-NATIVE GRASSLAND.

Threats:
General:


PLSS: T08N, R06E, Sec. 22 (M)
Accuracy: specific area
Area (acres): 2

UTM: Zone-10 N4266913 E648056
Latitude/Longitude: 38.53832 / -121.30122
Elevation (feet): 70

County Summary: Sacramento
Quad Summary: Carmichael (3812153)

Sources:
SUG95R0001 SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
SUG95R0002 SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1994-95. 1995-10-30
<table>
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<tr>
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<th>Branchinecta mesovallensis</th>
<th>Common Name:</th>
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<td>Listing Status:</td>
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<td>Rare Plant Rank:</td>
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<td>Global: G2</td>
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<td>General Habitat:</td>
<td>VERNAL POOLS IN THE CENTRAL VALLEY.</td>
<td>Micro Habitat:</td>
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<td>Last Date Observed:</td>
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<td>Unknown</td>
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<td>Owner/Manager:</td>
<td>PVT</td>
<td>Trend:</td>
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<td>Presence:</td>
<td>Presumed Extant</td>
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<tr>
<td>Location:</td>
<td>NORTHWEST CORNER OF INTERSECTION OF BRUCEVILLE RD AND JACINTO RD.</td>
<td></td>
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<tr>
<td>Detailed Location:</td>
<td></td>
<td></td>
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<tr>
<td>Ecological:</td>
<td>SITE IS COMPOSED OF NON-NATIVE ANNUAL GRASSLAND AND APPEARS TO BE DISKED AT LEAST ANNUALLY FOR WEED CONTROL AND FIRE PREVENTION.</td>
<td></td>
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<tr>
<td>Threats:</td>
<td>POTENTIAL DEVELOPMENT.</td>
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<td>PLSS:</td>
<td>T07N, R05E, Sec. 22 (M)</td>
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<td>UTM:</td>
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<td>County Summary:</td>
<td>Sacramento</td>
<td>Quad Summary:</td>
<td>Florin (3812144)</td>
</tr>
</tbody>
</table>

**Sources:**
ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED CRUSTACEANS FOR BRUCEVILLE ROAD NORTH (SACRAMENTO COUNTY, CALIFORNIA). 2004-06-22
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 94540  
EO Index: 95656
Key Quad: Elk Grove (3812143)  
Element Code: ICBRA03150
Occurrence Number: 111  
Occurrence Last Updated: 2014-11-25

Scientific Name: Branchinecta mesovalennis  
Common Name: midvalley fairy shrimp
Listing Status: Federal: None  
Rare Plant Rank:  
State: None  
Other Lists:  

CNDDDB Element Ranks: Global: G2  
State: S2

General Habitat: VERNAL POOLS IN THE CENTRAL VALLEY.
Micro Habitat:  

Last Date Observed: 2011-02-XX  
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2011-02-XX  
Occurrence Rank: Unknown
Owner/Manager: SACTO VALLEY CONSERVANCY  
Trend: Unknown
Presence: Presumed Extant

Location:
SACRAMENTO PRAIRIE VERNAL POOL PRESERVE; ABOUT 0.7MI SE OF EXCELSIOR & DIERKS RDS, 0.9MI NW OF GRANT LINE & CALVINE RDS.

Detailed Location:
WERRE PARCEL. MAPPED TO LOCATION GIVEN FOR POOL #31.

Ecological:
VERNAL POOLS IN MATRIX OF CALIFORNIA ANNUAL GRASSLAND ON GENTLY ROLLING TOPOGRAPHY. AREA IS PROTECTED AS A PRESERVE.

Threats:
GENERAL:
NOT DETECTED DURING 2005 SURVEYS. POOL DRY DURING 2008 SURVEYS. DETECTED IN LOW ABUNDANCE DURING 2011 SURVEYS.

PLSS: T07N, R06E, Sec. 14 (M)  
Accuracy: 80 meters  
Area (acres): 0
UTM: Zone-10 N4258599 E649516  
Latitude/Longitude: 38.46318 / -121.28625  
Elevation (feet): 90

County Summary:  
Sacramento  
Quad Summary:  
Elk Grove (3812143)

Sources:

Report Printed on Tuesday, September 15, 2015
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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<td>Listing Status:</td>
<td>Federal: None</td>
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<tr>
<td>Occurrence Last Updated:</td>
<td>2014-12-15</td>
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| General Habitat: | VERNAL POOLS IN THE CENTRAL VALLEY. |
| Micro Habitat: | |

| Last Date Observed: | 2011-02-XX |
| Last Survey Date: | 2011-02-XX |
| Owner/Manager: | SACTO VALLEY CONSERVANCY |
| Presence: | Presumed Extant |

| Location: | SACRAMENTO PRAIRIE VERNAL POOL PRESERVE; ON THE E SIDE OF EXCELSIOR RD ABOUT 0.6 MI SSE OF THE GERBER RD INTERSECTION. |
| Detailed Location: | LAGUNA PARCEL ALONG LAGUNA CREEK. MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS #159, 163, 164, & 168. |
| Ecological: | VERNAL POOLS IN MATRIX OF CALIFORNIA ANNUAL GRASSLAND ON GENTLY ROLLING TOPOGRAPHY. AREA IS PROTECTED AS A PRESERVE. |
| Threats: | NOT DETECTED DURING SURVEYS IN 2005 OR 2008; POOLS #163 & 168 DRY DURING 2008 SURVEYS. DETECTED IN HIGH TO VERY HIGH ABUNDANCE DURING 2011 SURVEYS. |

| PLSS: | T07N, R06E, Sec. 11 (M) |
| Accuracy: | specific area |
| Area (acres): | 12 |

| UTM: | Zone-10 N4259704 E648679 |
| Latitude/Longitude: | 38.47327 / -121.29560 |
| Elevation (feet): | 95 |

| County Summary: | Elk Grove (3812143) |

Map Index Number: 94542
Key Quad: Elk Grove (3812143)
Occurrence Number: 113
Scientific Name: Branchinecta mesovallensis
Common Name: midvalley fairy shrimp
Listing Status: Federal: None
State: None
Rare Plant Rank:
Other Lists:
CNDDDB Element Ranks: Global: G2
State: S2
General Habitat:
VERNAL POOLS IN THE CENTRAL VALLEY.
Micro Habitat:

Last Date Observed: 2008-02-01
Last Survey Date: 2008-02-01
Owner/Manager: PVT
Presence: Presumed Extant
Location:
KLOTZ PROPERTY OPEN SPACE PRESERVE, ABOUT 1.0MI NE OF EXCELSIOR & GERBER RDS, 1.3MI NW OF GRANT LINE & EAGLES NEST RDS.
Detailed Location:
MAPPED TO LOCATION GIVEN FOR OCCUPIED POOL #130.
Ecological:
NATURAL VERNAL POOLS ON 320-ACRE PRESERVE TRAVERSED BY LAGUNA CREEK.
Threats:
General:
DETECTED IN 1 OF 21 POOLS SAMPLED ON 1 FEB 2008.

PLSS: T07N, R06E, Sec. 11 (M)
Accuracy: 80 meters
Area (acres): 0
UTM: Zone-10 N4259944 E650033
Latitude/Longitude: 38.47521 / -121.28003
Elevation (feet): 90

County Summary:
Sacramento

Quad Summary:
Elk Grove (3812143)

Sources:
BAR08R0001 BARTLEY, N. (ECORP CONSULTING, INC.) - 90-DAY REPORT OF FINDINGS REGARDING BRANCHIPOD ASSESSMENT SURVEY KLOTZ PROPERTY OPEN SPACE PRESERVE 2008-02-01
Map Index Number: 94549
EO Index: 95665
Key Quad: Elk Grove (3812143)
Element Code: ICBRA03150
Occurrence Number: 114
Occurrence Last Updated: 2014-12-15

Scientific Name: Branchinecta mesovallensis
Common Name: midvalley fairy shrimp

Listing Status: Federal: None
State: None
Rare Plant Rank:
Other Lists:

CNDDB Element Ranks:
Global: G2
State: S2

General Habitat: VERNAL POOLS IN THE CENTRAL VALLEY.

Micro Habitat:

Last Date Observed: 1994-03-03
Occurrence Type: Natural/Native occurrence
Occurrence Last Updated: 2014-12-15

Last Survey Date: 1994-03-03
Occurrence Rank:

Owner/Manager: UNKNOWN
Trend: Unknown

Presence: Possibly Extirpated

Location:
ABOUT 0.6 MILES NE OF VINTAGE PARK DR AT WATERMAN RD AND 1.1 MILES NW OF BRADSHAW ROAD AT CALVINE ROAD, VINEYARD.

Detailed Location:
MAPPED GENERALLY TO GIVEN LOCALITY, "1 MILE NORTH OF CALVINE ROAD, 1/2 MILE WEST OF BRADSHAW ROAD." NOW IN THE VICINITY OF BOTHWELL DRIVE.

Ecological:
AIR PHOTOS SHOW THAT DEVELOPMENT STARTED OCCURRING IN THIS AREA IN 1993 AND BY 2002 HALF OF THE SITE WAS DEVELOPED AS HOUSES. SMALL PARCELS TO THE NORTH APPEAR TO HAVE POSSIBLE SUITABLE HABITAT IN 2014 AERIALS.

Threats:
General:

5 COLLECTED ON 3 MAR 1994 (BELK #1291, USNM #1084037)

PLSS: T07N, R06E, Sec. 17 (M) Accuracy: 1/10 mile Area (acres): 0
UTM: Zone-10 N4258926 E644487 Latitude/Longitude: 38.46696 / -121.34380 Elevation (feet): 75

County Summary: Elk Grove (3812143)
Quad Summary:

Sources:
FIE94S0001 FIELDS - USNM #1084037, COLLECTED "1 MILE NORTH OF CALVINE ROAD, ONE-HALF MILE WEST OF BRADSHAW ROAD.* 1994-03-03
Map Index Number: 94556
Key Quad: Elk Grove (3812143)
Occurrence Number: 115
EO Index: 95672
Element Code: ICBRA03150
Occurrence Last Updated: 2014-11-25

Scientific Name: Branchinecta mesovallensis
Common Name: midvalley fairy shrimp

Listing Status:
Federal: None
State: None

Rare Plant Rank:
Other Lists:

CNDDB Element Ranks:
Global: G2
State: S2

General Habitat:
VERNAL POOLS IN THE CENTRAL VALLEY.

Micro Habitat:

Last Date Observed: 2008-XX-XX
Last Survey Date: 2008-XX-XX
Owner/Manager: PVT
Presence: Presumed Extant

Location:
NEWLAND HANSEN PROPERTY ALONG LAGUNA CREEK, ON THE NORTHWEST CORNER OF SHELDON ROAD AT WATERMAN ROAD, ELK GROVE.

Detailed Location:
MAPPED TO PROPERTY BOUNDARIES; 2004 & 2008 WET SEASON DETECTION LOCATIONS UNKNOWN; CYSTS SUCCESSFULLY CULTURED INTO B. MESOVALLENSIS WERE COLLECTED FROM POOL VP8.

Ecological:
Threats:
General:

PLSS: T07N, R06E, Sec. 20 (M)
Accuracy: nonspecific area
Area (acres): 115

UTM: Zone-10 N4256019 E644213
Latitude/Longitude: 38.44081 / -121.34753
Elevation (feet): 55

County Summary:
Sacramento
Elk Grove (3812143)

SOURCES:
HEL08R0019 HELM, B. & T. WOOD (HELM BIOLOGICAL CONSULTING) - HATCHING OF LARGE BANCHIOPOD CYSTS COLLECTED FROM THE NEWLAND HANSEN PROPERTY 2008-12-02
Map Index Number: 24533  
Key Quad: Florin (3812144)  
Occurrence Number: 27  
EO Index: 1788  
Element Code: ICBRA06010  
Occurrence Last Updated: 2014-07-31

**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

**Listing Status:** Federal: None  
State: None  
**CNDDDB Element Ranks:** Global: G2G3  
State: S2S3

**General Habitat:** SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2013-01-29  
**Last Survey Date:** 2013-01-29  
**Presence:** Presumed Extant  
**Trend:** Unknown

**Location:** ALONG RAILROAD TRACKS FROM JUST E OF SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, S TO DWIGHT RD, S OF SACRAMENTO.


**Ecological:** WEEDY, WATER-FILLED DEPRESSIONS WITHIN RAILROAD ROW; SLIGHTLY TURBID WATER; DOMINANT PLANTS WERE JUNCUS BUFONIUS, PLAGIOBOTHRYS STIPITATUS VAR. MICRANTHUS, GRATIOLA EBRACTEATA, LYTHRUM HYSSOPIFOLIA (1993). LEPIDURUS PACKARDI ALSO FOUND.

**Threats:** MOSQUITO ABATEMENT, VEGETATION CONTROL (1993); UTILITY & RAILROAD MAINTENANCE; (1993/2013), WEEDS (2013).

**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.

**PLSS:** T07N, R05E, Sec. 20 (M)  
**UTM:** Zone-10 N4256132 E634483  
**Accuracy:** specific area  
**Latitude/Longitude:** 38.44335 / -121.45897  
**Area (acres):** 49  
**Elevation (feet):** 15

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
KOF92U0001 KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINCTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX  
LEA93F0010 LEACH, S. - FIELD SURVEY FORM FOR LEPIDURUS Packardi 1993-02-23  
PIM13F0003 PIMENTEL, E. (AECOM) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2013-01-29  
WAL95S0017 WALKER, R. & R. KOFORD - CASIZ #104241, COLLECTED "EAST OF SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT... 400 FEET NORTH OF PLANT ENTRANCE." 1995-01-06  
YOR93F0007 YORK, R. & M. SAZAKI - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 1993-02-11
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 31558  
**EO Index:** 22317  
**Key Quad:** Sacramento East (3812154)  
**Occurrence Number:** 49  
**Occurrence Last Updated:** 1995-10-02  
**Element Code:** ICBRA06010

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**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

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**Listing Status:**  
- **Federal:** None  
- **State:** None

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**CNDDB Element Ranks:**  
- **Global:** G2G3  
- **State:** S2S3

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**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

---

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

---

**Last Date Observed:** 1995-02-14  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Fair  
**Last Survey Date:** 1995-04-21  
**Trend:** Unknown

---

**Owner/Manager:** DOD-BT COLLINS RESERVE TR CNTR  
**Presence:** Presumed Extant

---

**Location:**  
FORMER SACRAMENTO ARMY DEPOT, B.T. COLLINS ARMY RESERVE TRAINING CENTER.

---

**Detailed Location:**  
FOUND ONLY IN SEASONAL WETLAND INSIDE THE OVAL OF AND ADJACENT TO THE RUNNING TRACK. PROBABLY EXTINGUISHED; SEE EO FOR B. LYNCHI AT SAME LOCATION (EONDX 6893).

---

**Ecological:**  
53 PONDED WATER AREAS SAMPLED EVERY 2 WEEKS BETWEEN 12/19/94 & 4/21/95. AREA SURVEYED INCLUDED SEASONAL WETLANDS, SHALLOW SWALES, TIRE TRACKS, PONDED AREAS IN RUNNING TRACK & BASEBALL DIAMOND, & FIELD & ROADSIDE DRAINAGE DITCHES.

---

**Threats:**  
**General:**
LINDERIELLA OCCIDENTALIS WAS FOUND IN 6 OF THE 53 SITES FROM 1/31/95 TO 2/14/95; 31 ADULTS COLLECTED AND DEPOSITED IN CAS. 3 OF THE 6 POOLS ALSO HAD BRACHINECTA LYNCHI; MORE POOL INFO IN REPORT.

---

**PLSS:** T08N, R05E, Sec. 26 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 5

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**UTM:** Zone-10 N4263773 E639762  
**Latitude/Longitude:** 38.51137 / -121.39697  
**Elevation (feet):** 40

---

**County Summary:**  
Sacramento  
Sacramento East (3812154)

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**Sources:**

- CRO95F0003 CROWE, D. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 1995-01-31
- FOS95R0001 FOSTER WHEELER ENVIRONMENTAL CORP. - B.T. COLLINS ARMY RESERVE TRAINING CENTER 1994-95 VERNAL POOL CRUSTACEAN PRESENCE/ABSENCE SURVEY 60-DAY REPORT 1995-06-XX
### California Natural Diversity Database

#### Occurrence Report

**California Department of Fish and Wildlife**

**Map Index Number:** 32459

**Key Quad:** Carmichael (3812153)

**Occurrence Number:** 50

**EO Index:** 6484

**Element Code:** ICBRA06010

**Occurrence Last Updated:** 1997-03-27

### Scientific Name

**Linderiella occidentalis**

### Common Name

California linderiella

### Listing Status

**Federal:** None

**State:** None

### Rare Plant Rank

**Other Lists:** IUCN_NT-Near Threatened

### CNDDDB Element Ranks

**Global:** G2G3

**State:** S2S3

### General Habitat

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

### Micro Habitat

WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

### Last Date Observed

1996-03-21

### Last Survey Date

1996-03-21

### Owner/Manager

PVT

### Presence

Presumed Extant

### Location

SW OF MATHER AFB; BETWEEN KIEFER BLVD, BRADSHAW ROAD, JACKSON ROAD, AND EXCELSIOR ROAD.

### Detailed Location


### Ecological

CONSTRUCTED AND NATURAL VERNAL POOLS WITHIN ANNUAL GRASSLAND.

### Threats

GRAZING; GRAVEL PITS IN NORTHERN PORTIONS OF SITE; PROPOSED AGGREGATE MINING.

### General


### PLSS

T08N, R06E, Sec. 21 (M)

### Accuracy

nonspecific area

### Area (acres)

1,493

### UTM

Zone-10 N4266114 E646979

### Latitude/Longitude

38.53130 / -121.31374

### Elevation (feet)

70

### County Summary

Sacramento

### Carmichael (3812153)

### Quad Summary

### Sources

- HUBER, A. (BIOSYSTEMS ANALYSIS, INC.) - FIELD SURVEY FORMS FOR LINDERIELLA OCCIDENTALIS (FEB-MAR) 1991-03-XX
- KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
- SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
- SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED BRANCHIOPODS CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933. 1996-XX-XX
### Map Index Number: 95401  
### Key Quad: Rio Linda (3812164)  
### Occurrence Number: 57

### Scientific Name: *Linderiella occidentalis*  
### Common Name: California linderiella

### Listing Status:  
- **Federal:** None  
- **State:** None

### Rare Plant Rank:  
- **Other Lists:** IUCN NT-Near Threatened

### CNDDB Element Ranks:  
- **Global:** G2G3  
- **State:** S2S3

### General Habitat:  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

### Micro Habitat:  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

### Last Date Observed: 1995-03-16  
### Last Survey Date: 1995-03-16  
### Owner/Manager: DOD-MCCLELLAN AFB  
### Presence: Presumed Extant

### Location:  
MCCLELLAN AFB; FROM ABOUT 0.1 TO 0.5 MILES SW OF ASCOT AVE AT PATROL RD.

### Detailed Location:  
MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS, #111, M052, M073, M076, M95A (=MCC95A), M95B (=MCC95B), & M131.

### Ecological:  
VERNAL POOLS WITH ALGAE, GRASS, OR MUD BOTTOMS, 2 TO 40 INCHES IN MAXIMUM DEPTH; IN ANNUAL GRASSLAND. OSTRACODS, COPEPODS, TREE FROG TADPOLES ALSO FOUND; B. LYNCHI CO-OCCURRED IN 1 POOL.

### Threats:  
EXPANSION OF BASE FACILITIES; MODIFICATION OF WATERSHED; AIRCRAFT REPAIR; LIGHT INDUSTRIAL; RESIDENTIAL; COMMERCIAL.

### General:  
FOUND IN 7 POOLS DURING SURVEYS FEB-MAR 1995.

### PLSS:  
- T09N, R05E, Sec. 03 (M)  
### UTM:  
- Zone-10 N4280822 E637489  
### Accuracy: specific area  
### Latitude/Longitude: 38.66531 / -121.41967  
### Area (acres): 25  
### Elevation (feet): 50

### County Summary:  
Sacramento  
### Quad Summary:  
Rio Linda (3812164)

### Sources:  
- LAC95F0001 LACY, T. (WESCO-RMI) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 1995-03-15  
- LAC95R0001 LACY, T. (WESCO-RMI) - 1995 VERNAL POOL CRUSTACEAN SURVEY RESULTS - MCCLELLAN AFB AND LINCOLN & DAVIS COMMUNICATIONS FACILITIES; CONSERVATION PLAN INCLUDED. 1995-XX-XX
**Map Index Number:** 32513  
**EO Index:** 2085  
**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 62  
**Occurrence Code:** ICRA06010  
**Occurrence Last Updated:** 1995-11-21

**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

**Listing Status:**  
- **Federal:** None  
- **State:** None

**Rare Plant Rank:** None  
**Other Lists:** IUCN_NT-Near Threatened

** CNDDB Element Ranks:**  
- **Global:** G2G3  
- **State:** S2S3

**General Habitat:** SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1995-03-16  
**Last Survey Date:** 1995-03-16  
**Owner/Manager:** DOD-MCCLELLAN AFB  
**Presence:** Presumed Extant

**Location:** MCCLELLAN AFB; CREEKS AREA; 0.8 KM NE OF MAIN AVENUE AND RALEY BLVD.

**Detailed Location:**  
**Ecological:**  
3 VERNAL POOLS WITH ALGAE OR GRASS BOTTOMS IN ANNUAL GRASSLAND. POOL SIZES: 25 FT X 10 FT, 50 X 15 FT & 150 X 50 FT WITH MAX DEPTHS OF 4, 6 & 12 INCHES. OSTRACODS, COPEPODS, FLATWORMS, BEETLES, & INSECT LARVAE ALSO FOUND IN POOLS.

**Threats:** DEVELOPMENT; MILITARY USES; COMMERCIAL AND LIGHT INDUSTRIAL; RESIDENTIAL.

**General:**  

**PLSS:** T09N, R05E, Sec. 19 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 4  
**UTM:** Zone-10 N4280141 E637294  
**Latitude/Longitude:** 38.65921 / -121.42205  
**Elevation (feet):** 50

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
LAC95R0001 - LACY, T. (WESCO-RMI) - 1995 VERNAL POOL CRUSTACEAN SURVEY RESULTS - MCCLELLAN AFB AND LINCOLN & DAVIS COMMUNICATIONS FACILITIES; CONSERVATION PLAN INCLUDED. 1995-XX-XX
Map Index Number: 32518
Key Quad: Citrus Heights (3812163)
Occurrence Number: 64
EO Index: 2094
Element Code: ICBRA06010
Occurrence Last Updated: 2009-05-15

Scientific Name: Linderiella occidentalis
Common Name: California linderiella

Listing Status:
Federal: None
State: None

Rare Plant Rank:
Other Lists: IUCN_NT-Near Threatened

CNDDDB Element Ranks:
Global: G2G3
State: S2S3

General Habitat: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARPAN OR IN SANDSTONE DEPRESSIONS.

Micro Habitat: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Last Date Observed: 1996-03-06
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1996-05-27
Occurrence Rank: Unknown

Owner/Manager: PVT-STOCK RANCH
Trend: Unknown

Presence: Presumed Extant

Location:
STOCK RANCH; 0.8 KM SW OF AUBURN ROAD X SYLVAN ROAD.

Detailed Location:
1995-18 SEASONAL WETLAND/VERNAL POOL HABITATS SURVEYED; POOLS RANGED IN SIZE FROM 65 TO 9,920 SQ. FT; LINDERIELLA WAS FOUND IN SW-4. 1996-9 SEASONAL WETLAND/VERNAL POOL HABITAT SURVEYED; LINDERIELLA ONLY OBSERVED IN SW-4.

Ecological:
SEASONAL WETLAND/VERNAL POOL HABITAT IN NON-NATIVE GRASSLAND, ORCHARDS, OAK WOODLAND & PORTIONS OF SAN JUAN & ARCADE CREEKS W/ ASSOCIATED DRAINAGES; PLANT SPECIES: AVENA SP., BROMUS RIGIDUS, B. MOLLIS, PERENNIAL RYE, ERODIUM & VICIA SPP.

Threats:
PREDATION BY HYLA TADPOLES; COMPETITION PRESSURE FROM AQUATIC INSECTS; HEAVY VEHICLE USE ON SITE.

General:
POOL #SW-4: LINDERIELLA OBSERVED IN 1995 (1/13, 1/27 & 2/9) AND 1996 (2/7, 2/21 & 3/6); SEVERAL GENERATIONS OF SHRIMP OBSERVED, WITH LACK OF ADULTS IN LAST GENERATION, POSSIBLY DUE TO PREDATION FROM HYLA TADPOLES.

PLSS: T10N, R06E, Sec. 26 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4283651 E648098
Latitude/Longitude: 38.68909 / -121.29718
Elevation (feet): 125

County Summary: Citrus Heights (3812163)

Sources:
GIB95R0002 GIBSON & SKORDAL, WETLAND CONSULTANTS - VERNAL POOL CRUSTACEAN SURVEY - STOCK RANCH (CALIFORNIA LINDERIELLA). 1995-07-XX
GIB96R0001 GIBSON & SKORDAL, WETLAND CONSULTANTS - FINAL VERNAL POOL CRUSTACEAN SURVEY REPORT - STOCK RANCH, SACRAMENTO COUNTY. 1996-06-17
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<tr>
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**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

**Listing Status:**  
- **Federal:** None  
- **State:** None

**Rare Plant Rank:**  
- **State:** S2S3  
- **Global:** G2G3

**CNDDB Element Ranks:**  
- **Global:** G2G3  
- **State:** S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1993-02-12  
**Last Survey Date:** 1993-02-12  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
600 FEET WEST OF EAST LEVEE ROAD; IMMEDIATELY SOUTH OF 2 TRANSMISSION-LINE TOWERS; 1.0 MI N OF ELKHORN BLVD.

**Detailed Location:**  
Ecological:  
NORTHERN HARDPAN VERNAL POOL; DOMINANT PLANTS: *PLAGIOBOTHRYS STIPITATUS VAR. MIRCANTHUS*; *P. GRENEI*; *PSILOCARPHUS OREGANUS*; *P. BREVISSIMUS*; *GRATIOLA EBRACTEATA*; *LYTHRUM HYSSOPIFOLIA*; *POLYGONUM AVICULARE* AND *DOWNINGIA PUSILLA*.

**Threats:**  
ADJACENT LANDOWNERS WANT LEVEL LAND FOR AGRICULTURE AND SELL SURFACE MATERIAL FOR SACRAMENTO METRO AIRPORT DEVELOPMENT.

**General:**  
>500 ADULTS OBSERVED, 1 COLLECTED FOR PERSONAL COLLECTION.

**PLSS:** T10N, R04E, Sec. 25 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4284528 E631489  
**Latitude/Longitude:** 38.69961 / -121.48781  
**Elevation (feet):** 30

**County Summary:**  
Sacramento  
Rio Linda (3812164)

**Sources:**  
LEA93F0008  
LEACH, S. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 1993-02-12
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 26043
EO Index: 2091
Key Quad: Rio Linda (3812164)
Element Code: ICBRA06010
Occurrence Number: 73
Occurrence Last Updated: 1995-10-02

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| General Habitat: | SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS. |
| Micro Habitat:   | WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS. |

| Last Date Observed: | 1993-02-12 |
| Last Survey Date:   | 1993-02-12 |
| Presence:            | Presumed Extant |
| Location:            | ON SOUTH SIDE OF GRAVEL ROAD; 220 FT W OF EAST LEVEE ROAD; 0.6 MI S OF ELVERTA ROAD X EAST LEVEE ROAD. |

| Detailed Location: |
| Ecological: |
| NORTHERN HARDPAN VERNAL POOL ON SAN JOAQUIN SERIES SOIL; DOMINANT PLANTS: PLAGIOBOTHRYS, ERYNGIUM, GRATIOLA, LASTHERIA, RANUNCULUS, AND LIMNANTHUS. WATER WAS 6-10 INCHES DEEP IN FEBRUARY 1993. SITE CONTAINED WATER UNTIL LATE APRIL 1993. |

| Threats: |
| FARMING ON SITE; POSSIBILITY THAT OWNER WILL GRADE SITE TO FACILITATE IRRIGATION FOR GROWING MORE INTENSIVE CROPS (HAY). |

| General: |
| >500 ADULTS AND JUVENILES OBSERVED; 1 ADULT COLLECTED FOR PERSONAL COLLECTION; THIS POOL HAD MOST DIVERSE COMPOSITION OF ALL POOLS SURVEYED ALONG EAST LEVEE ROAD; RARE PLANT DOWNING PUSILLA OBSERVED. |

PLSS: T10N, R04E, Sec. 24 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4285236 E631603
Latitude/Longitude: 38.70598 / -121.48647
Elevation (feet): 28

County Summary: Sacramento

Sources:
LEA93F0007 LEACH, S. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 1993-02-12
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**General Habitat:**
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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<td>Location:</td>
<td>700 FEET WEST OF EAST LEVEE ROAD X ELKHORN BLVD, ON SOUTH SIDE OF ELKHORN BLVD.</td>
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**Detailed Location:**

**Ecological:**
HEAVILY GRAZED NORTHERN HARDPAN VERNAL POOL; SOIL IS MAPPED AS SAN JOAQUIN SERIES WITH HARDPAN UNDERNEATH; HYDROLOGY IS CONTROLLED BY ~10 ACRE DRAINAGE AREA; PLANTS: RANUNCULUS, PHYLA, LIAEA, AND PLAGIOBOTHRYS.

**Threats:**
GRAZING; POTENTIAL WIDENING OF ELKHORN BLVD OR REMOVAL OF SOIL FOR FILL OR AGRICULTURAL DEVELOPMENT.

**General:**
>200 ADULTS OBSERVED; 1 COLLECTED FOR PERSONAL COLLECTION.

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<td>Quad Summary:</td>
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**Sources:**

LEA93F0006 LEACH, S. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 1993-02-12
Linderiella occidentalis

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS. WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

SEASONALLY INUNDATED DEPRESSION NEXT TO FLOOD CONTROL LEVEE; DOMINATED BY FACULTATIVE UPLAND GRASSES AND HERBS; SOIL MAPPED AS SAN JOAQUIN SERIES UNDERLAIN BY CARBONATE-CEMENTED HARDPAN; HYDROLOGY MAY BE DUE TO FILL FOR EAST LEVEE.

ILLEGAL DUMPING; FUTURE EXPANSION OF EAST LEVEE.

>500 ADULTS AND JUVENILES OBSERVED; 1 ADULT COLLECTED FOR PERSONAL COLLECTION; AGE STRUCTURE 90% ADULTS AND 10% JUVENILES.

PLSS: T10N, R04E, Sec. 36 (M) |
UTM: Zone-10 N4282267 E631710 |
County Summary: Sacramento |
Latitude/Longitude: 38.67921 / -121.48580 |
Accuracy: 80 meters |
Area (acres): 0 |
Elevation (feet): 35

Sources:
LEA93F0005 LEACH, S. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 1993-02-12
### Source
**CRA93F0002**
CRANSTON, P. (U.S. BUREAU OF LAND MANAGEMENT) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1993-02-02

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**Scientific Name:** *Linderiella occidentalis*

- **Common Name:** California linderiella

- **Listing Status:**
  - Federal: None
  - State: None

- **Rare Plant Rank:**
  - Other Lists: IUCN_NT-Near Threatened

- **CNNDDB Element Ranks:**
  - Global: G2G3
  - State: S2S3

- **General Habitat:** SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

- **Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

- **Last Date Observed:** 1993-02-02
- **Last Survey Date:** 1993-02-02
- **Owner/Manager:** BLM
- **Presence:** Presumed Extant

- **Location:** FORMER MATHER AIR FORCE BASE; WESTERN PORTION OF TRIANGLE FORMED BY DOUGLAS RD, SUNRISE BOULEVARD & FOLSOM SOUTH CANAL.

- **Detailed Location:**
  - LAND TO THE NORTH AND EAST IS PRIVATELY-OWNED FOR INDUSTRIAL/BUSINESS; EAST PARCEL IS UNDEVELOPED; THE FORMER MATHER AFB IS TO THE SOUTH AND WEST.

- **Ecological:**
  - GRASSLAND.

- **Threats:** IDENTIFIED FOR EXCHANGE.

- **General:**
  - MANY INDIVIDUALS FROM BOTH SPECIES, LINDERIELLA OCCIDENTALIS AND LEPIDURUS PACKARDI, OBSERVED; UNKNOWN NUMBERS COLLECTED.

- **PLSS:**
  - T08N, R07E, Sec. 07 (M)

- **UTM:**
  - Zone-10 N4269191 E652586

- **County Summary:**
  - Sacramento

- **Quad Summary:**
  - Buffalo Creek (3812152), Carmichael (3812153)

- **Accuracy:**
  - specific area

- **Latitude/Longitude:**
  - 38.55807 / -121.24877

- **Area (acres):** 20

- **Elevation (feet):** 140

---

**Sources:** CRA93F0002 CRANSTON, P. (U.S. BUREAU OF LAND MANAGEMENT) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1993-02-02
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 32443
Key Quad: Sacramento East (3812154)
Occurrence Number: 118
EO Index: 636
Element Code: ICBRA06010
Occurrence Last Updated: 1996-03-06

Scientific Name: Linderiella occidentalis
Common Name: California linderiella
Listing Status: Federal: None
State: None
Rare Plant Rank:
Other Lists: IUCN_NT-Near Threatened

General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Last Date Observed: 1995-03-31
Last Survey Date: 1995-03-31
Owner/Manager: PVT-PIPE TRADES TRUST FUND
Presence: Presumed Extant

Location:
1.2 KM ESE OF ELDER CREEK ROAD AT FLORIN PERKINS ROAD; SE OF THE FORMER SACRAMENTO ARMY DEPOT.
Detailed Location:
ELDER CREEK PROPERTY. LINDERIELLA OCCIDENTALIS WERE FOUND IN 2 OF 90 SAMPLED WETLANDS.
Ecological:
HARDPAN VERNAL POOLS IN ANNUAL GRASSLAND.

Threats:
RURAL AGRICULTURE; URBAN DEVELOPMENT OCCURRING IN VICINITY.

General:
POOLS #46 & 50: 2/21/95: >50 ADULTS OBSERVED. POOL #50: 3/31/95: <50 ADULTS OBSERVED.

Accuracy: nonspecific area
Area (acres): 16

Accuracy: nonspecific area
Area (acres): 40

Accuracy: nonspecific area
Elevation (feet): 38.50564 / -121.37821

County Summary:
Sacramento
Carmichael (3812153), Sacramento East (3812154)

Sources:
SUG95R0001 SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
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<td><strong>Key Quad:</strong> Rio Linda (3812164)</td>
<td><strong>Element Code:</strong> ICBRA06010</td>
<td><strong>Occurrence Number:</strong> 122</td>
<td><strong>Occurrence Last Updated:</strong> 1996-06-18</td>
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**Scientific Name:** *Linderiella occidentalis*

**Listing Status:**
- Federal: None
- State: None

**CNDDB Element Ranks:**
- Global: G2G3
- State: S2S3

**General Habitat:**
SEASONAL POOLS IN UNPLOVED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1992-04-01

**Owner/Manager:** PVT-UNION PACIFIC RR

**Presence:** Presumed Extant

**Location:** ALONG UNION PACIFIC RAILROAD, 0.2 MILES SOUTH OF ELKHORN BLVD, RIO LINDA.

**Detailed Location:**

**PLSS:**
- T10N, R05E, Sec. 31 (M)

**UTM:**
- Zone-10 N4282605 E632253

**Accuracy:** 80 meters

**Latitude/Longitude:** 38.68218 / -121.47949

**Area (acres):** 0

**Elevation (feet):** 40

**County Summary:**
- Sacramento
- Rio Linda (3812164)

**Sources:**
- KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
### Linderiella occidentalis

**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella  
**Listing Status:** Federal: None  
**Rare Plant Rank:** Other Lists: IUCN_NT-Near Threatened  
**CNDDDB Element Ranks:** Global: G2G3  
**State:** S2S3  
**General Habitat:** SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.  
**Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.  
**Last Date Observed:** 1992-04-01  
**Occurrence Type:** Natural/Native occurrence  
**Last Survey Date:** 1992-04-01  
**Occurrence Rank:** Unknown  
**Owner/Manager:** PVT-UNION PACIFIC RR  
**Trend:** Unknown  
**Presence:** Presumed Extant  
**Location:** CORNER OF ELVERTA ROAD AND UNION PACIFIC RAILROAD AT EAST MAIN DRAINAGE CANAL, RIO LINDA.  
**Detailed Location:**  
**Ecological:**  
**Threats:**  
**General:** KO福德 OBSERVED LINDERIELLA DURING SURVEY IN SPRING OF 1992.  
**PLSS:** T10N, R04E, Sec. 13 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0  
**UTM:** Zone-10 N4286193 E631659  
**Latitude/Longitude:** 38.71459 / -121.48564  
**Elevation (feet):** 35  
**County Summary:** Sacramento Rio Linda (3812164)  
**Sources:**  
KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 34791  
EO Index: 12939

**Key Quad:** Sacramento East (3812154)  
Element Code: ICBRA06010

**Occurrence Number:** 124  
Occurrence Last Updated: 1996-08-05

| Scientific Name: | Linderiella occidentalis |
| Listing Status: | Federal: None |
| | State: None |
| CNNDDB Element Ranks: | Global: G2G3 |
| | State: S2S3 |

**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

**General Habitat:** SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1992-04-03  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1992-04-03  
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT-SPRR  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:** RAILROAD DITCH AT 47TH AVENUE (ELDER CREEK RD) & SPTRR, NEAR POWER INN ROAD; NEAR SW CORNER OF SACRAMENTO ARMY DEPOT.

**Detailed Location:** SPTRR IS SOUTHERN PACIFIC TRACTION RAILROAD, WHICH RUNS SE FROM THE CORNER OF 65TH ST AND HIGHWAY 50.

**Ecological:** RAILROAD DITCH.

**General Threats:**

**Planned Land Survey System (PLSS):**

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<td>Sacramento East (3812154)</td>
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**Sources:**

KOFORD, E. (EBASÇO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 95291
Key Quad: Sacramento East (3812154)
Occurrence Number: 125
EO Index: 13153
Element Code: ICBRA06010
Occurrence Last Updated: 2015-02-25

**Scientific Name:** Linderiella occidentalis
**Common Name:** California linderiella

**Listing Status:**
- **Federal:** None
- **State:** None

**Rare Plant Rank:**
- **Global:** G2G3
- **State:** S2S3
- **Other Lists:** IUCN_NT-Near Threatened

**General Habitat:** SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Scientific Name:** Linderiella occidentalis
**Common Name:** California linderiella

**Occurrence Type:** Natural/Native occurrence
**Occurrence Rank:** Unknown
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:** AT RAILROAD TRACKS NEAR FRUITRIDGE ROAD AT POWER INN ROAD; NEAR NORTHWEST CORNER OF SACRAMENTO ARMY DEPOT.

**Detailed Location:**
THE RAILROAD TRACKS ARE PART OF SOUTHERN PACIFIC TRACTION RAILROAD, WHICH RUNS SE FROM CORNER OF 65TH STREET AND HIGHWAY 50.

**Ecological:**
TURBID POOL. IN AERIAL PHOTOS IT APPEARS THAT POOLS FORM ALONG EITHER SIDE OF THE RAILROAD TRACKS FROM FRUITRIDGE SOUTH TO THE MORRISON CREEK CANAL.

**Threats:**
LINDERIELLA OBSERVED BY E.J. KOFORD DURING SURVEY IN SPRING OF 1992; LEPIDURUS PACKARDI ALSO PRESENT.

**PLSS:** T08N, R05E, Sec. 26 (M)
**Accuracy:** 1/10 mile
**Area (acres):** 0

**UTM:** Zone-10 N4265266 E638840
**Latitude/Longitude:** 38.52497 / -121.40724
**Elevation (feet):** 40

**County Summary:**
Sacramento
Sacramento East (3812154)

**Sources:**
KOF92U0001 KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
**Scientific Name:** Linderiella occidentalis

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G2G3
- **State:** S2S3

**General Habitat:**
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1992-04-02
**Occurrence Type:** Natural/Native occurrence

**Owner/Manager:** PVT-CENTRAL CALIFORNIA TRR
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
FRUITRIDGE ROAD AT CENTRAL CALIFORNIA TRACTION RR, NEAR FLORIN-PERKINS ROAD, NEAR NE CORNER OF SACRAMENTO ARMY DEPOT.

**Detailed Location:**
CLEAR POOL WITH DETRITUS.

**PLSS:** T08N, R05E, Sec. 25 (M)
**Accuracy:** 80 meters
**Area (acres):** 0

**UTM:** Zone-10 N4265320 E640782
**Latitude/Longitude:** 38.52515 / -121.38497
**Elevation (feet):** 40

**Sources:**
KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

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**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

**Listing Status:**  
- Federal: None  
- State: None

**CNDDDB Element Ranks:**  
- Global: G2G3  
- State: S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1992-04-02  
**Last Survey Date:** 1992-04-02  
**Owner/Manager:** PVT-UNION PACIFIC RR  
**Presence:** Presumed Extant

**Location:**  
CORNER OF FLORIN ROAD AND UNION PACIFIC (WESTERN PACIFIC) RAILROAD, WEST OF HIGHWAY 99.

**Detailed Location:**

**PLSS:** T07N, R05E, Sec. 06 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4261937 E633350  
**Latitude/Longitude:** 38.49582 / -121.47084  
**Elevation (feet):** 15

**County Summary:**  
Sacramento  
Florin (3812144)

**Ecological:**

**Threats:**

**General:**  
LINDERIELLA OBSERVED BY KOFORD DURING SURVEY IN SPRING OF 1992. LEPIDURUS PACKARDI ALSO PRESENT.

**Sources:**  
KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Linderiella occidentalis

**Common Name:** California linderiella

**Listing Status:**

- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**

- **Global:** G2G3
- **State:** S2S3

**General Habitat:**

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**

WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1992-04-02

**Occurrence Type:** Natural/Native occurrence

**Most Recent Survey Date:** 1992-04-02

**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN

**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**

ROADSIDE DITCH NEAR FRUITRIDGE ROAD AND MAYHEW ROAD, SOUTHWEST OF MATHER AIR FORCE BASE.

**Detailed Location:**

**Ecological:**

**Threats:**

**General:**

KOIFORD OBSERVED LINDERIELLA DURING SURVEY IN SPRING OF 1992.

**PLSS:** T08N, R06E, Sec. 29 (M)

**Accuracy:** 1/5 mile

**Area (acres):** 0

**UTM:** Zone-10 N4265406 E644335

**Latitude/Longitude:** 38.52536 / -121.34421

**Elevation (feet):** 56

**County Summary:** Sacramento

**Quad Summary:** Carmichael (3812153)

**Sources:**

KOIF92U0001 KOIFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
Map Index Number: 34798
Key Quad: Carmichael (3812153)
Occurrence Number: 129
EO Index: 12597
Element Code: ICBRA06010
Occurrence Last Updated: 1999-05-11

Scientific Name: Linderiella occidentalis
Common Name: California linderiella

Listing Status: Federal: None
State: None

Rare Plant Rank: Other Lists: IUCN_NT-Near Threatened

CNDDDB Element Ranks: Global: G2G3
State: S2S3

General Habitat: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.
Micro Habitat: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Last Date Observed: 1992-04-02
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1992-04-02
Occurrence Rank: Unknown
Owner/Manager: UNKNOWN
Trend: Unknown
Presence: Presumed Extant

Location: CORNER OF KIEFER BLVD AND EAGLES NEST ROAD, SOUTHEAST OF MATHER AIR FORCE BASE.

Detailed Location: VERNAL POOL WITH VEGETATION.


Threats: PLSS: T08N, R07E, Sec. 19 (M) Accuracy: 80 meters Area (acres): 0
UTM: Zone-10 N4265847 E651591 Latitude/Longitude: 38.52812 / -121.26090 Elevation (feet): 147

County Summary: Sacramento Quad Summary: Carmichael (3812153)

Sources:
KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
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**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDDB Element Ranks:**  
**Global:** G2G3  
**State:** S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1992-04-03  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1992-04-03  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:**  
ROADSIDE DITCH AT ELDER CREEK AND EXCELSIOR ROAD, SOUTH OF MATHER AIR FORCE BASE.

**Detailed Location:**  
CLEAR ROADSIDE DITCH WITH VEGETATION.

**Ecological:**  
CLEAR ROADSIDE DITCH WITH VEGETATION.

**Threats:**  
KOFORD OBSERVED LINDERIELLA DURING SURVEY IN SPRING OF 1992.

**General:**  
KOFORD OBSERVED LINDERIELLA DURING SURVEY IN SPRING OF 1992.

**PLSS:** T08N, R06E, Sec. 27 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4263868 E648407  
**Latitude/Longitude:** 38.51083 / -121.29784  
**Elevation (feet):** 111

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
### Scientific Name

**Linderiella occidentalis**

### Common Name

California linderiella

### Listing Status

- **Federal:** None
- **State:** None

### Rare Plant Rank

- **Other Lists:** IUCN_NT-Near Threatened

### CNDDB Element Ranks

- **Global:** G2G3
- **State:** S2S3

### General Habitat

- **SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.**
- **Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

### Last Date Observed

1992-04-02

### Last Survey Date

1992-04-02

### Presence

Presumed Extant

### Location

0.1 MILE WEST OF HEDGE AVENUE AND SOUTH OF FLORIN ROAD, SACRAMENTO.

### Detailed Location

IN A 35 FOOT LONG PUDDLE.

### Threats

- **General:** KOFORD OBSERVED LINDERIELLA IN PUDDLE DURING SURVEY IN SPRING OF 1992.

### PLSS

- **T07N, R06E, Sec. 06 (M)**

### UTM

- **Zone-10 N4262122 E642630**

### Accuracy

80 meters

### Area (acres)

0

### Latitude/Longitude

38.49605 / -121.36443

### Elevation (feet)

48

### Sources

KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
Map Index Number: 34801
EO Index: 11973

Key Quad: Elk Grove (3812143)
Element Code: ICBRA06010

Occurrence Number: 132
Occurrence Last Updated: 1996-08-06

Scientific Name: Linderiella occidentalis
Common Name: California linderiella

Listing Status:
- Federal: None
- State: None

Rare Plant Rank:
- Other Lists: IUCN_NT-Near Threatened

CNNDDB Element Ranks:
- Global: G2G3
- State: S2S3

General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Last Date Observed: 1992-04-02
Last Survey Date: 1992-04-02

Owner/Manager: UNKNOWN

Presence: Presumed Extant

Location:
ROADSIDE DITCHES NEAR FLORIN ROAD AND BRADSHAW ROAD, BESIDE FLORIN ROAD, SACRAMENTO.

Detailed Location:
TWO SITES, 0.6 MILES APART.

Ecological:
ROADSIDE DITCHES.

Threats:
GENERAL:
KOFORD OBSERVED LINDERIELLA IN DITCHES DURING SURVEY IN SPRING OF 1992.

PLSS: T07N, R06E, Sec. 05 (M)
Accuracy: 4/5 mile
Area (acres): 0

UTM: Zone-10 N4262194 E645205
Latitude/Longitude: 38.49628 / -121.33490
Elevation (feet): 64

County Summary:
Sacramento
Elk Grove (3812143), Carmichael (3812153)

SOURCES:
KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

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**CNDDB Element Ranks:***
- **Global:** G2G3
- **State:** S2S3

**General Habitat:**
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2003-02-17  
**Last Survey Date:** 2003-02-17  
**Owner/Manager:** PVT-GRUPE DEVELOPMENT CO  
**Prexence:** Presumed Extant

**Location:**
BETWEEN WESTERN PACIFIC RAILROAD AND I-5, SOUTH OF ELK GROVE BLVD AND NORTH OF HOOD FRANKLIN ROAD, ELK GROVE.

**Detailed Location:**

**Ecological:**
NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS, SEASONAL MARSHES AND WETLANDS WITHIN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.

**Threats:**
General:

**PLSS:**
- T06N, R05E, Sec. 06 (M)

**UTM:**
- Zone-10 N4250798 E633934

**County Summary:**
Sacramento  
Florin (3812144)

**Sources:**
- FAR03F0021  
  FARMER, M. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2003-02-17
- MUT91S0006  
  MUTH, D. - USNM #1144061 & 1144064, COLLECTED "5.0 MILES SOUTH OF SACRAMENTO ALONG INTERSTATE 5." 1991-03-13
- SUG95R0001  
  SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
- SUG96R0001  
  SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED BRANCHIOPODS CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933. 1996-XX-XX
- SUG97R0001  
  SUGNET & ASSOCIATES - 1997 ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NO. PRT-795933 1997-XX-XX
- SUG97R0002  
  SUGNET & ASSOCIATES - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA AT THE ELLIOTT RANCH MITIGATION SITE WATERFOWL STUDY AREA, SACRAMENTO COUNTY, CALIFORNIA 1997-05-03
- SUG98R0003  
  SUGNET & ASSOCIATES - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA AT THE ELLIOTT RANCH MITIGATION SITE WATERFOWL STUDY AREA, SACRAMENTO COUNTY, CALIFORNIA. 1998-10-08
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 32455

**EO Index:** 8929

**Key Quad:** Carmichael (3812153)

**Occurrence Number:** 144

**Occurrence Last Updated:** 1997-03-27

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**Scientific Name:** Linderiella occidentalis

**Common Name:** California linderiella

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**Listing Status:**

- **Federal:** None
- **State:** None

**Rare Plant Rank:** None

**Other Lists:** IUCN NT-Near Threatened

---

**CNDDB Element Ranks:**

- **Global:** G2G3
- **State:** S2S3

**General Habitat:**

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**

WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

---

**Last Date Observed:** 1996-03-21

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Unknown

**Trend:** Unknown

**Owner/Manager:** PVT-GRANITE CONSTRUCTION CO

**Presence:** Presumed Extant

**Location:**

ALONG NORTH EDGE OF KIEFER BLVD, 0.7 KM WNW OF KIEFER BLVD AND MATHER PARKWAY, SACRAMENTO.

---

**Detailed Location:**

GRANITE-TEICHERT PILOT PROJECT SITE (PART). 1996: 10 TOTAL POOLS SURVEYED.

**Ecological:**

CONSTRUCTED AND NATURAL HARDPAN VERNAL POOLS IN ANNUAL NON-NATIVE GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.

**Threats:**

**General:**

50+ ADULTS OBSERVED IN ALL TEN POOLS SAMPLED.

---

**PLSS:** T08N, R06E, Sec. 22 (M)

**Accuracy:** specific area

**Area (acres):** 2

**UTM:** Zone-10 N4266913 E648056

**Latitude/Longitude:** 38.53832 / -121.30122

**Elevation (feet):** 70

---

**County Summary:**

Sacramento

Carmichael (3812153)

---

**Sources:**

SUG96R0001  SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED BRANCHIOPODS CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933. 1996-XX-XX
**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

---

**Map Index Number:** 28182  
**EO Index:** 29286  
**Key Quad:** Sacramento East (3812154)  
**Occurrence Number:** 149

**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDDB Element Ranks:**  
- **Global:** G2G3  
- **State:** S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1996-03-10  
**Last Survey Date:** 1996-03-10  
**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**  
ALONG THE CENTRAL CALIFORNIA TRACTION RAILROAD RIGHT-OFF-WAY, FROM NORTH END OF 83RD ST TO FLORIN PERKINS RD, SACRAMENTO.

**Detailed Location:**  
LOCATED IN A SERIES OF PONDED DEPRESSIONS ALONG THE RAILROAD RIGHT-OFF-WAY. LINDERIELLA FOUND IN 12 OF 27 SAMPLED DEPRESSIONS.

**Ecological:**  
HABITAT CONSISTS OF PONDED DEPRESSIONS. BRANCHINECTA MESOVALLENSIS (UNDESCRIBED) AND B. LYNCHI ALSO FOUND IN THIS AREA.

**Threats:**  
CONSTANT DISTURBANCE FROM RAILROAD TRUCKS & OTHERS DRIVING THROUGH POOLED AREAS. ALSO TIRES & DEBRIS IN POOLED AREAS.

**General:**  
SURVEYS CONDUCTED FROM 6 FEBRUARY TO 10 MARCH 1996.

**PLSS:** T08N, R05E, Sec. 23 (M)  
**Accuracy:** specific area  
**Area (acres):** 39

**UTM:** Zone-10 N4266013 E639863  
**Latitude/Longitude:** 38.53154 / -121.39537  
**Elevation (feet):** 40

**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:**  
MAR96F0001 MARTIN, D. (BIOTA) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & LINDERIELLA OCCIDENTALIS 1996-03-10
### Scientific Name: Linderiella occidentalis

### Common Name: California linderiella

### Listing Status:
- **Federal:** None
- **State:** None

### Rare Plant Rank:
- **Global:** G2G3
- **State:** S2S3

### Other Lists: IUCN_NT-Near Threatened

### General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

### Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

### Last Date Observed: 1997-01-XX

### Last Survey Date: 1997-01-XX

### Presence: Presumed Extant

### Location:
1 MILE SOUTH FROM JCT OLD PLACERVILLE AND ROUTIER ROADS, NORTH OF WEST END OF SACRAMENTO MATHER AIRPORT RUNWAYS.

### Detailed Location:
CALIFORNIA LINDERIELLA IN POOLS NUMBERED 1278-79, 1284-85, 1287-88, 1290-91, 1293-95, 1359, 1361-68.

### Ecological:
FOUND IN 20 VERNAL POOLS AT THE OLD MATHER AIR FORCE BASE.

### Threats:
DEVELOPMENT.

### PLSS: T08N, R06E, Sec. 16 (M)

### UTM: Zone-10 N4267705 E646496

### Accuracy: specific area

### Latitude/Longitude: 38.54571 / -121.31895

### Area (acres): 29

### Elevation (feet): 75

### Owners/Managers:
SAC COUNTY

### Trend: Unknown

### Presence Rank: Unknown

### Sources:

1. JSA93R0002 - JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03

2. JSA97R0002 - JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 41022
EO Index: 41022
Key Quad: Carmichael (3812153)
Element Code: ICBRA06010
Occurrence Number: 161
Occurrence Last Updated: 1999-05-04

Scientific Name: Linderiella occidentalis
Common Name: California linderiella
Listing Status: Federal: None
Rare Plant Rank: State: None
Other Lists: IUCN_NT-Near Threatened
CNNDDB Element Ranks: Global: G2G3
State: S2S3

General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Last Date Observed: 1997-01-XX
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1997-01-XX
Occurrence Rank: Unknown
Owner/Manager: SAC COUNTY
Trend: Unknown
Presence: Presumed Extant

Location:
0.7 MILES SE FROM JCT OLD PLACERVILLE AND ROUTIER ROADS, NW CENTER OF SACRAMENTO MATHER AIRPORT RUNWAYS.

Detailed Location:
CALIFORNIA LINDERIELLA IN POOLS NUMBERED 1402-06 IN OPEN AREA BETWEEN TAXI AND RUNWAYS.

Ecological:
FOUND IN 5 VERNAL POOLS AT THE OLD MATHER AIR FORCE BASE.

Threats:
DEVELOPMENT.

General:
OBSERVED IN 1996-97.

PLSS: T08N, R06E, Sec. 15 (M)
Accuracy: specific area
Area (acres): 2
UTM: Zone-10 N4268568 E647339
Latitude/Longitude: 38.55335 / -121.30909
Elevation (feet): 75

County Summary: Sacramento
Quad Summary: Carmichael (3812153)

Sources:
JSA93R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03
JSA97R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
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<td>Occurrence Number: 162</td>
<td>Occurrence Last Updated: 2011-07-05</td>
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**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

**Listing Status:**  
- Federal: None  
- State: None

**Rare Plant Rank:**  
- Other Lists: IUCN_NT-Near Threatened

**CNDDDB Element Ranks:**  
- Global: G2G3  
- State: S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2006-05-04  
**Last Survey Date:** 2006-05-04

**Owner/Manager:** SAC COUNTY

**Presence:** Presumed Extant

**Location:**  
MATHER FIELD VERNAL POOL PRESERVE, S OF OLD MATHER AIRPORT RUNWAY AND E OF THE WATER TREATMENT PONDS, N OF KIEFER BLVD.

**Detailed Location:**  

**Ecological:**  
FOUND IN VERNAL POOLS, VERNAL SWALES, SEASONAL WETLANDS, AND FRESHWATER MARSH.

**Threats:**  
DEVELOPMENT.

**General:**  

**PLSS:** T08N, R06E, Sec. 14 (M)  
**Accuracy:** specific area  
**Area (acres):** 84

**UTM:** Zone-10 N4267843 E648624  
**Latitude/Longitude:** 38.54660 / -121.29451  
**Elevation (feet):** 80

**County Summary:**  
Sacramento  
Carmichael (3812153)

**Sources:**

- JSA93R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03
- JSA97R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
- WIT06F0003 WITHAM, C. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2006-04-11
### California Department of Fish and Wildlife

**California Natural Diversity Database**

**Occurrence Report**

#### Map Index Number: 41025

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#### Listing Status:

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#### Other Lists:

- IUCN_NT-Near Threatened

#### General Habitat:

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

#### Micro Habitat:

WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

#### Last Date Observed: 1997-01-XX

#### Last Survey Date: 1997-01-XX

#### Owner/Manager: SAC COUNTY

#### Presence: Presumed Extant

#### Location:

0.4 MILE NNW OF JUNCTION OF KIEFER BLVD AND EAGLES NEST ROAD, MATHER REGIONAL PARK, SE OF SACRAMENTO.

#### Detailed Location:

7 VERNAL POOLS IN THIS PORTION OF THE COMPLEX CONTAIN CALIFORNIA LINDERIELLA. THIS IS PART OF THE OLD MATHER AIR FORCE BASE.

#### Ecological:

VERNAL POOLS, AND DISTURBED VERNAL POOLS.

#### Threats:

IMPACTED BY HUMANS.

#### General:

OBSERVED IN 1993 AND 1996-97. LEPIDURUS PACKARDI ALSO OBSERVED.

#### PLSS:

T08N, R06E, Sec. 24 (M)

#### UTM:

Zone-10 N4266445 E651135

#### Accuracy: specific area

#### Area (acres): 10

#### Latitude/Longitude: 38.53359 / -121.26601

#### Elevation (feet): 140

#### Presence: Presumed Extant

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| Quad Summary: Carmichael (3812153) |

#### Sources:

- JSA93R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03
- JSA97R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
### Linderiella occidentalis

**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella  
**Listing Status:** Federal: None  
**Rare Plant Rank:**  
**State:** None  
**Other Lists:** IUCN_NT-Near Threatened  
**CNDDB Element Ranks:**  
**Global:** G2G3  
**State:** S2S3  
**General Habitat:** SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.  
**Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.  
**Last Date Observed:** 1997-XX-XX  
**Occurrence Type:** Natural/Native occurrence  
**Last Survey Date:** 1997-XX-XX  
**Occurrence Rank:** Unknown  
**Owner/Manager:** SAC COUNTY  
**Trend:** Unknown  
**Presence:** Presumed Extant  
**Location:** 0.3 MILE NORTH OF INTERSECTION OF G AVE AND DOUGLAS RD, NW MATHER REGIONAL PARK, OLD MATHER AIR FORCE BASE.  
**Detailed Location:** 2 VERNAL POOLS IN THIS PORTION OF THE COMPLEX CONTAIN CALIFORNIA LINDERIELLA.  
**Ecological:** VERNAL SWALE-VERNAL POOLS, AND DISTURBED SEASONAL WETLAND.  
**Threats:** DEVELOPMENT, IMPACTED BY HUMANS.  
**General:** OBSERVED IN 1993 AND 1997 SURVEYS.  
**PLSS:** T08N, R06E, Sec. 12 (M)  
**Accuracy:** specific area  
**Area (acres):** 4  
**UTM:** Zone-10 N4269806 E650856  
**Latitude/Longitude:** 38.56391 / -121.26848  
**Elevation (feet):** 120  

**Sources:**  
JSA93R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03  
JSA97R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
### Scientific Name: *Linderiella occidentalis*  
**Common Name:** California linderiella

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<th>Micro Habitat</th>
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<td>SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.</td>
<td>WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.</td>
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<td>Presence:</td>
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**Location:**  
0.1 MILE EAST OF JUNCTION OF KIEFER BLVD AND EAGLES NEST ROAD, MATHER REGIONAL PARK (6 FEATURES, ALONG KIEFER BLVD).

**Detailed Location:**  
MORRISON CREEK DRAINAGE AREA, IN THE OLD MATHER AIR FORCE BASE.

**Ecological:**  
6 FEATURES THAT ARE EITHER VERNAL POOLS, VERNAL SWALES, OR A BRANCH OF MORRISON CREEK.

**Threats:**  
IMPACTED BY HUMANS.

**General:**  
OBSERVED IN 1993 AND 1996-97 IN 5 OF THE 6 FEATURES MAPPED. ALSO LEPIDURUS PACKARDI OBSERVED.

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<td>Latitude/Longitude: 38.52698 / -121.25613</td>
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**County Summary:**  
Sacramento  
Buffalo Creek (3812152), Carmichael (3812153)

**Sources:**  
**JSA93R0002**  
JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03

**JSA97R0002**  
JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
## California Natural Diversity Database

**Occurrence Report**

**California Department of Fish and Wildlife**

### Scientific Name:
*Linderiella occidentalis*

#### Common Name:
California linderiella

### Listing Status:
- **Federal:** None
- **State:** None

### CNDDB Element Ranks:
- **Global:** G2G3
- **State:** S2S3

### General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

### Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

### Last Date Observed:
1997-01-XX

### Last Survey Date:
1997-01-XX

### Owner/Manager:
SAC COUNTY

### Presence:
Presumed Extant

### Location:
0.7 MILE WNW OF JUNCTION OF KIEFER BLVD AND EAGLES NEST ROAD, MATHER REGIONAL PARK, SE OF SACRAMENTO.

### Detailed Location:
2 VERNAL POOLS IN THIS PORTION OF THE COMPLEX CONTAIN CALIFORNIA LINDERIELLA. PART OF THE OLD MATHER AIR FORCE BASE.

### Ecological:
VERNAL POOLS.

### Threats:
OBSERVED IN 1996-97.

### PLSS:
T08N, R06E, Sec. 24 (M)

### UTM:
Zone-10 N4266396 E650452

### Accuracy:
specific area

### Area (acres):
2

### Elevation (feet):
115

### County Summary:
Sacramento

### Quad Summary:
Carmichael (3812153)

### Sources:
JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONducted FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
### Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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#### Scientific Name
- **Linderiella occidentalis**

#### Listing Status
- **Federal:** None
- **State:** None

#### CNDDDB Element Ranks
- **Global:** G2G3
- **State:** S2S3

#### General Habitat
- **SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.**

#### Micro Habitat
- **WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.**

#### Last Date Observed
- 1998-10-15

#### Last Survey Date
- 1998-10-15

#### Owner/Manager
- PVT

#### Presence
- Presumed Extant

#### Location
- EAST SIDE OF HIGHWAY 99, BETWEEN WHITEHOUSE CREEK AND SHELDON ROAD, SOUTH OF SACRAMENTO.

#### Detailed Location

#### Ecological:

#### Threats:

#### General:
- **OBSERVED DURING DRY-SEASON SAMPLING OF SEASONAL WETLANDS ON 15 OCT 1998.**

#### PLSS:
- T07N, R05E, Sec. 26 (M)

#### UTM:
- Zone-10 N4255421 E639718

#### County Summary:
- Sacramento
- Florin (3812144)

#### Accuracy:
- specific area

#### Area (acres):
- 8

#### Lat/Lon:
- 38.43614 / -121.39915

#### Elevation (feet):
- 30

#### Sources:
- HEL98F0014
- HELM, B. (MAY AND ASSOCIATES, INC.) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 1998-10-15
**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

**Listing Status:**  
- Federal: None  
- State: None

**CNNDDB Element Ranks:**  
- Global: G2G3  
- State: S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1998-04-XX  
**Last Survey Date:** 1998-04-XX  
**Presence:** Presumed Extant

**Ecological:**  
HABITAT CONSISTS OF BOTH NATURAL AND MAN-MADE VERNAL POOLS.

**Detailed Location:**  
INTERSECTION OF COSUMNES RIVER COLLEGE BOULEVARD AND HIGHWAY 99, SOUTH OF SACRAMENTO.

**PLSS:** T07N, R05E, Sec. 15 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 162

**UTM:** Zone-10 N4257618 E638447  
**Latitude/Longitude:** 38.45613 / -121.41327  
**Elevation (feet):** 25

**County Summary:**  
Sacramento  
Florin (3812144)

**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Sources:**  
HEL98F0016  
HELM, B. (MAY AND ASSOCIATES, INC.) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 1998-XX-XX
## Occurrence Report

### Map Index Number: 42726

### Key Quad: Elk Grove (3812143)

### Occurrence Number: 182

### Scientific Name: Linderiella occidentalis

### Common Name: California linderiella

### Listing Status: Federal: None

### Rare Plant Rank: Other Lists: IUCN_NT-Near Threatened

### CNNDDB Element Ranks: Global: G2G3

### State: S2S3

### General Habitat:

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

### Micro Habitat:

WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

### Last Date Observed: 1993-03-31

### Last Survey Date: 1993-03-31

### Presence: Presumed Extant

### Location:

ALONG CENTRAL CALIFORNIA TRACTION RAILROAD, NORTH OF CALVINE RD, SOUTH OF FLORIN RD, AND WEST OF VINEYARD RD.

### Detailed Location:

LONG NARROW RAIN FILLED DEPRESSIONS IN RAILROAD RIGHT-OF-WAY. LAND USE IS GRAZING AND RAILROAD RIGHT-OF-WAY. SOME ADJACENT PASTURES HAD REALLY NICE LOOKING VERNAL POOLS.

### Ecological:

UNDULATING TOPOGRAPHY, RED CLAY SOILS. POOLS 5 X 10 TO 15 METERS.

### Threats:

RAILROAD MAINTENANCE, CONVERSION TO RESIDENTIAL, INTENSIVE AGRICULTURE, GRAZING, DUMPING.

### General:

NUMEROUS TO FEW ADULTS OBSERVED, HIGHER NUMBERS IN THE MIDDLE SECTION OF MAPPED AREA. ALSO OBSERVED LEPIDURUS SP, CLAM SHRIMP, RED COPEPODS.

### PLSS:

T07N, R06E, Sec. 08 (M)

### Accuracy: nonspecific area

### Area (acres): 157

### UTM:

Zone-10 N4260046 E644736

### Latitude/Longitude: 38.47701 / -121.34071

### Elevation (feet): 60

### County Summary: Sacramento

### Quad Summary: Elk Grove (3812143)

### Sources:

KIR93F0008 KIRPATRICK, G. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS (CALIFORNIA LINDERIELLA) 1993-03-07

KIR93F0009 KIRPATRICK, G. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS (CALIFORNIA LINDERIELLA) 1993-03-07

KIR93F0010 KIRPATRICK, G. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS (CALIFORNIA LINDERIELLA) 1993-03-31

KIR93F0011 KIRPATRICK, G. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS (CALIFORNIA LINDERIELLA) 1993-03-07
California Department of Fish and Wildlife

California Natural Diversity Database

Occurrence Report

Map Index Number: 42727
EO Index: 42727

Key Quad: Elk Grove (3812143)
Occurrence Number: 183

Scientific Name: Linderiella occidentalis
Common Name: California linderiella

Listing Status: Federal: None
State: None

CNDDB Element Ranks: Global: G2G3
State: S2S3

General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Last Date Observed: 1993-04-01
Occurrence Type: Natural/Native occurrence

Presence: Presumed Extant

Location:
ALONG CENTRAL CALIFORNIA TRACTION RAILROAD, BETWEEN HEDGE AVE AND FLORIN ROAD, SACRAMENTO.

Detailed Location:
NARROW RAIN-FILLED DEPRESSION IN RIGHT-OF-WAY ABOUT 5 METERS IN WIDTH AND 15 METERS IN LENGTH. UNDULATING TOPOGRAPHY ON RED CLAY SOILS.

Ecological:
CLEAR, CLAY BOTTOMED POOL WITH SOME EMERGENT VEGETATION, POOL IS ADJACENT TO SAND LOADER USED FOR RAIL BED MAINTENANCE.

Threats:
RAILROAD MAINTENANCE AND GRADING OF RAILROAD.

General:
MODERATE DENSITY OF REPRODUCTIVE ADULTS OBSERVED; ALSO OBSERVED WESTERN TOAD TADPOLES, 1993.

PLSS: T08N, R06E, Sec. 31 (M)
Accuracy: nonspecific area
Area (acres): 27

UTM: Zone-10 N4262378 E642992
Latitude/Longitude: 38.49830 / -121.36023
Elevation (feet): 40

County Summary:
Sacramento
Elk Grove (3812143), Carmichael (3812153)

Sources:
KIR93F0012 KIRPATRICK, G. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS (CALIFORNIA LINDERIELLA) 1993-04-01
### Occurrence Report
#### California Department of Fish and Wildlife
#### California Natural Diversity Database

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**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

**Listing Status:**  
- Federal: None  
- State: None

**CNDDDB Element Ranks:**  
- Global: G2G3  
- State: S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2001-03-28  
**Last Survey Date:** 2001-03-28

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**  
GRANITE VINEYARD SITE, 0.4 MILE SE OF THE INTERSECTION OF HEDGE AVE AND FRUTRIDGE ROAD, SACRAMENTO.

**Detailed Location:**  
WETLAND #6.

**Ecological:**  
HABITAT ON SITE CONSISTS PRIMARILY OF NON-NATIVE GRASSLAND WITH SEASONALLY FLOODED/INUNDATED AREAS, A RIPARIAN CORRIDOR WITH FLOWING WATER 9 MONTHS OF THE YEAR AND AN IRRIGATION POND.

**Threats:**  

**PLSS:** T08N, R06E, Sec. 30 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4264896 E643159  
**Latitude/Longitude:** 38.52095 / -121.35780  
**Elevation (feet):** 50

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**
- BAL01R0001 BALFOUR, P. (ECORP CONSULTING, INC.) - ANNUAL REPORT OF FINDINGS REGARDING DRY SEASON (CYST) SURVEY AT THE GRANITE VINEYARD SITE, SACRAMENTO COUNTY, CALIFORNIA. 2001-02-09
- ECO01R0004 ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEANS AT GRANITE VINEYARD SITE, SACRAMENTO, CALIFORNIA. 2001-06-25
**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

**Listing Status:** 
- **Federal:** None  
- **State:** None

**Rare Plant Rank:** 
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G2G3  
- **State:** S2S3

**General Habitat:** SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2002-01-31  
**Last Survey Date:** 2002-01-31  
**Owner/Manager:** SAC COUNTY-PARKS & REC  
**Presence:** Presumed Extant

**Location:** MATHER LAKE REGIONAL PARK, NE SIDE OF MATHER LAKE, SOUTH OF DOUGLAS ROAD AND WEST OF SUNRISE BLVD, SE OF SACRAMENTO.

**Detailed Location:**  

**Ecological:**  
HABITAT CONSISTS OF ANNUAL GRASSLAND DOMINATED BY NON-NATIVE PLANTS WITH NATURALLY OCCURRING & POSSIBLY ARTIFICIAL SEASONAL WETLANDS, INCLUDING VERNAL POOLS. PLANTS WITHIN WETLANDS: CARTER'S BUTTERCUP, WINGED WATER-STARWORT, POPCORN FLOWER.

**Threats:**

**General:**  
100'S OBSERVED IN WETLANDS A & B AND 1000'S OBSERVED IN WETLANDS C, E AND F ON 31 JAN 2002.

**PLSS:** T08N, R07E, Sec. 07 (M)  
**Accuracy:** specific area  
**Area (acres):** 16

**UTM:** Zone-10 N4269103 E652367  
**Latitude/Longitude:** 38.55732 / -121.25130  
**Elevation (feet):** 135

**County Summary:** Sacramento  
**Quad Summary:** Buffalo Creek (3812152), Carmichael (3812153)

**Sources:**

ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING FEDERALLY-LISTED BRANCHIPODS FOR MATHER LAKE REGIONAL PARK, SACRAMENTO COUNTY, CALIFORNIA. 2002-04-17
### Scientific Name: Linderiella occidentalis

### Common Name: California linderiella

#### Listing Status:
- **Federal:** None
- **State:** None

#### Rare Plant Rank:
- **Global:** G2G3
- **State:** S2S3

#### Other Lists:
- IUCN_NT-Near Threatened

### General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

### Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

### Last Date Observed: 2004-01-15

### Last Survey Date: 2004-01-15

### Owner/Manager: PVT

### Presence: Presumed Extant

### Location:
CHURCHILL DOWNS WETLAND PRESERVE (IN PART), 4.5 MILES NORTH OF ELK GROVE.

### Detailed Location:
0.5 MILE SOUTH OF GERBER ROAD, 1.2 MILES NORTH OF CALVINE, AND 0.5 MILE EAST OF FLORIN ROAD.

### Ecological:
HABITAT CONSISTS OF NATURAL AND CREATED VERNAL POOLS WITHIN A GRASSLAND.

### Threats:
**General:**
10'S TO 1,000'S OBSERVED IN 16 OF 35 NATURAL VERNAL POOLS (DIVIDED BETWEEN THIS SITE & OCC 215) 21 JAN, 7 MAR 2003. ALSO OBSERVED IN 2002. NO OTHER BRANCHIOPOD SPECIES OBS IN 2003. 10'S OBS IN 2 POOLS, 1000'S OBS IN 2 POOLS ON 15 JAN 2004.

### Accuracy:
nonspecific area

### Area (acres):
55

### PLSS:
T07N, R06E, Sec. 07 (M)

### UTM:
Zone-10 N4259578 E643059

### Latitude/Longitude:
38.47306 / -121.36003

### Elevation (feet):
50

### County Summary:
Sacramento

### Elk Grove (3812143)

### Sources:
- ECO02R0008: ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIOPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE. 2002-04-16
- ECO03R0002: ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIOPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE 2003-06-06
- ECO04R0001: ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIOPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE (SACRAMENTO COUNTY, CALIFORNIA) 2004-06-02
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**Scientific Name:** *Linderiella occidentalis*

**Common Name:** California linderiella

**Listing Status:**
- Federal: None
- State: None

**CNDDB Element Ranks:**
- Global: G2G3
- State: S2S3

**General Habitat:**
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2004-01-15

**Last Survey Date:** 2004-01-15

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
CHURCHILL DOWNS WETLAND PRESERVE (IN PART); 4 MILES NNE OF ELK GROVE.

**Detailed Location:**
1 MILE SOUTH OF GERBER ROAD TO 0.5 MILE NORTH OF CALVINE ROAD, EXTENDING 0.4 MILE WEST OF BRADSHAW ROAD.

**Ecological:**
SITE IS VERNAL POOL PRESERVE - GRASSLAND. SURROUNDING LAND CONSISTS OF HOMES.

**Threats:**
**General:**
10’S TO 1,000’S OBSERVED IN 16 OF 35 NATURAL VERNAL POOLS (DIVIDED BETWEEN THIS SITE & OCC 214) 21 JAN AND 7 MAR 2003. ALSO OBSERVED IN 2002. NO OTHER BRANCHIPOD SPECIES OBS IN 2003. 10’S OBS IN 1 POOL, 100’S OBS IN 3 POOLS ON 15 JAN 2004.

**PLSS:** T07N, R06E, Sec. 17 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 94

**UTM:** Zone-10 N4258529 E645058  
**Latitude/Longitude:** 38.46329 / -121.33734  
**Elevation (feet):** 65

**County Summary:**
Sacramento
Elk Grove (3812143)

**Sources:**
- ECO02R0008 ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERAủy-LISTED BRANCHIPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE. 2002-04-16
- ECO03R0002 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERAływ-LISTED BRANCHIPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE 2003-06-08
- ECO04R0001 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERAływ-LISTED BRANCHIPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE (SACRAMENTO COUNTY, CALIFORNIA) 2004-06-02
Linderiella occidentalis

California linderiella

Federal: None
State: None

Global: G2G3
State: S2S3

SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Natural/Native occurrence
Excellent
Unknown

Presumed Extant

SW END OF THE RUNWAY OF OLD MATHER AIR FORCE BASE, 1 MILE NE OF THE INTERSECTION OF BRADSHAW ROAD AND JACKSON ROAD.

VERNAL POOL PRESERVE CONSISTS OF 38 VERNAL POOLS ON 10.04 ACRES.

HABITAT CONSISTS OF A VERNAL POOL PRESERVE, DOMINATED BY PLAGIOBOTHRYS STIPITATUS, LASTHENIA FREMONTII, DOWNINGIA BICORNUTA, ERYNGIUM VASEYI, NAVARRETIA LEUCOCEPHALA, AND DESCHAMPSIA DANTHONIOIDES.

PLSS: T08N, R06E, Sec. 16 (M)
UTM: Zone-10 N4267058 E646210

Accuracy: specific area
Latitude/Longitude: 38.53993 / -121.32235

Area (acres): 44
Elevation (feet): 65

Sacramento
Carmichael (3812153)

FAR02F0001 FARMER, M. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2002-03-15
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Linderiella occidentalis

**Common Name:** California linderiella

**Listing Status:**
- **Federal:** None
- **State:** None

**Rare Plant Rank:**
- **Global:** G2G3
- **State:** S2S3

**Other Lists:** IUCN_NT-Near Threatened

**General Habitat:**
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2002-02-04

**Last Survey Date:** 2002-02-04

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**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.

**Threats:**

**General:**
5-10 ADULTS OBSERVED VISUALLY ON 4 FEB 2002, NO AQUATIC SAMPLING.

**PLSS:**
- T06N, R05E, Sec. 05 (M)

**UTM:**
- Zone-10 N4250791 E635069
- Latitude/Longitude: 38.39514 / -121.45328
- Elevation (feet): 20

**County Summary:**
Sacramento

**Quad Summary:**
- Florin (3812144)

**Sources:**
- HUD02F0009  HUDDLESTON, R. (CH2M HILL) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2002-02-04
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

**Listing Status:**  
Federal: None  
State: None

**Rare Plant Rank:**  
Other Lists: IUCN_NT-Near Threatened

**CNDDDB Element Ranks:**  
Global: G2G3  
State: S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2005-01-30  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2005-01-30  
**Occurrence Rank:** Unknown

**Owner/Manager:** CITY OF SACRAMENTO-GRANT HS  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
0.7 MILE SOUTH OF ELKHORN BOULEVARD AND 0.4 MILE WEST OF SORENTO ROAD, 2 MILES SW OF RIO LINDA.

**Detailed Location:**  
POTENTIAL SITE FOR THE NEW GRANT HIGH SCHOOL.

**Ecological:**  
HABITAT CONSISTS OF ANNUAL GRASSLAND ON A LEVEL TO GENTLY-SLOPING SLOPE. SOIL PROFILE INCLUDES HARDPAN.

**Threats:**  
THREATENED BY DEVELOPMENT AS A HIGH SCHOOL.

**General:**  
500+ ADULTS OBSERVED ON 30 JAN 2005.

**PLSS:** T10N, R04E, Sec. 36 (M)  
Accuracy: 80 meters  
Area (acres): 0

**UTM:** Zone-10 N4281822 E631280  
Latitude/Longitude: 38.67526 / -121.49082  
Elevation (feet): 25

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
THO05F0002 THOMAS, J. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2005-01-30
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Key Quad:** Rio Linda (3812164)

**Occurrence Number:** 252

**Scientific Name:** *Linderiella occidentalis*

**Common Name:** California linderiella

**Listing Status:**
- Federal: None
- State: None

**CNDDDB Element Ranks:**
- Global: G2G3
- State: S2S3

**General Habitat:**
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2004-XX-XX

**Last Survey Date:** 2004-XX-XX

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
NORTH OF DYER LANE, ABOUT 0.75 TO 1.5 MILES WEST OF CENTER POINT ROAD, WEST OF ROSEVILLE.

**Detailed Location:**

**Ecological:**

**Threats:**

**General:**
50+ CYSTS FOUND IN DRY SEASON SAMPLING IN BASIN #D-5.

**PLSS:** T10N, R05E, Sec. 10 (M)

**Accuracy:** nonspecific area

**Area (acres):** 239

**UTM:** Zone-10 N4289091 E637887

**Latitude/Longitude:** 38.73974 / -121.41345

**Elevation (feet):** 90

**County Summary:** Placer

**Quad Summary:** Rio Linda (3812164)

**Sources:**
HEL04R0001 HELM, B. - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE DYER LANE 240 PROPERTY, SACRAMENTO COUNTY, CALIFORNIA. 2004-XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 64335
**EO Index:** 64414

**Key Quad:** Rio Linda (3812164)
**Element Code:** ICBRA06010

**Occurrence Number:** 253
**Occurrence Last Updated:** 2006-06-20

**Scientific Name:** Linderiella occidentalis
**Common Name:** California linderiella

**Listing Status:**
- Federal: None
- State: None

**Rare Plant Rank:**
- Other Lists: IUCN_NT-Near Threatened

**CNDDB Element Ranks:**
- Global: G2G3
- State: S2S3

**General Habitat:**
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2004-XX-XX
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2004-XX-XX
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
NORTH OF I-80, BETWEEN DRY CREEK ROAD TO THE EAST AND RIO LINDA BLVD TO THE WEST, AT TERMINUS OF JESSIE RD, SACRAMENTO.

**Detailed Location:**

**Ecological:**

**Threats:**

**General:**
UNKNOWN NUMBER OF CYSTS FOUND IN DRY SEASON SAMPLING IN BASINS SW3 AND SW4.

**PLSS:** T09N, R05E, Sec. 09 (M)
**Accuracy:** nonspecific area
**Area (acres):** 35

**UTM:** Zone-10 N4278372 E635601
**Latitude/Longitude:** 38.64354 / -121.44184
**Elevation (feet):** 35

**County Summary:**
Sacramento
Rio Linda (3812164)

**Sources:**
HEL04R0002  HELM, B. - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE JESSIE AVENUE PROPERTY, SACRAMENTO COUNTY, CALIFORNIA 2004-XX-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 64336  
**Key Quad:** Rio Linda (3812164)  
**Occurrence Number:** 254

<table>
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<td>Occurrence Last Updated: 2006-06-20</td>
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**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G2G3  
- **State:** S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2004-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2004-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
BETWEEN DRY CREEK AND PFE ROAD, EAST OF WATT AVENUE AND WEST OF WALERBI ROAD, WEST OF ROSEVILLE.

**Detailed Location:**

**Ecological:**

**Threats:**

**General:**

UNKNOWN NUMBER OF CYSTS FOUND DURING DRY SEASON SAMPLING IN BASINS SW-1 AT RIOLO 1 SITE, AND SW-1 AT RIOLO 2 SITE.

**PLSS:** T10N, R05E, Sec. 12 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 127

**UTM:** Zone-10 N4288436 E641077  
**Latitude/Longitude:** 38.73334 / -121.37689  
**Elevation (feet):** 110

**County Summary:**

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<tr>
<td>Citrus Heights (3812163), Rio Linda (3812164)</td>
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</table>

**Quad Summary:**

**Sources:**

HEL04R0004  
HELM BIOLOGICAL CONSULTING - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE PFE PROPERTY, 2004-11-01
**Sources:**

HEL04R0003  HELM BIOLOGICAL CONSULTING - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE FAT PROPERTY, SACRAMENTO COUNTY, CALIFORNIA. 2004-11-01
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

<table>
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<th>64429</th>
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<tr>
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<td>Occurrence Number: 258</td>
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<td>Occurrence Last Updated: 2006-03-27</td>
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**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

**Listing Status:**  
- Federal: None  
- State: None

**Rare Plant Rank:**  
- Global: G2G3  
- State: S2S3

**CNNDDB Element Ranks:**  
- Global: G2G3  
- State: S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2002-02-20  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2002-02-20  
**Occurrence Rank:** Excellent

**Owner/Manager:** PVT-SACRAMENTO VLY CONSERVANCY

**Presence:** Presumed Extant  
**Trend:** Unknown

**Location:**  
SACRAMENTO PRAIRIE VERNAL POOL PRESERVE, SE OF SACRAMENTO.

**Detailed Location:**  
0.8 MILE SOUTH OF INTERSECTION OF JACKSON ROAD AND EXCELSIOR ROAD, JUST EAST OF EXCELSIOR ROAD.

**Ecological:**  
VERNAL POOLS WITHIN A CALIFORNIA ANNUAL GRASSLAND MATRIX. CYZICUS CALIFORNICUS ALSO PRESENT.

**Threats:**  
The grass Glyceria declinata is becoming problematic in the area.

**General:**  
"LOTS" OF INDIVIDUALS SEEN.

**PLSS:** T08N, R06E, Sec. 35 (M)  
**Accuracy:** specific area

**UTM:** Zone-10 N4263411 E648591  
**Latitude/Longitude:** 38.50669 / -121.29582

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Area (acres):** 2  
**Elevation (feet):** 120

**Sources:**  
WITH05F0003 WITHAM, C. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2005-02-20

WITH05R0001 WITHAM, C. - SACRAMENTO PRAIRIE VERNAL POOL PRESERVE, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
## Linderiella occidentalis

### General Habitat:
Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and TDS.

### Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

### Last Date Observed:
2005-02-20

### Presence:
Presumed Extant

### Location:
Sacramento Prairie Vernal Pool Preserve, SE of Sacramento.

### Detailed Location:
About 1.3 miles southeast of intersection of Jackson Road and Excelsior Road, in the SE 1/4 of the NE 1/4 of Section 35.

### Ecological:
Vernal pools.

### Threats:
The grass Glyceria declinata is becoming problematic in the general area.

### General:
"Lots" of individuals observed. Found in two pools; Brachinecta lynchi was also found in one pool, and Lepidurus Packardi was found in the other.

### PLSS:
T08N, R06E, Sec. 35 (M)

### UTM:
Zone-10 N4263279 E649975

### County Summary:
Sacramento

### Quad Summary:
Carmichael (3812153)

### Sources:
WIT05F0003 WITHAM, C. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2005-02-20
WIT05R0001 WITHAM, C. - SACRAMENTO PRAIRIE VERNAL POOL PRESERVE, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
## Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<td>Key Quad:</td>
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<td>Occurrence Number:</td>
<td>260</td>
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<td>EO Index:</td>
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<td>Occurrence Last Updated:</td>
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### Scientific Name: Linderiella occidentalis

### Common Name: California linderiella

#### Listing Status:
- **Federal:** None
- **State:** None

#### Rare Plant Rank:

#### Other Lists:
- IUCN_NT-Near Threatened

#### CNDDB Element Ranks:
- **Global:** G2G3
- **State:** S2S3

### General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

### Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

### Last Date Observed:
2005-02-28

### Last Survey Date:
2005-02-28

### Owner/Manager:
PVT-SACRAMENTO VLY CONSERVANCY

### Presence:
Presumed Extant

### Location:
SACRAMENTO PRAIRIE VERNAL POOL PRESERVE, SE OF SACRAMENTO.

#### Detailed Location:
JUST NORTH OF FLORIN ROAD, 0.6 MILE WEST OF EAGLES NEST ROAD, APPROXIMATELY 8 MILES NE OF ELK GROVE.

#### Ecological:
VERNAL POOLS.

### Threats:
THE GRASS Glyceria declinata IS BECOMING PROBLEMATIC IN THE GENERAL AREA.

#### General:
"LOTS" OF INDIVIDUALS OBSERVED. FOUND IN 8 POOLS; LEPIDURUS PACKARDI WAS ALSO FOUND IN 5 OF THE POOLS.

### PLSS:
- **T08N, R06E, Sec. 36 (M)**

### UTM:
- **Zone-10 N4262505 E650611**

### Accuracy:
Specific area

### Area (acres):
7

### Latitude/Longitude:
38.49819 / -121.27286

### Elevation (feet):
120

### County Summary:
Sacramento

### Quad Summary:
Elk Grove (3812143)

### Sources:
- WIT05F0003  WITHAM, C. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2005-02-20
- WIT05R0001  WITHAM, C. - SACRAMENTO PRAIRIE VERNAL POOL PRESERVE, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
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<td>Occurrence Number: 261</td>
<td>Occurrence Last Updated: 2006-06-20</td>
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**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

**Listing Status:**  
- Federal: None  
- State: None

**Rare Plant Rank:**  
- Other Lists: IUCN_NT-Near Threatened

**CNDDB Element Ranks:**  
- Global: G2G3  
- State: S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2005-04-07  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2005-04-07  
**Occurrence Rank:** Good

**Owner/Manager:** SAC COUNTY-PARKS & REC  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
VICINITY OF INTERSECTION OF EAGLES NEST ROAD AND WOODRING ROAD, MATHER FIELD, SE OF SACRAMENTO.

**Detailed Location:**  
JUST NORTH OF WOODRING WAY, AT T-JUNCTION WITH MCRBOBERTS WAY, 0.55 MILES WEST OF INTERSECTION OF WOODRING WAY AND EAGLES NEST ROAD.

**Ecological:**  
VERNAL POOL IN CALIFORNIA GRASSLAND MATRIX.

**Threats:**  
"LOTS" OF INDIVIDUALS FOUND, BUT FIELD SURVEY FORM REFERS TO THREE SEPARATELY MAPPED POOLS.

**PLSS:** T08N, R06E, Sec. 13 (M)  
**Accuracy:** specific area  
**Area (acres):** 1

**UTM:** Zone-10 N4268408 E651397  
**Latitude/Longitude:** 38.55122 / -121.26257  
**Elevation (feet):** 120

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
WITHAM, C. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS. 2005-XX-XX  
WITHAM, C. - MATHER FIELD VERNAL POOLS, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
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<th>Linderiella occidentalis</th>
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<th>California linderiella</th>
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<th>General Habitat:</th>
<th>SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.</th>
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<td>Micro Habitat:</td>
<td>WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.</td>
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<td>Last Survey Date:</td>
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<td>Owner/Manager:</td>
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<td>Detailed Location:</td>
<td>VERNAL POOL IN CALIFORNIA GRASSLAND MATRIX.</td>
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<td>Ecological:</td>
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<td>Threats:</td>
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<tr>
<td>General:</td>
<td>&quot;LOTS&quot; OF INDIVIDUALS FOUND, BUT FIELD SURVEY FORM REFERS TO THREE SEPARATELY MAPPED POOLS.</td>
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| PLSS: | T08N, R06E, Sec. 13 (M) | Accuracy: | specific area | Area (acres): | 1 |
| PLSS: | T08N, R06E, Sec. 13 (M) | UTM: Zone-10 N4267775 E651432 | Latitude/Longitude: 38.54551 / -121.26231 | Elevation (feet): | 120 |
| County Summary: | Sacramento | Quad Summary: | Carmichael (3812153) |                  |     |

<table>
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<td>WIT05F0006</td>
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<td>WIT05R0002</td>
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### Linderiella occidentalis

**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella  
**Listing Status:** Federal: None  
**State:** None  
**Rare Plant Rank:** Federal: None  
**State:** None  
**CNDDB Element Ranks:** Global: G2G3  
**State:** S2S3  
**Threats:**  
**General:** "LOTS" OF INDIVIDUALS FOUND 24 FEB - 7 APR 2005, BUT SURVEY FORM REFERS TO THREE SEPARATELY MAPPED POOLS. **PLSS:** T08N, R07E, Sec. 18 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**UTM:** Zone-10 N4267216 E652451  
**Latitude/Longitude:** 38.54030 / -121.25074  
**Elevation (feet):** 160  
**Presence:** Presumed Extant  
**Location:** 1 MI NE OF JCT OF EAGLES NEST RD & KEIFER BLVD ND 0.4 MI W OF SUNRISE BLVD, S OF MATHER GOLF COURSE, SE OF SACRAMENTO.  
**Detailed Location:** POOL AT THE NE END OF UNNAMED LOOP ROAD, JUST EAST OF MATHER VERNAL POOL PRESERVE. MAPPED TO PROVIDED MAP.  
**Ecological:** VERNAL POOL IN CALIFORNIA GRASSLAND MATRIX.  
**Threats:** General:  
**Sources:**  
- WIT05F0007 WITHAM, C. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS. ATTACHED TO REPORT, WIT05R0002 2005-XX-XX  
- WIT05R0002 WITHAM, C. - MATHER FIELD VERNAL POOLS, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 65888
Key Quad: Florin (3812144)
Occurrence Number: 265
EO Index: 65967
Element Code: ICBRA06010
Occurrence Last Updated: 2014-07-28

Scientific Name: Linderiella occidentalis
Common Name: California linderiella

Listing Status: Federal: None
State: None
Rare Plant Rank:
Other Lists: IUCN_NT-Near Threatened
CNDDB Element Ranks: Global: G2G3
State: S2S3

General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Last Date Observed: 2007-03-08
Last Survey Date: 2007-03-08
Owner/Manager: PVT
Presence: Presumed Extant

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.

Threats:
A SMALL AMOUNT OF GARBAGE NOTED WITHIN SOUTHERN POOL IN 2007.

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.

PLSS: T07N, R05E, Sec. 26 (M)
Accuracy: specific area
Area (acres): 14

UTM: Zone-10 N4254915 E640436
Latitude/Longitude: 38.43147 / -121.39101
Elevation (feet): 30

County Summary:
Sacramento
Florin (3812144)

Sources:
BAL06F0004 BALLARD, A. & S. ROPER - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2006-04-05
BAL07F0006 BALLARD, A. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2007-03-08
BAL07F0007 BALLARD, A. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2007-03-08
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 82079
Key Quad: Florin (3812144)
Occurrence Number: 387
EO Index: 83068
Element Code: ICBRA06010
Occurrence Last Updated: 2011-03-23

Scientific Name: Linderiella occidentalis
Common Name: California linderiella
Listing Status: Federal: None
State: None
Rare Plant Rank: Other Lists: IUCN_NT-Near Threatened
CNDDB Element Ranks: Global: G2G3
State: S2S3

General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Last Date Observed: 2009-03-11
Last Survey Date: 2009-03-11
Owner/Manager: UNKNOWN
Presence: Presumed Extant

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.

Threats:
MOSQUITOFISH (GAMBUSIA AFFINIS) ARE KNOWN PREDATORS OF FAIRY SHRIMP AND WERE FOUND IN SOME PONDS.

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.

PLSS: T06N, R04E, Sec. 13 (M)
Accuracy: specific area
Area (acres): 234

UTM: Zone-10 N4248918 E631007
Latitude/Longitude: 38.37888 / -121.50013
Elevation (feet): 10

County Summary:
Sacramento

Quad Summary:
Brucerville (3812134), Courtland (3812135), Florin (3812144), Clarksburg (3812145)

Sources:
DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
### Scientific Name: Linderiella occidentalis

- **Scientific Name:** Linderiella occidentalis
- **Common Name:** California linderiella

- **Listing Status:** Federal: None
- **Rare Plant Rank:** State: None

- **CNDDB Element Ranks:**
  - Global: G2G3
  - State: S2S3

- **Other Lists:** IUCN NT-Near Threatened

### General Habitat:
- **SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.**

### Last Date Observed:
- 1997-XX-XX

### Occurrence Type:
- Natural/Native occurrence

### Presence:
- Presumed Extant

### Location:
- MATHER FIELD, ABOUT 1 MILE WEST OF DOUGLAS ROAD AND MATHER BLVD INTERSECTION, RANCHO CORDOVA.

### Detailed Location:
- SOUTH OF THE NORTH END OF THE AIRPORT RUNWAY.

### Ecological:
- FOUND IN VERNAL POOLS.

### Threats:

### PLSS:
- T08N, R06E, Sec. 11 (M)

### UTM:
- Zone-10 N4268967 E649538

### County Summary:
- Sacramento

### Quad Summary:
- Carmichael (3812153)

### Sources:
- JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
### Linderiella occidentalis

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**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G2G3  
- **State:** S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

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<td>PVT</td>
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<td>Presumed Extant</td>
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<td>Location:</td>
<td>ABOUT 0.9 MILE WNW OF HIGHWAY 99 AT GRANT LINE ROAD &amp; 1.1 MILES NE OF KAMMERER RD AT MCMILLAN ROAD, SOUTH OF ELK GROVE.</td>
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<td>Detailed Location:</td>
<td>&quot;STERLING MEADOWS PROPERTY.&quot; MAPPED TO LOCATIONS GIVEN IN 2008 REPORT.</td>
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<td>Ecological:</td>
<td>200-ACRE PROPERTY. BRANCHINECTA CYSTS ALSO FOUND.</td>
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<td>LINERIELLA OCCIDENTALIS CYSTS WERE FOUND IN 8 OUT OF 15 BASINS DRY-SAMPLED ON 2 MAY 2008.</td>
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**PLSS:**  
T06N, R05E, Sec. 12 (M)  
**Accuracy:** specific area  
**Area (acres):** 28

**UTM:**  
Zone-10 N4249234 E641654  
**Latitude/Longitude:** 38.38010 / -121.37821  
**Elevation (feet):** 35

**County Summary:**  
Sacramento  
**Quad Summary:** Florin (3812144)

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**Scientific Name:** *Linderiella occidentalis*  
**Common Name:** California linderiella

**Listing Status:**  
- **Federal:** None  
- **State:** None

**Rare Plant Rank:**  
- **Other Lists:** IUCN_NT-Near Threatened

**CNDDB Element Ranks:**  
- **Global:** G2G3  
- **State:** S2S3

**General Habitat:** SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:** WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 1995-01-31  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**Owner/Manager:** SRCSD-STONE LAKES NWP  
**Presence:** Presumed Extant

**Location:** NORTH SIDE OF MORRISON CREEK, ABOUT 0.9 MILES 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.

**Threats:**

**General:**  
3 COLLECTED ON 31 JAN 1995 (CASIZ #104242).

**Accuracy:** 2/5 mile  
**Area (acres):** 0

**PLSS:** T07N, R04E, Sec. 24 (M)  
**UTM:** Zone-10 N4256935 E632399  
**Latitude/Longitude:** 38.45089 / -121.48269  
**Elevation (feet):** 0

**County Summary:**  
Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
WALKER, R. & E. KOFORD - CASIZ #104242, COLLECTED “NORTH OF MORRISON CREEK LEVEE ROAD... 7/8 MILE EAST OF INTERSTATE 5.” 1995-01-31
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

**Listing Status:**  
- Federal: None  
- State: None

**Rare Plant Rank:**  
- Other Lists: IUCN_NT-Near Threatened

**CNDDDB Element Ranks:**  
- Global: G2G3  
- State: S2S3

**General Habitat:**  
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**  
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2007-10-03  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2007-10-03  
**Occurrence Rank:** Fair

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant  
**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.

**Threats:**  

**PLSS:**  
T07N, R05E, Sec. 12 (M)  
**Accuracy:** specific area  
**Area (acres):** 28

**UTM:**  
Zone-10 N4259237 E640781  
**Latitude/Longitude:** 38.47035 / -121.38620  
**Elevation (feet):** 35

**County Summary:**  
Sacramento  
**Quad Summary:**  
Florin (3812144)

**Sources:**  
- HELM06F0025 HELM, B. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2006-01-16  
- HELM07F0015 HELM, B. (HELM BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2007-10-03  
- HELM07R0014 HELM, B. (HELM BIOLOGICAL CONSULTING) - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIPODS AT THE DEANE-VINTAGE PROPERTIES 2007-10-XX
### California Department of Fish and Wildlife

**California Natural Diversity Database**

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**Scientific Name:** *Linderiella occidentalis*

**Common Name:** California linderiella

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G2G3
- **State:** S2S3

**General Habitat:**
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2006-05-01

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2006-05-01

**Occurrence Rank:** Unknown

**Owner/Manager:** PVT

**Trend:** Unknown

**Presence:** Presumed Extant

**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.

**Threats:**
DETECTED AT A DENSITY OF 50/25L ON 22 JAN 2006; OVER 100 OBSERVED BETWEEN 22 JAN & 1 MAY 2006.

**PLSS:** T06N, R05E, Sec. 10 (M)  
**Accuracy:** 1/10 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4249178 E639001  
**Latitude/Longitude:** 38.38001 / -121.40858  
**Elevation (feet):** 30

**County Summary:** Florin

**Sources:**
- HELM, B. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2006-05-01
- HELM, B. - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2006-01-22

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Map Index Number: 93294  
EO Index: 94428  
Element Code: ICBRA06010  
Occurrence Last Updated: 2014-07-29
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** Linderiella occidentalis

**Common Name:** California linderiella

**Listing Status:** Federal: None, State: None

**Rare Plant Rank:** Other Lists: IUCN_NT-Near Threatened

**CNDDB Element Ranks:** Global: G2G3, State: S2S3

**General Habitat:**
Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions.

**Micro Habitat:**
Water in the pools has very low alkalinity, conductivity, and TDS.

**Last Date Observed:** 1991-03-13

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** None

**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 mesovallescensis collected at this locality on same date.

**Threats:**
Development.

**General:**
19 collected on 13 Mar 1991 (BELK #1019 & 1022; USNM #1144059 & 1144063).

**PLSS:** T07N, R05E, Sec. 32 (M)  Accuracy: 1/10 mile  Area (acres): 0

**UTM:** Zone-10 N4252377 E635652  Latitude/Longitude: 38.40934 / -121.44630  Elevation (feet): 10

**County Summary:** Sacramento

**Quad Summary:** Florin (3812144)

**Sources:**
MUT91S0005 MUTH, D. - USNM #1144059 & 1144063, COLLECTED "4.0 MILES SOUTH OF SACRAMENTO, 2 MILES EAST OF INTERSTATE 5." 1991-03-13
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 93299
**EO Index:** 94434

**Key Quad:** Florin (3812144)
**Element Code:** ICBRA06010

**Occurrence Number:** 411
**Occurrence Last Updated:** 2014-07-29

**Scientific Name:** Linderiella occidentalis
**Common Name:** California linderiella

**Listing Status:**
- **Federal:** None
- **State:** None

**Rare Plant Rank:**
- **Other Lists:** IUCN NT-Near Threatened

**CNDDDB Element Ranks:**
- **Global:** G2G3
- **State:** S2S3

**General Habitat:**
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

**Micro Habitat:**
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

**Last Date Observed:** 2008-03-18
**Last Survey Date:** 2008-03-18

**Presence:** Presumed Extant

**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.

**Threats:**
DETECTED AT LOW TO HIGH ABUNDANCE IN 7 OUT OF 9 BASINS SAMPLED, FROM 6 FEB TO 18 MAR 2008.

**PLSS:** T07N, R05E, Sec. 02 (M)
**Accuracy:** specific area
**Area (acres):** 27

**UTM:** Zone-10 N4260698 E640311
**Latitude/Longitude:** 38.48359 / -121.39129
**Elevation (feet):** 35

**County Summary:** Florin (3812144)

**Sources:**
HIR08D0001 HIRKALA, M. (GIBSON & SKORDAL, LLC) - LISTED VERNAL POOL BRANCHIOPOD WET SEASON SURVEY 90-DAY REPORT, FEENSTRA UNIT 6A PROPERTY, SACRAMENTO COUNTY, CALIFORNIA, JUNE 2008. 2008-06-24
### Scientific Name

**Scientific Name:** Linderiella occidentalis  
**Common Name:** California linderiella

### Listing Status

**Federal:** None  
**State:** None  
**Other Lists:** IUCN_NT-Near Threatened

### CNDDDB Element Ranks

**Global:** G2G3  
**State:** S2S3  
**Other Lists:** IUCN_NT-Near Threatened

### General Habitat

**SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.**

### Micro Habitat

**WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.**

### Last Date Observed

2006-11-18

### Presence

Presumed Extant

### Location

W RIEGO ROAD AT POWERLINE ROAD, ABOUT 3 MILES NORTH OF SACRAMENTO INTERNATIONAL AIRPORT, NORTH OF SACRAMENTO.

### Detailed Location

MAPPED TO LOCATIONS OF POOLS OW217 & OW219 FROM 2007 REPORT. PART OF 1,800-ACRE LINEAR SURVEY AREA FOR PGE LINE 123 EXTENSION/LINE 407 (PHASE 1)/METRO AIR PARK DISTRIBUTION FEEDER PROJECT.

### Ecological

EPHEMERAL, ROADSIDE WATER FEATURES JOINED BY A CULVERT.

### Threats

ENERGY INFRASTRUCTURE MAINTENANCE/CONSTRUCTION.

### General

2 CYSTS FOUND IN SOIL SAMPLES TAKEN FROM 2 BASINS IN NOV 2006.

### PLSS

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### County Summary

| Sutter                | Taylor Monument (3812165), Verona (3812175) |

### Sources

HEL07R0029 HELM, B. (HELM BIOLOGICAL CONSULTING) - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE PG&E LINE 123 EXTENSION/LINE 407 (PHASE 1)/METRO AIR PARK DISTRIBUTION FEEDER MAIN PROJECT 2007-05-XX
Map Index Number: 93328
EO Index: 94474
Key Quad: Florin (3812144)
Element Code: ICBRA06010
Occurrence Number: 423
Occurrence Last Updated: 2014-07-30

Scientific Name: Linderiella occidentalis
Common Name: California linderiella

Listing Status:
- Federal: None
- State: None

Rare Plant Rank:
- Other Lists: IUCN_NT-Near Threatened

CNDDB Element Ranks:
- Global: G2G3
- State: S2S3

General Habitat:
SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro Habitat:
WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Last Date Observed: 2003-02-17
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2003-02-17
Occurrence Rank: Unknown
Owner/Manager: PVT
Trend: Unknown
Presence: Presumed Extant

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.

Threats:

General:
DETECTED IN ONE POOL ON 17 FEB 2003.

Area (acres): 0
Accuracy: 80 meters
PLSS: T06N, R05E, Sec. 08 (M)
Latitude/Longitude: 38.38649 / -121.45508
UTM: Zone-10 N4249829 E634927
Elevation (feet): 17
County Summary: Florin (3812144)

Sacramento

Sources:
FAR03F0019 FARMER, M. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2003-02-17
### Lepidurus packardi

**Common Name:** vernal pool tadpole shrimp

**Scientific Name:** *Lepidurus packardi*

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**Occurrence Last Updated:** 1996-07-08

**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:**
Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.

**Micro Habitat:**
Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.

**Last Date Observed:** 1995-02-28

**Last Survey Date:** 1995-02-28

**Owner/Manager:** PVT-RMC LONESTAR

**Presence:** Presumed Extant

**Location:**
0.6 mile NNW of the intersection of Eagles Nest Road and Douglas Road, NE of (former) Mather Air Force Base.

**Detailed Location:**
Ecological:
HABITAT CONSISTS OF A VERNAL POOL ON RED BLUFF LOAM SOIL. DOMINANT PLANTS INCLUDE RANUNCULUS BONARIENSIS VAR. TRISEPALUS, ERYNGIUM VASEYI, LIMNANTHES ALBA, AND ELEOCHARIS MACROSTACHYA.

**Threats:**
POSSIBLE THREAT OF GRAVEL MINING - SITE IS OWNED BY A GRAVEL MINING COMPANY, CURRENTLY MINING NORTH AND WEST OF SITE.

**General:**
1 EXUVIUM COLLECTED ON 28 FEBRUARY 1995 AND DEPOSITED AT CAS.

**PLSS:**
- T08N, R06E, Sec. 12 (M)

**Accuracy:**
80 meters

**Area (acres):** 0

**UTM:**
- Zone-10 N4270325 E651241

**Latitude/Longitude:**
38.56852 / -121.26395

**Elevation (feet):** 125

**County Summary:**
Sacramento
Carmichael (3812153)

**Sources:**

- FIE95F0001  FIELDS, W. (HYDROZOOLOGY) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1995-02-28
- FIE95U0001  FIELDS, W. (HYDROZOOLOGY) - FORMAL LETTER TO DFG FOR VERNAL POOL CRUSTACEAN SURVEY ON RMC LONESTAR LAND - ATTACHED TO FIE95F0001 & FIE95F0002. 1995-05-30
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

**Map Index Number:** 82551  
**Key Quad:** Buffalo Creek (3812152)  
**Occurrence Number:** 12  
**EO Index:** 2105  
**Element Code:** ICBRA10010  
**Occurrence Last Updated:** 2015-01-09

**Scientific Name:** *Lepidurus packardi*  
**Common Name:** vernal pool tadpole shrimp

**Listing Status:**  
- **Federal:** Endangered  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3

**General Habitat:** INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:** POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2005-01-21  
**Last Survey Date:** 2005-01-21  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:** NOTHWEST OF THE JUNCTION OF FLORIN RD & SUNRISE BLVD, ON NORTH & SOUTH SIDES OF JACKSON RD (HWY 16).

**Detailed Location:** GRECH/TRIANGLE GRECH PROPERTY. 1995 DETECTIONS IN POOLS #42, 41, 44, 70B, 72, 83C, & 200. 1996 DETECTIONS IN E 1/2 OF SE 1/4 & NW 1/4 OF NE 1/4 SEC 31. 2005 DETECTION LOCATIONS UNKNOWN; SOMEWHERE WITHIN PROPERTY.

**Ecological:** HARDPAN VERNAL POOLS, SEASONAL WETLANDS, CUTOFF DRAINAGE CHANNEL, AND STOCKPOND IN NON-NATIVE GRASSLAND USED FOR GRAZING. AERIAL IMAGERY SINCE TIME OF ORIGINAL SURVEYS SHOWS HABITAT MODIFICATION FROM EXPANDED MINING OPERATIONS.

**Threats:** RURAL AGRICULTURAL USES AND GRAVEL MINING.


**PLSS:** T08N, R07E, Sec. 31 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 196

**UTM:** Zone-10 N4263033 E652768  
**Latitude/Longitude:** 38.50257 / -121.24802  
**Elevation (feet):** 120

**County Summary:** Sacramento  
**Sloughhouse (3812142), Buffalo Creek (3812152), Carmichael (3812153)**

**Sources:**

- LSA06R0001 LSA ASSOCIATES, INC. - 2005 ANNUAL REPORT TO THE U.S. FISH AND WILDLIFE SERVICE FOR SECTION 10 (A) (R) (A) PERMIT NUMBER TE-797234-6 ISSUED TO LSA ASSOCIATES, INC. 2006-01-31

- MUT96F0004 MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1996-XX-XX

- MUT96F0005 MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1996-XX-XX

- MUT96F0006 MUTH, D. (LSA ASSOCIATES, INC.) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1996-XX-XX

- SUG95R0001 SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX

- SUG95R0002 SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1994-95. 1995-10-30
## Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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### Scientific Name:  *Lepidurus packardi*  
**Common Name:** vernal pool tadpole shrimp

### Listing Status:  
**Federal:** Endangered  
**State:** None

### CNDDB Element Ranks:  
**Global:** G3  
**State:** S2S3

### General Habitat:  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

### Micro Habitat:  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNFLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

### Last Date Observed: | 1995-03-31 | Occurrence Type: | Natural/Native occurrence |
### Last Survey Date: | 1995-03-31 | Occurrence Rank: | Unknown |
### Owner/Manager: | PVT-PIPE TRADES TRUST FUND | Trend: | Unknown |
### Presence: | Presumed Extant |

### Location:  
1.2 KM ESE OF ELDER CREEK ROAD X FLORIN PERKINS ROAD; SE OF THE FORMER SACRAMENTO ARMY DEPOT.

### Detailed Location:  
ELDER CREEK PROPERTY. MAPPED TO LOCATIONS GIVEN IN 1995 REPORT FOR OCCUPIED POOLS (#21, 38, 41, 43, 44, 46, 50, 53, 86).

### Ecological:  
HARDPAN VERNAL POOLS IN ANNUAL GRASSLAND. BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS, TREE FROG ALSO PRESENT.

### Threats:  
RURAL AGRICULTURE; URBAN DEVELOPMENT OCCURRING IN VICINITY.

### General:  
FEWER THAN 50 FOUND IN 4 POOLS, MORE THAN 50 IN 6 OF 90 POOLS SAMPLED 21 FEB 1995. FEWER THAN 50 IN 1 POOL ON 31 MAR 1995. 4 COLLECTED AND DEPOSITED IN CAS (CASIZ #103118, 103120, 103121 & 103124).

### PLSS:  
T08N, R05E, Sec. 36 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 16

### UTM:  
Zone-10 N4263165 E641409  
**Latitude/Longitude:** 38.50564 / -121.37821  
**Elevation (feet):** 40

### Sacramento  
Carmichael (3812153), Sacramento East (3812154)

### Sources:  
**BAL95S0015**  
BALFOUR, P. - CASIZ #103118, 103120, & 103121, COLLECTED FROM "SW1/4 OF NE 1/4 SECTION 36; T08N R05E." 1995-02-21

**BAL95S0016**  
BALFOUR, P. - CASIZ #103124, COLLECTED FROM "NW1/4 OF NE1/4 SECTION 36; T08N R05E." 1995-02-21

**SUG95R0001**  
SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:** Federal: Endangered

**Rare Plant Rank:** Other Lists: IUCN_EN-Endangered

**CNDDB Element Ranks:**

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**General Habitat:**

INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**

POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1996-03-21

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2010-07-07

**Occurrence Rank:** Unknown

**Owner/Manager:** PVT-GRANITE CONSTRUCTION CO

**Presence:** Presumed Extant

**Location:**

GRANITE-TEICHERT PILOT PROJECT, SW OF MATHER AFB; S OF KIEFER BLVD, E OF BRADSHAW RD, N JACKSON RD, & W OF EXCELSIOR RD.

**Detailed Location:**


**Ecological:**

NATURAL & CREATED VERNAL POOLS IN GRAZED ANNUAL GRASSLAND USED FOR AGGREGATE MINING. AERIAL PHOTOS SINCE THE TIME OF SURVEY SHOW HABITAT DESTRUCTION FROM EXPANSION OF ROADS & MINING; AND THAT THE "PRESERVE" PARCEL WAS PLOWED OR DISKED.

**Threats:**

ROAD BUILDING, GRAVEL MINING, PLOWING/DISKING.

**General:**


**PLSS:** T08N, R06E, Sec. 22 (M)

**UTM:** Zone-10 N4266264 E646754

**County Summary:** Sacramento

**Accuracy:** nonspecific area

**Latitude/Longitude:** 38.53268 / -121.31628

**Elevation (feet):** 70

**Area (acres):** 1,421

**Quad Summary:** Carmichael (3812153)
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- Federal: Endangered
- State: None

**CNDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1996-03-21
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1996-03-21
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT-GRANITE CONSTRUCTION CO

**Presence:** Presumed Extant

**Location:** ALONG NORTH EDGE OF KIEFER BLVD, 0.7 KM WNW OF KIEFER BLVD AT MATHER PARKWAY.

**Detailed Location:**
GRANITE-TEICHERT PILOT PROJECT SITE (PART). 1995: 10 TOTAL WATERBODIES SURVEYED, DISCREPANCY BETWEEN MAP AND FIELD SURVEY FORM; MAPPED ACCORDING TO MAP NOT SURVEY FORM. 1996: 10 TOTAL WATERBODIES SURVEYED.

**Ecological:**
BOTH CONSTRUCTED & HISTORIC HARDPAN VERNAL POOLS IN ANNUAL GRASSLAND; WETLAND COMPENSATION/MITIGATION PRESERVE. LINDERIELLA OCCIDENTALIS ALSO PRESENT.

**Threats:**

**General:**
50+ OBSERVED IN POOL #10, 5 FEB, & IN POOLS #9 & 10 ON 21 FEB 1995; 2 COLLECTED AND DEPOSITED IN CAS (CASIZ #103113 & 103122). FEWER THAN 50 ADULTS OBSERVED IN POOLS #7, 9 & 10, 21 MAR 1996.

**PLSS:**
- T08N, R06E, Sec. 22 (M)

**Accuracy:** specific area
**Area (acres):** 2

**UTM:**
- Zone-10 N4266913 E648056

**Latitude/Longitude:** 38.53832 / -121.30122
**Elevation (feet):** 70

**County Summary:**
Sacramento
Carmichael (3812153)

**Sources:**
- BALFOUR, P. - CASIZ #103113 & 103122. COLLECTED FROM "NE 1/4 OF NE 1/4 SECTION 22; T08N R06E." 1995-02-21
- SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
- SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1994-95, 1995-10-30
- SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED BRANCHIOPODS CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933. 1996-XX XX
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**

- **Federal:** Endangered
- **State:** None

**CNDDB Element Ranks:**

- **Global:** G3
- **State:** S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2013-01-29

**Occurrence Type:** Natural/Native occurrence

**Activity Rank:** Poor

**Owner/Manager:** SRCSD, PVT-WESTERN PACIFIC RR

**Presence:** Presumed Extant

**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.

**Threats:**

**General:**

**PLSS:** T07N, R05E, Sec. 20 (M)

**Accuracy:** nonspecific area

**Area (acres):** 1,120

**UTM:** Zone-10 N4256457 E635064

**Latitude/Longitude:** 38.44619 / -121.45225

**Elevation (feet):** 15

**County Summary:**
Sacramento
Florin (3812144)

**Sources:**
- KOF92U0001 KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
- LEA93F0010 LEACH, S. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1993-02-23
- PET00F0002 PETRASH, S. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2000-XX-XX
- PIM12F0001 PIMENTEL, E. (AECOM) - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI 2012-12-28
- PIM13F0001 PIMENTEL, E. (AECOM) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2013-01-29
- PIM13F0003 PIMENTEL, E. (AECOM) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS 2013-01-29
- SUG93U0001 SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
- WAL95S0022 WALKER, R. & E. KOFORD - CASIZ #103315, COLLECTED "200' SOUTHWEST OF SACRAMENTO MUNICIPAL UTILITY DISTRICT SWITCHYARD, 75 FEET WEST OF UNION PACIFIC RAILROAD TRACKS." 1995-02-15
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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- Federal: Endangered
- State: None

**CNDDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
INHIBITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1993-02-02

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Fair

**Trend:** Unknown

**Owner/Manager:** BLM

**Presence:** Presumed Extant

**Location:**
FORMER MATHER AIR FORCE BASE; WESTERN PORTION OF TRIANGLE FORMED BY DOUGLAS RD, SUNRISE BOULEVARD & FOLSOM SOUTH CANAL.

**Detailed Location:**
LAND TO THE NORTH AND EAST IS PRIVATELY-OWNED FOR INDUSTRIAL/BUSINESS; THE FORMER MATHER AFB IS TO THE SOUTH AND WEST; EAST PARCEL IS UNDEVELOPED.

**Ecological:**
GRASSLANDS.

**Threats:**
IDENTIFIED FOR EXCHANGE.

**General:**
MANY INDIVIDUALS OF BOTH SPECIES, *LEPIDURUS PACKARDI* AND *LINDERIELLA OCCIDENTALIS*, OBSERVED; COLLECTION MADE.

**PLSS:** T08N, R07E, Sec. 07 (M)

**Accuracy:** specific area

**Area (acres):** 20

**UTM:** Zone-10 N4269191 E652586

**Latitude/Longitude:** 38.55807 / -121.24877

**Elevation (feet):** 140

**County Summary:**
Sacramento

**Quad Summary:**
Buffalo Creek (3812152), Carmichael (3812153)

**Sources:**
CRA93F0002 CRANSTON, P. (U.S. BUREAU OF LAND MANAGEMENT) - FIELD SURVEY FORM FOR LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1993-02-02
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**Scientific Name:** *Lepidurus packardi*  
**Common Name:** vernal pool tadpole shrimp

**Listing Status:**  
Federal: Endangered  
State: None

**CNDDB Element Ranks:**  
Global: G3  
State: S2S3

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1992-04-03  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1992-04-03  
**Occurrence Rank:** Poor

**Owner/Manager:** PVT-SPRR  
**Trend:** Unknown

**Location:**  
RAILROAD DITCH AT 47TH AVENUE (ELDER CREEK RD) & SPTRR, NEAR POWER INN ROAD; NEAR SW CORNER OF SACRAMENTO ARMY DEPOT.

**Detailed Location:**  
SPTRR = SOUTHERN PACIFIC TRACTION RAILROAD. MAPPED TO LOCATION DESCRIBED BY KOFORD. SUGNET LOCATION GIVEN ONLY AS TRS SEC 26, ATTRIBUTED HERE. 2011: POOL ON N SIDE OF ELDER CK RD, ABOUT 0.4 MI E OF RR CROSSING, (BT COLLINS SITE) SURVEYED.

**Ecological:**  
RAILROAD DITCH ("ROADSIDE DITCH" IN SUGNET RECORDS). BRANCHINECTA LYNCHI AND LINDERIELLA OCCIDENTALIS ALSO OBSERVED. SURROUNDING AREA IS HIGHLY URBANIZED.

**Threats:**  
**General:**  
KOFORD OBSERVED TADPOLE SHRIMP DURING SURVEY IN SPRING OF 1992 (SUGNET ID #145, FROM SAME DATE, IS PROBABLY ANOTHER RECORD OF THIS DETECTION). NOT FOUND IN NEARBY POOL DURING 2011 SURVEY.

**PLSS:**  
T08N, R05E, Sec. 35 (M)  
Accuracy: 1/10 mile  
Area (acres): 0

**UTM:**  
Zone-10 N4263661 E639314  
Latitude/Longitude: 38.51043 / -121.40213  
Elevation (feet): 40

**County Summary:**  
Sacramento East (3812154)

**SOURCES:**  
KOF92U0001 KOFOED, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX  
SUG93U0001 SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX  
WIT11U0002 WITHERAM, C. - BT COLLINS ARMY RESERVE BRANCHIPOD MONITORING, 90-DAY REPORT, RECOVERY PERMIT TE-799570-3, 2010-TA-0243 2011-05-17
**Lepidurus packardi**

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**Occurrence Report**

**Location:**
AT RAILROAD TRACKS NEAR FRUITRIDGE ROAD AT POWER INN ROAD; NEAR NORTHWEST CORNER OF SACRAMENTO ARMY DEPOT.

**Detailed Location:**
The railroad tracks are part of Southern Pacific traction railroad, which runs SE from corner of 65th Street and Highway 50.

**Ecological:**
Turbid pool. In aerial photos it appears that pools form along either side of the railroad tracks from Fruitridge south to the Morrison Creek Canal.

**Threats:**
Area heavily developed.

**General:**
Tadpole shrimp observed by E.J. Koford during survey in spring of 1992; Linderiella occidentalis also present.

**PLSS:**
- T08N, R05E, Sec. 26 (M)

**Accuracy:** 1/10 mile

**Area (acres):** 0

**UTM:**
Zone 10 N4265266 E638840

**Latitude/Longitude:** 38.52497 / -121.40724

**Elevation (feet):** 35

**County Summary:**
Sacramento

**Quad Summary:**
Sacramento East (3812154)

**Sources:**
KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 93180
Key Quad: Florin (3812144)
Occurrence Number: 68

EO Index: 12533
Element Code: ICBRA10010
Occurrence Last Updated: 2015-01-29

Scientific Name: Lepidurus packardi
Common Name: vernal pool tadpole shrimp

Listing Status: Federal: Endangered
State: None

Rare Plant Rank: None
Other Lists: IUCN_EN-Endangered

CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat:
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Micro Habitat:
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

Last Date Observed: 1995-01-25
Last Survey Date: 1995-01-25

Occurrence Type: Natural/Native occurrence
Occurrence Rank: Poor
Trend: Unknown

Owner/Manager: PVT-UNION PACIFIC RR, SMUD

Presence: Presumed Extant

Location:
ALONG WESTERN PACIFIC RAILROAD, FROM FLORIN RD TO ABOUT 0.4 MILES SOUTH, WEST OF FRANKLIN BLVD, SACRAMENTO.

Detailed Location:

Ecological:

Threats:
DEVELOPMENT.

General:

PLSS:
T07N, R05E, Sec. 06 (M)

Accuracy: nonspecific area
Area (acres): 16

UTM:
Zone-10 N4261935 E633354

Latitude/Longitude: 38.49580 / -121.47079
Elevation (feet): 15

County Summary:
Sacramento
Florin (3812144)

Quad Summary:

Sources:
KOF15U0001 KOFORD, E. (PG&E) - EMAIL CORRESPONDENCE REGARDING VERNAL POOL TADPOLE SHRIMP OCCURRENCES IN THE VICINITY OF GARDENALDE ROAD. 2015-01-26
KOF92U0001 KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIIDURUS PACKARDI 1992-04-XX
MAR95S0013 MARTIN, D. & J. MARTINI - CASIZ #94830, COLLECTED “S OF FLORIN RD, W OF UNION PACIFIC RAILROAD, NE OF POCKET SUBSTATION.” 1995-01-25
MAR95S0014 MARTIN, D. & J. MARTINI - CASIZ #94831, COLLECTED “S OF FLORIN RD, E OF UNION PACIFIC RAILROAD, W OF LUTHER BURBANK HIGH SCHOOL.” 1995-01-25
SUG93U0001 SIGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Lepadurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:**
Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.

**Micro Habitat:**
Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.

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<td>PVT-SPRR</td>
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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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**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.

**Threats:**
Area is heavily developed.

**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).

**PLSS:**
- **T07N, R05E, Sec. 02 (M)**

**Accuracy:** 1/10 mile

**UTM:**
- **Zone-10 N4262053 E639822**

**Latitude/Longitude:** 38.49587 / -121.39662

**Elevation (feet):** 35

**Area (acres):** 0

**County Summary:**
Sacramento

**Quad Summary:**
Florin (3812144)

**Sources:**
- KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
- SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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<td>General Habitat:</td>
<td>INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.</td>
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<td>Micro Habitat:</td>
<td>POOLS COMMONLY FOUND IN GRASS BOTTOMED SAWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED &amp; HIGHLY TURBID.</td>
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<td>Location:</td>
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<td>Detailed Location:</td>
<td>TURBID POOL.</td>
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<td>Sources:</td>
<td>KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS &amp; LEPIDURUS PACKARDI 1992-04-XX</td>
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Map Index Number: 34802
Key Quad: Elk Grove (3812143)
Occurrence Number: 71
EO Index: 11938
Element Code: ICBRA10010
Occurrence Last Updated: 2011-06-29

Scientific Name: Lepidurus packardi
Common Name: vernal pool tadpole shrimp

Listing Status:
Federal: Endangered
State: None

CNDDB Element Ranks:
Global: G3
State: S2S3

General Habitat:
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Micro Habitat:
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

Last Date Observed: 1992-04-02
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1992-04-02
Occurrence Rank: Unknown

Owner/Manager: PVT-SACRAMENTO VLY CONSERVANCY
Trend: Unknown

Presence: Presumed Extant

Location:
PART OF ARROYO SECO (FLORIN MITIGATION BANK), NE CORNER OF EXCELSIOR ROAD & FLORIN ROAD, 4.1 MI E OF FLORIN PO, SAC CO.

Detailed Location:
LOCATION STATED AS "VERNAL POOL NEAR NORTHEAST CORNER OF EXCELSIOR AND FLORIN." MAPPED ACCORDING TO STATED LOCATION. 1993 SUGNET REPORT: VERNAL POOL SOMEWHERE IN SECTION 35.

Ecological:
VERNAL POOL.

Threats:
General:
KOFORD OBSERVED TADPOLE SHRIMP HERE DURING SURVEY ON 2 APRIL 1992. UNKNOWN NUMBER OF LEPIDURUS PACKARDI OBS 2 APR 1992 IN VERNAL POOL SOMEWHERE IN SECTION 35, (SUGNET #150) - POSSIBLY SAME SIGHTING AS KOFORD.

PLSS: T08N, R06E, Sec. 35 (M)  Accuracy: 1/5 mile  Area (acres): 0
UTM: Zone-10 N4262458 E648688  Latitude/Longitude: 38.49808 / -121.29492  Elevation (feet): 110

County Summary: Quad Summary:
Sacramento  Elk Grove (3812143), Carmichael (3812153)

Sources:
KOFORD, E. (EBASCO) - LETTER TO USFWS REGARDING ADDITIONAL LOCALITIES OF FAIRY SHRIMP IN SACRAMENTO: BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 1992-04-XX
SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
### Scientific Name: \textit{Lepidurus packardi}

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Last Date Observed:** 2003-02-17

**Last Survey Date:** 2003-02-17

**Owner/Manager:** PVT-GRUPE DEVELOPMENT CO

**Presence:** Presumed Extant

**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: 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.

**Threats:**

**PLSS:** T06N, R05E, Sec. 06 (M)

**Accuracy:** specific area

**Area (acres):** 570

**UTM:** Zone-10 N4250798 E633934

**Latitude/Longitude:** 38.39538 / -121.46627

**Elevation (feet):** 15

**County Summary:** Sacramento

**Quad Summary:** Florin (3812144)
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Sources:

FAR03F0019  FARMER, M. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2003-02-17
HUD02F0008  HUDDLESTON, R. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2002-02-04
KWA95S0006  KWAN, K. - CASIZ #103131, COLLECTED AT "NE 1/4 OF SE 1/4 SECTION 7; T6N R5E." 1995-02-14
KWA95S0007  KWAN, K. - CASIZ #103136, COLLECTED FROM "NE 1/4 OF SW 1/4 SECTION 7; T6N R5E." 1995-02-14
SUG93U0001  SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
SUG95R0001  SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933 1995-06-XX
SUG95R0002  SUGNET & ASSOCIATES - CORRECTIONS TO ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT #PRT-795933, 1994-95. 1995-10-30
SUG96R0001  SUGNET & ASSOCIATES - ANNUAL REPORT TO THE USFWS REGARDING SURVEYS FOR LISTED BRANCHIOPODS CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NUMBER PRT-795933. 1996-XX-XX
SUG97R0001  SUGNET & ASSOCIATES - 1997 ANNUAL REPORT TO THE U.S. FISH & WILDLIFE SERVICE REGARDING SURVEYS FOR LISTED CRUSTACEA CONDUCTED UNDER FEDERAL FISH AND WILDLIFE PERMIT NO. PRT-795933 1997-XX-XX
SUG97R0002  SUGNET & ASSOCIATES - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA AT THE ELLIOTT RANCH MITIGATION SITE WATERFOWL STUDY AREA, SACRAMENTO COUNTY, CALIFORNIA 1997-05-03
SUG98F0002  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-01-25
SUG98F0003  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-01-25
SUG98F0004  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-01-25
SUG98F0005  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-02-08
SUG98F0006  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-02-08
SUG98F0007  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-01-25
SUG98F0008  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-01-25
SUG98F0009  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-01-25
SUG98F0010  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-02-08
SUG98F0011  SUGNET & ASSOCIATES - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-02-08
SUG98R0003  SUGNET & ASSOCIATES - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY-LISTED CRUSTACEA AT THE ELLIOTT RANCH MITIGATION SITE WATERFOWL STUDY AREA, SACRAMENTO COUNTY, CALIFORNIA. 1998-10-08
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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1997-02-12

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Fair

**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
SOUTH OF LAGUNA CREEK, 0.5 MILE WEST OF VINEYARD BLVD, 4 MILES NE OF ELK GROVE.

**Detailed Location:**
1993: DETECTION SOMEWHERE IN TRS SECTION 16. 1997: MAPPED TO GIVEN SITE, LOCATED NORTH OF A LARGE SUBDIVISION BETWEEN VINEYARD LANE AND CENTRAL CALIFORNIA TRACTION RAILROAD TRACKS.

**Ecological:**
1993: AIR PHOTOS SHOW THAT SE PORTION OF SECTION 16 WAS ALREADY BEING GRADED AROUND THE TIME OF SURVEY. 1997: FOUND IN GRAZED SEASONAL WETLAND FORMED BY EARTH EXCAVATION; SOME VERNAL POOL INDICATOR PLANTS PRESENT BUT MOSTLY NON-NATIVES.

**Threats:**
DEVELOPMENT.

**General:**
FOUND IN 1 FEATURE INSPECTED IN SECTION 16 IN 1993 (SUGNET RECORD #141). 7 ADULTS OBSERVED (6 DEAD, 1 ALIVE) ON 12 FEB 1997.

**PLSS:**
- **T07N, R06E, Sec. 16 (M)**

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:**
- **Zone-10 N4258716 E646185**

**Latitude/Longitude:**
- 38.46479 / -121.32439

**Elevation (feet):** 65

**County Summary:**
Sacramento
Elk Grove (3812143)

**Sources:**
- SUG93U0001  SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
- WOL97F0001  WOLFF, D. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1997-02-12
### Scientific Name: Lepidurus packardi

**Listed Status:**
- Federal: Endangered
- State: None

**CNDDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.

**Micro Habitat:**
Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.

**Last Date Observed:** 1993-03-12
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1993-03-12
**Occurrence Rank:** Unknown

**Presence:** Presumed Extant
**Trend:** Unknown

**Location:**
 Vicinity of Grant Line Road at Mosher Rd intersection, about 1.25 miles NE of I-99 at Grant Line, Elk Grove.

**Detailed Location:**
1993: Detection location given only as TRS Section 8 (Most likely NW Quarter of Sec 8 West of Grant Line). 2005 & 2006: Surveys of 28-acre Fieldstone South Property in NE 1/4 Sec 8 & SE 1/4 Sec 5.

**Ecological:**
Manmade roadside ditch.

**Threats:**
Air photos taken since the 1993 detection show residential development.

**General:**
Found in the 1 feature inspected, 12 Mar 1993 (Sugnet Record #129). Not found in dry-season survey in 2005 or wet-season survey in 2006.

**PLSS:**
T06N, R06E, Sec. 08 (M)

**UTM:**
Zone-10 N4250327 E644472

**County Summary:**
Sacramento

**Planned Survey:**
Elk Grove (3812143)

**Accuracy:**
3/5 mile

**Area (acres):**
0

**Latitude/Longitude:**
38.38950 / -121.34574

**Elevation (feet):**
50

### Sources:
- HELM05U0008 HELM, B. - Dry-Season Sampling for Federally Listed Large Branchiopods at the Fieldstone South Property. 2005-11-XX
- HELM06U0010 HELM, B. - Wet-Season Sampling for Federally Listed Large Branchiopods at the Fieldstone South Property. 2006-05-XX
- SUG93U0001 SUGNET & ASSOCIATES - Printout of location (T-R-S) of Fairy Shrimp Sampling. (Obtained from the U.S. Fish and Wildlife Service) 1993-XX-XX
### Lepidurus packardi

**Map Index Number:** 33681  
**EO Index:** 30428  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 88  
**Occurrence Last Updated:** 2014-07-15  
**Scientific Name:** Lepidurus packardi  
**Common Name:** vernal pool tadpole shrimp

#### Listing Status: Federal: Endangered  
State: None  
**Rare Plant Rank:** None

**CNDDDB Element Ranks:**  
Global: G3  
State: S2S3

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BottomED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1992-04-02  
**Last Survey Date:** 1992-04-02  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  
**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.

**Threats:**  
OBSERVED IN 2 OF 3 ROADSIDE DITCHES SAMPLED IN TRS SECTION 8, 2 APR 1992 (SUGNET RECORD #131).

**PLSS:** T07N, R05E, Sec. 08 (M)  
**UTM:** Zone-10 N4259515 E634747  
**Accuracy:** nonspecific area  
**Latitude/Longitude:** 38.47379 / -121.45529  
**Area (acres):** 639  
**Elevation (feet):** 15

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
ROZUMOWICZ, B. (AREA WEST ENVIRONMENTAL, INC.) - WET-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE FRANKLIN POINT PROJECT 2007-09-XX

SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
# Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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**Scientific Name:** *Lepidurus packardi*  
**Common Name:** vernal pool tadpole shrimp

**Listing Status:**  
- Federal: Endangered
- State: None

**CNDDB Element Ranks:**  
- Global: G3
- State: S2S3

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

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**Presence:** Presumed Extant

**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.

**Threats:**  
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.

**PLSS:** T07N, R05E, Sec. 02 (M)  
**UTM:** Zone-10 N4260675 E640264

**Accuracy:** specific area  
**Latitude/Longitude:** 38.48338 / -121.39184  
**Area (acres):** 18  
**Elevation (feet):** 40

**County Summary:**  
Sacramento  
Florin (3812144)

**Sources:**
- HEL08F0014 HELM, B. (HELM BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2008-07-14
- HIR08D0001 HIRKALA, M. (GIBSON & SKORDAL, LLC) - LISTED VERNAL POOL BRANCHIOPOD WET SEASON SURVEY 90-DAY REPORT, FEENSTRA UNIT 6A PROPERTY, SACRAMENTO COUNTY, CALIFORNIA, JUNE 2008, 2008-06-24
- SUG93U0001 SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
- WOO08R0001 WOOD, T. (HELM BIOLOGICAL CONSULTING) - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE FEENSTRA UNIT 6A PROPERTY 2008-07-14
Map Index Number: 33686
EO Index: 30620
Key Quad: Elk Grove (3812143)
Occurrence Number: 90
Occurrence Last Updated: 2015-01-29
Scientific Name: Lepidurus packardi
Common Name: vernal pool tadpole shrimp
Listing Status: Federal: Endangered
State: None
Rare Plant Rank: Other Lists: IUCN_EN-Endangered
CNDDB Element Ranks: Global: G3
State: S2S3
General Habitat: INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.
Micro Habitat: POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.
Last Date Observed: 2007-02-27
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2007-02-27
Occurrence Rank: Fair
Owner/Manager: PVT, UNKNOWN
Trend: Unknown
Presence: Presumed Extant
Location: NORTH OF GERBER ROAD, SOUTH OF FLORIN ROAD, EAST OF ELK GROVE-FLORIN ROAD, ABOUT 5 MILES NORTH OF ELK GROVE.
Threats: DEVELOPMENT.
PLSS: T07N, R06E, Sec. 05 (M)
Accuracy: nonspecific area
Area (acres): 1,920
UTM: Zone-10 N4261365 E644417
Latitude/Longitude: 38.48894 / -121.34410
Elevation (feet): 60
County Summary: Sacramento
Quad Summary: Elk Grove (3812143)
### Sources:

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<td>HEL05U0001</td>
<td>HELM, B. - DRY-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE NORTH VINEYARD STATION PROPERTY, 2005-12-XX</td>
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<td>HEL05U0006</td>
<td>HELM, B. - DRY-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE TLC-NORTH VINEYARD/CASTALANO PROPERTY, 2005-12-XX</td>
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<td>HELM, B. (HELM BIOLOGICAL CONSULTING) - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE EBIG 40-REYNEN PROPERTY 2006-09-XX</td>
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<td>HELM, B. (HELM BIOLOGICAL CONSULTING) - FEDERALLY-LISTED LARGE BRANCHIOPODS SAMPLING AT KWAN-ELDER CREEK ESTATES 2007-06-XX</td>
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**Scientific Name:** Lepidurus packardi  
**Common Name:** vernal pool tadpole shrimp

**Listing Status:**  
- Federal: Endangered  
- State: None  
**Rare Plant Rank:**  
- Other Lists: IUCN_EN-Endangered

**CNDDB Element Ranks:**  
- Global: G3  
- State: S2S3

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1993-03-02

**Last Survey Date:** 1993-03-02

**Owner/Manager:** UNKNOWN

**Presence:** Possibly Extirpated

**Location:**  
EAST OF BRADSHAW RD, WEST OF EXCELSIOR RD, NORTH OF CALVINE RD, NNE OF ELK GROVE.

**Detailed Location:**  
1993: LOCATION GIVEN ONLY AS TRS SECTIONS 15. 2005: SMALL PARCELS IN SW 1/4 & NE 1/4 SEC 16 SURVEYED.

**Ecological:**  
1993: NATURAL VERNAL POOLS; AIR PHOTOS SHOW EXTANT DEVELOPMENT IN SW 1/4 OF SECTION; SINCE TIME OF SURVEY DEVELOPMENT HAS SPREAD ACROSS MOST OF SECTION. 2005: SURVEYS ON PRIVATE PROPERTIES LIKELY BEING CONSIDERED FOR DEVELOPMENT.

**Threats:**  
DEVELOPMENT.

**General:**  
FOUND IN 29 OF 49 FEATURES INSPECTED IN SEC 15 IN 1993 (SUGNET RECORD NUMBER 140). NOT FOUND DURING DRY-SEASON SURVEYS IN 2005 IN SECTION 16 TO THE WEST.

**PLSS:** T07N, R06E, Sec. 15 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 689

**UTM:** Zone-10 N4258238 E647714  
**Latitude/Longitude:** 38.46023 / -121.30697  
**Elevation (feet):** 65

**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Sources:**

- HELM05U0005 HELM, B. - DRY-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIPODS AT THE GRAMMERCY PARK PROJECT. 2005-12-XX
- HELM05U0026 HELM, B. - DRY-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIPODS AT THE WILDKAW SOUTH PROPERTY. 2005-09-XX
- HELM05U0034 HELM, B. - DRY-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIPODS AT THE GARFOOT GREENS PROPERTY. 2005-10-XX
- SUG93U0001 SUGNET & ASSOCIATES. PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- Federal: Endangered
- State: None

**CNDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1998-01-28

**Last Survey Date:** 1998-01-28

**Owner/Manager:** PVT-CONSERVATION RESOURCES

**Presence:** Presumed Extant

**Location:**
ARROYO SECO SITE, AREA 0.8 MILES ENE OF FLORIN ROAD AT EXCELSIOR ROAD, SACRAMENTO COUNTY.

**Detailed Location:**
ARROYO SECO MITIGATION BANK SITE. NORTH OF FLORIN ROAD AND SOUTH OF ROLLING MEADOWS DR. MAPPED TO MAP PROVIDED (WHI98F0006). SUGNET REPORT: VERNAL POOL SOMEWHERE IN SECTION 35.

**Ecological:**
NATURAL VERNAL POOL COMMUNITY.

**Threats:**
**General:**
LEPIDURUS PACKARDI OBSERVED ON 2 APR 1992 IN A NATURAL VERNAL POOL (SUGNET #150). 100'S OBS IN 7 LOCATIONS DURING 28 JAN 1998 SURVEY.

**PLSS:** T08N, R06E, Sec. 35 (M)

**Accuracy:** nonspecific area

**Area (acres):** 27

**UTM:** Zone-10 N4262694 E649653

**Latitude/Longitude:** 38.50005 / -121.28380

**Elevation (feet):** 120

**County Summary:**
Sacramento Elk Grove (3812143), Carmichael (3812153)

**Sources:**
- SUG93U0001 SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
- WHI98F0006 WHITNEY, K. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-01-28
### Occurrence Report
**California Department of Fish and Wildlife**
**California Natural Diversity Database**

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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- Federal: Endangered
- State: None

**CNDDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Occurrence Number:** 113

**Occurrence Last Updated:** 2015-01-09

**Map Index Number:** 82549

**EO Index:** 31890

**Element Code:** ICBRA10010

**Occurrence Last Updated:** 2015-01-09

**Last Date Observed:** 2005-01-21

**Last Survey Date:** 2005-01-21

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
SOUTHWEST CORNER OF EAGLES NEST RD & JACKSON RD (HWY 16), INTERSECTED BY FRYE CREEK, SOUTH OF MATHER AFB.

**Detailed Location:**
1996: EAST 1/2 OF NE 1/4 SECTION 36. 2000: WEST 1/2 OF NE 1/4 SECTION 36. 2005 DETECTION LOCATIONS UNKNOWN; SOMEWHERE WITHIN PROPERTY.

**Ecological:**
NORTHERN HARDPAN VERNAL POOLS SURROUNDED BY NON-NATIVE GRASSLAND. LINDERIELLA OCCIDENTALIS & BRANCHINECTA LYNCHI WERE ALSO OBSERVED IN POOLS HERE. AERIAL IMAGERY SINCE TIME OF ORIGINAL SURVEYS SHOWS MINE EXPANSION.

**Threats:**
THREATENED BY GRAVEL MINING.

**General:**

**PLSS:**
- T08N, R06E, Sec. 36 (M)

**Accuracy:** nonspecific area

**Area (acres):** 158

**UTM:** Zone-10 N4263557 E651209

**Latitude/Longitude:** 38.50756 / -121.26578

**Elevation (feet):** 125

**County Summary:**
Sacramento

**Detailed Location:**
SOUTHWEST CORNER OF EAGLES NEST RD & JACKSON RD (HWY 16), INTERSECTED BY FRYE CREEK, SOUTH OF MATHER AFB.

**Detailed Location:**
1996: EAST 1/2 OF NE 1/4 SECTION 36. 2000: WEST 1/2 OF NE 1/4 SECTION 36. 2005 DETECTION LOCATIONS UNKNOWN; SOMEWHERE WITHIN PROPERTY.

**Ecological:**
NORTHERN HARDPAN VERNAL POOLS SURROUNDED BY NON-NATIVE GRASSLAND. LINDERIELLA OCCIDENTALIS & BRANCHINECTA LYNCHI WERE ALSO OBSERVED IN POOLS HERE. AERIAL IMAGERY SINCE TIME OF ORIGINAL SURVEYS SHOWS MINE EXPANSION.

**Threats:**
THREATENED BY GRAVEL MINING.

**General:**

**PLSS:**
- T08N, R06E, Sec. 36 (M)

**Accuracy:** nonspecific area

**Area (acres):** 158

**UTM:** Zone-10 N4263557 E651209

**Latitude/Longitude:** 38.50756 / -121.26578

**Elevation (feet):** 125

**County Summary:**
Sacramento

**Sources:**
- LSA ASSOCIATES, INC. - 2005 ANNUAL REPORT TO THE U.S. FISH AND WILDLIFE SERVICE FOR SECTION 10 (A) (R) (A) PERMIT NUMBER TE-797234-6 ISSUED TO LSA ASSOCIATES, INC. 2006-01-31
- MUTH, D. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2000-03-15
- MUTH, D. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2000-03-15
- MUTH, D. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1996-XX-XX
- MUTH, D. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1996-XX-XX

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**Map Index Number:** 82549

**EO Index:** 31890

**Element Code:** ICBRA10010

**Occurrence Last Updated:** 2015-01-09

**Last Date Observed:** 2005-01-21

**Last Survey Date:** 2005-01-21

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**
SOUTHWEST CORNER OF EAGLES NEST RD & JACKSON RD (HWY 16), INTERSECTED BY FRYE CREEK, SOUTH OF MATHER AFB.

**Detailed Location:**
1996: EAST 1/2 OF NE 1/4 SECTION 36. 2000: WEST 1/2 OF NE 1/4 SECTION 36. 2005 DETECTION LOCATIONS UNKNOWN; SOMEWHERE WITHIN PROPERTY.

**Ecological:**
NORTHERN HARDPAN VERNAL POOLS SURROUNDED BY NON-NATIVE GRASSLAND. LINDERIELLA OCCIDENTALIS & BRANCHINECTA LYNCHI WERE ALSO OBSERVED IN POOLS HERE. AERIAL IMAGERY SINCE TIME OF ORIGINAL SURVEYS SHOWS MINE EXPANSION.

**Threats:**
THREATENED BY GRAVEL MINING.

**General:**

**PLSS:**
- T08N, R06E, Sec. 36 (M)

**Accuracy:** nonspecific area

**Area (acres):** 158

**UTM:** Zone-10 N4263557 E651209

**Latitude/Longitude:** 38.50756 / -121.26578

**Elevation (feet):** 125

**County Summary:**
Sacramento

**Sources:**
- LSA ASSOCIATES, INC. - 2005 ANNUAL REPORT TO THE U.S. FISH AND WILDLIFE SERVICE FOR SECTION 10 (A) (R) (A) PERMIT NUMBER TE-797234-6 ISSUED TO LSA ASSOCIATES, INC. 2006-01-31
- MUTH, D. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2000-03-15
- MUTH, D. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2000-03-15
- MUTH, D. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1996-XX-XX
- MUTH, D. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1996-XX-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNDDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1998-04-XX

**Last Survey Date:** 1998-04-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**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.

**Threats:**
**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.

**PLSS:** T07N, R05E, Sec. 15 (M)

**Accuracy:** nonspecific area

**Area (acres):** 162

**UTM:** Zone-10 N4257618 E638447

**Latitude/Longitude:** 38.45613 / -121.41327

**Elevation (feet):** 25

**County Summary:**
Sacramento

**Quad Summary:**
Florin (3812144)

**Sources:**
- HELM98F0015 HELM, B. (MAY AND ASSOCIATES, INC.) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-XX-XX
- JSA96U0001 JONES & STOKES ASSOCIATES, INC. - COMPILATION OF VERNAL POOL INVESTIGATIONS MADE BY JONES AND STOKES BIOLOGISTS 1996-08-08
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 41009  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 131  
**EO Index:** 41009  
**Element Code:** ICBRA10010  
**Occurrence Last Updated:** 2011-07-06

**Scientific Name:** Lepidurus packardi  
**Common Name:** vernal pool tadpole shrimp

**Listing Status:**  
- **Federal:** Endangered  
- **State:** None  
**Rare Plant Rank:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2006-05-05  
**Last Survey Date:** 2006-05-05  
**Owner/Manager:** SAC COUNTY  
**Presence:** Presumed Extant  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Good  
**Trend:** Unknown

**Location:**  
MATHER FIELD VERNAL POOL PRESERVE, S OF OLD MATHER AIRPORT RUNWAY AND E OF THE WATER TREATMENT PONDS, N OF KIEFER BLVD.

**Detailed Location:**  
1993: EXACT LOCATIONS NOT PROVIDED - FOUND IN 9 POOLS AT THE MATHER REDEVELOPMENT PLAN AREA. 1996-96: FOUND IN 49 POOLS TOTAL FOR THE MATHER FIELD SPECIFIC PLAN SURVEY.

**Ecological:**  
FOUND IN VERNAL POOLS, VERNAL SWALES, SEASONAL WETLANDS, AND FRESHWATER MARSH. LINDERIELLA OCCIDENTALIS ALSO OBSERVED.

**Threats:**  
DEVELOPMENT.

**General:**  

**PLSS:** T08N, R06E, Sec. 14 (M)  
**UTM:** Zone-10 N4267843 E648624  
**Accuracy:** specific area  
**Latitude/Longitude:** 38.54660 / -121.29451  
**Elevation (feet):** 80  
**Area (acres):** 84

**County Summary:**  
Sacramento  
Carmichael (3812153)

**Quad Summary:**

**Sources:**

- JSA93R0002  
  JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03

- JSA97R0002  
  JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX

- WIT06F0003  
  WITHAM, C. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2006-04-11
Map Index Number: 41018
EO Index: 41018
Key Quad: Carmichael (3812153)
Element Code: ICBRA10010
Occurrence Number: 132
Occurrence Last Updated: 1999-05-04

Scientific Name: Lepidurus packardi
Common Name: vernal pool tadpole shrimp

Listing Status: Federal: Endangered
State: None

CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat:
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Micro Habitat:
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

Last Date Observed: 1997-01-XX
Last Survey Date: 1997-01-XX
Owner/Manager: SAC COUNTY
Occurrence Rank: Unknown
Occurrence Type: Natural/Native occurrence
Trend: Unknown
Presence: Presumed Extant

Location:
0.75 MILE S OF INTERSECTION OF OLD PLACERVILLE AND ROUTIER ROADS, N OF WEST END OF SACRAMENTO MATHER AIRPORT RUNWAYS.
Detailed Location:
IN POOLS NUMBERED 1291 AND 1291.1.

Ecological:
FOUND IN TWO VERNAL POOLS, AT THE OLD MATHER AIR FORCE BASE.

Threats:
DEVELOPMENT.

General:
OBSERVED IN 1993 AND 1996-97. ALSO LINDERIELLA OCCIDENTALIS OBSERVED.

PLSS: T08N, R06E, Sec. 16 (M) Accuracy: 80 meters Area (acres): 0
UTM: Zone-10 N4268173 E646586 Latitude/Longitude: 38.54991 / -121.31781 Elevation (feet): 75

County Summary:
Sacramento

Quad Summary:
Carmichael (3812153)

Sources:
JSA93R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03
JSA97R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX

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**Scientific Name:** *Lepidurus packardi*  
**Common Name:** vernal pool tadpole shrimp

**Listing Status:**  
- Federal: Endangered  
- State: None

**CNDDB Element Ranks:**  
- Global: G3  
- State: S2S3

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1997-01-XX  
**Last Survey Date:** 1997-01-XX  
**Owner/Manager:** SAC COUNTY  
**Presence:** Presumed Extant

**Location:**  
0.1 MILE EAST OF JUNCTION OF KIEFER BLVD AND EAGLES NEST ROAD, MATHER REGIONAL PARK (6 FEATURES, ALONG KIEFER BLVD).

**Detailed Location:**  
PART OF THE MORRISON CREEK DRAINAGE, IN THE OLD MATHER AIR FORCE BASE.

**Ecological:**  
6 FEATURES THAT ARE EITHER, VERNAL POOLS, VERNAL SWALES, OR A BRANCH OF MORRISON CREEK.

**Threats:**  
IMPACTED BY HUMANS.

**General:**  
OBSERVED IN 1993 AND 1996-97 IN 5 OF THE 6 FEATURES MAPPED. LINDERIELLA OCCIDENTALIS ALSO OBSERVED.

**PLSS:** T08N, R07E, Sec. 19 (M)  
**Accuracy:** specific area  
**Area (acres):** 11

**UTM:** Zone-10 N4265728 E652010  
**Latitude/Longitude:** 38.52698 / -121.25613  
**Elevation (feet):** 125

**County Summary:** Sacramento  
**Quad Summary:** Buffalo Creek (3812152), Carmichael (3812153)

**Sources:**  
JSA93R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08 -03  
JSA97R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 41025  
**EO Index:** 41025  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 134  
**Occurrence Last Updated:** 1999-05-10  
**Element Code:** ICBRA10010

---

**Scientific Name:** Lepidurus packardi  
**Common Name:** vernal pool tadpole shrimp

---

**Listing Status:**  
**Federal:** Endangered  
**State:** None  
**Rare Plant Rank:**  
**Other Lists:** IUCN_EN-Endangered

---

**CNDDB Element Ranks:**  
**Global:** G3  
**State:** S2S3

---

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

---

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNFLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

---

**Last Date Observed:** 1997-01-XX  
**Last Survey Date:** 1997-01-XX  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

---

**Owner/Manager:** SAC COUNTY

---

**Location:**  
0.4 MILE NNW OF JUNCTION OF KIEFER BLVD AND EAGLES NEST ROAD, MATHER REGIONAL PARK.

---

**Detailed Location:**  
8 VERNAL POOLS IN THIS PORTION OF THE COMPLEX CONTAIN VERNAL POOL TADPOLE SHRIMP (VPTS). PART OF THE OLD MATHER AIR FORCE BASE.

---

**Ecological:**  
VERNAL POOLS, AND DISTURBED VERNAL POOLS.

---

**Threats:**  
IMPACTED BY HUMANS.

---

**General:**  
OBSERVED IN 1993 AND 1996-97. LINDERIELLA OCCIDENTALIS ALSO OBSERVED.

---

**PLSS:** T08N, R06E, Sec. 24 (M)  
**Accuracy:** specific area  
**Area (acres):** 10  
**UTM:** Zone-10 N4266445 E651135  
**Latitude/Longitude:** 38.53359 / -121.26601  
**Elevation (feet):** 140

---

**County Summary:**  
Sacramento

---

**Quad Summary:**  
Carmichael (3812153)

---

**Sources:**

JSA93R0002  
JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03

JSA97R0002  
JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
**Map Index Number:** 41041  
**EO Index:** 41041  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 137  
**Occurrence Last Updated:** 1999-05-11  
**Scientific Name:** Lepidurus packardi  
**Common Name:** vernal pool tadpole shrimp  
**Listing Status:**  
- **Federal:** Endangered  
- **State:** None  
**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3  
**Last Date Observed:** 1997-01-XX  
**Last Survey Date:** 1997-01-XX  
**Owner/Manager:** SAC COUNTY  
**Presence:** Presumed Extant  
**Location:**  
0.6 MILE EAST OF JUNCTION OF KIEFER BLVD AND EXCELSIOR ROAD, MATHER REGIONAL PARK, RANCHO CORDOVA.  
**Detailed Location:**  
1 VERNAL POOL IN THIS PORTION OF THE COMPLEX, WITH VERNAL POOL TADPOLE SHRIMP (VPTS). PART OF THE OLD MATHER AIR FORCE BASE.  
**Ecological:**  
VERNAL POOL.  
**Threats:**  
**General:** OBSERVED IN 1996-97.  
**PLSS:** T08N, R06E, Sec. 23 (M)  
**UTM:** Zone-10 N4266540 E649650  
**Accuracy:** specific area  
**Latitude/Longitude:** 38.53469 / -121.28301  
**Elevation (feet):** 110  
**Area (acres):** 1  
**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)  
**Sources:**  
JSA97R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1999-02-27

**Last Survey Date:** 1999-02-27

**Owner/Manager:** SAC COUNTY-PARKS & REC

**Presence:** Presumed Extant

**Location:** 0.6 MILE SW OF MATHER LAKE, (FORMER) MATHER AIR FORCE BASE, RANCHO CORDOVA.

**Detailed Location:**

**Ecological:**
HABITAT CONSISTS OF A LARGE VERNAL POOL WITH A GRASSY SUBSTRATE.

**Threats:**
THREATENED BY DEVELOPMENT AND INVASION BY NON-NATIVE SPECIES.

**General:**
15 TADPOLE SHRIMP OBSERVED ON 27 FEB 1999, ESTIMATED ONE TADPOLE SHRIMP CAPTURED WITH EACH DIP OF THE NET.

**PLSS:** T08N, R06E, Sec. 13 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4268233 E650956  
**Latitude/Longitude:** 38.54972 / -121.26767  
**Elevation (feet):** 125

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**
HUB99F0001 HUBER, A. (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1999-02-27
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<th><strong>EO Index:</strong></th>
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<td><strong>Element Code:</strong></td>
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<td><strong>Occurrence Last Updated:</strong></td>
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**Scientific Name:** *Lepidurus packardi*  
**Common Name:** vernal pool tadpole shrimp

**Listing Status:**  
**Federal:** Endangered  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G3  
**State:** S2S3

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 1998-07-10  
**Last Survey Date:** 1998-07-10  
**Occurrence Type:** Natural/Native occurrence

**Owner/Manager:** PVT  
**Occurrence Rank:** Fair  
**Presence:** Presumed Extant  
**Trend:** Unknown

**Location:** WEST OF MCCLELLAN AIR FORCE BASE BETWEEN MAGPIE CREEK & ASCOT AVE, DEL PASO, NORTH OF SACRAMENTO.

**Detailed Location:** SEASONAL WETLANDS, INNUNDATED APPROXIMATELY >30 DAYS DURING WINTER 1998. LOCATION GIVEN ONLY AS T9N, R5E, SECTION 19. SNAPED TO EXISTING MAPPED VERNAL POOLS.

**Ecological:**  
SURROUNDING LAND USE: AGRICULTURE AND FALLOW FIELDS.

**Threats:**  
DISKING, DEVELOPMENT.

**General:**  

**PLSS:** T09N, R05E, Sec. 19 (M)  
**UTM:** Zone-10 N4280626 E637266  
**Accuracy:** specific area  
**Latitude/Longitude:** 38.66358 / -121.42228  
**Area (acres):** 321  
**Elevation (feet):** 50

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
WAL98F0003  
WALKER, R. & B. HELM - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-07-10

WAL98F0004  
WALKER, R. & B. HELM - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-07-10
Map Index Number: 46127  
EO Index: 46127  
Key Quad: Elk Grove (3812143)  
Element Code: ICBRA10010  
Occurrence Number: 165  
Occurrence Last Updated: 2004-08-19

Scientific Name: Lepidurus packardi  
Common Name: vernal pool tadpole shrimp

Listing Status:  
Federal: Endangered  
State: None

CNDDDB Element Ranks:  
Global: G3  
State: S2S3

General Habitat:  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Micro Habitat:  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

Last Date Observed: 2004-02-12  
Last Survey Date: 2004-02-12  
Occurrence Type: Natural/Native occurrence  
Occurrence Rank: Excellent  
Trend: Unknown

Owner/Manager: PVT  
Presence: Presumed Extant

Location:  
CHURCHILL DOWNS WETLAND PRESERVE (PART); 4 MILES NNE OF ELK GROVE.

Detailed Location:  
1 MILE SOUTH GERBER RD, 0.5 MILE NORTH CALVINE RD & EXTENDING FROM 0.4 MILE WEST BRADSHAW RD. 2001 SURVEY: SE 1/4 OF NE 1/4, SECTION 17. 2002 SURVEY: INDIVIDUALS OBSERVED IN POOL NUMBER CVP1 (NW 1/4 OF THE NE 1/4 OF SECTION 17).

Ecological:  
SITE IS VERNAL POOL PRESERVE - GRASSLAND. OTHER SPECIES: LINDERIELLA OCCIDENTALIS AND BRANCHINECXTA LYNCHI ALSO IN VICINITY. SURROUNDING LAND CONSISTS OF HOMES.

Threats:  
16 MAR 2001: 100'S OF ADULTS OBSERVED. 5 APR 2001: 10'S OF EXOSKELETONS OBSERVED IN POOL - NO LIVE SHRIMP FOUND. 100'S OBS IN 1 POOL ON 21 JAN 2002. NONE OBS IN JAN & MAR 2003 SURVEYS. 10'S OBS IN 1 POOL ON 12 FEB 2004.

PLSS: T07N, R06E, Sec. 17 (M)  
Accuracy: nonspecific area  
Area (acres): 94

UTM: Zone-10 N4258529 E645058  
Latitude/Longitude: 38.46329 / -121.33734  
Elevation (feet): 65

County Summary:  
Sacramento  
Elk Grove (3812143)

Sources:  
CAP01F0002 CAPELL, S. ET AL. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2001-03-16  
CAP01F0003 CAPELL, S. ET AL. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2001-04-05  
ECO02F0002 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2002-01-21  
ECO02R0008 ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE. 2002-04-16  
ECO03R0002 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE 2003-06-06  
ECO04F0001 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2004-02-12  
ECO04R0001 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE (SACRAMENTO COUNTY, CALIFORNIA) 2004-06-02
**Map Index Number:** 48534  
**EO Index:** 48534  
**Key Quad:** Elk Grove (3812143)  
**Occurrence Number:** 173  
**Occurrence Last Updated:** 2014-07-23  
**Scientific Name:** Lepidurus packardi  
**Common Name:** vernal pool tadpole shrimp  
**Listing Status:**  
- **Federal:** Endangered  
- **State:** None  
**CNDDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3  
**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.  
**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLowed GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.  
**Last Date Observed:** 2002-01-21  
**Last Survey Date:** 2004-XX-XX  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Excellent  
**Trend:** Unknown  
**Presence:** Presumed Extant  
**Location:**  
CHURCHILL DOWNS WETLAND PRESERVE (PART); 4.5 MILES NORTH OF ELK GROVE.  
**Detailed Location:**  
0.5 MILE SOUTH OF GERBER RD, 1.2 MILES NORTH OF CALVINE AND 0.5 MILE EAST OF FLORIN RD. INDIVIDUALS OBSERVED IN POOL NUMBERS 8 AND 34 (NE 1/4 OF THE SE 1/4 OF SECTION 7).  
**Ecological:**  
HABITAT CONSISTS OF VERNAL POOLS WITHIN A GRASSLAND. LINDERIELLA OCCIDENTALIS AND BRANCHINECTA LYNCHI ALSO IN VICINITY.  
**Threats:**  
**General:**  
**PLSS:** T07N, R06E, Sec. 07 (M)  
**UTM:** Zone-10 N4259578 E643059  
**Latitude/Longitude:** 38.47306 / -121.36003  
**Area (acres):** 55  
**Elevation (feet):** 50  
**County Summary:**  
Sacramento  
Elk Grove (3812143)  
**Sources:**  
EC002F0005 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2002-01-21  
EC002F0006 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2002-01-21  
EC002R0008 ECORP CONSULTING, INC. - ANNUAL REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIOPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE. 2002-04-16  
EC003R0002 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIOPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE 2003-06-06  
EC004R0001 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING WET SEASON SURVEYS FOR FEDERALLY-LISTED BRANCHIOPODS AT THE CHURCHILL DOWNS WETLAND PRESERVE (SACRAMENTO COUNTY, CALIFORNIA) 2004-06-02
Map Index Number: 53920
Key Quad: Carmichael (3812153)
Occurrence Number: 178
EO Index: 53923
Element Code: ICBRA10010
Occurrence Last Updated: 2015-01-16

Scientific Name: Lepidurus packardi
Common Name: vernal pool tadpole shrimp

Listing Status:
Federal: Endangered
State: None

CNDDB Element Ranks:
Global: G3
State: S2S3

General Habitat:
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Micro Habitat:
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

Last Date Observed: 2010-03-03
Last Survey Date: 2010-03-03
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Good
Trend: Unknown
Presence: Presumed Extant

Location:
GRANITE I PRESERVE, JUST S OF KIEFER BLVD AT HAPPY LN, SW END OF OLD MATHER AFB.

Detailed Location:
MAPPED TO BOUNDARY OF PRESERVE WITHIN GRANITE-TEICHERT PROJECT SITE. 1997-1999 DETECTIONS SCATTERED THROUGHOUT SITE; EXACT LOCATIONS NOT GIVEN FOR 2002 DETECTIONS. FOUND IN POOLS #97-18 & 99-1 DURING SURVEY OF ADJACENT SMUD YARD IN 2010.

Ecological:
38 CONSTRUCTED VERNAL POOLS ON 10.04 ACRES OF NON-NATIVE GRASSLAND, SURROUNDED BY AGGREGATE MINING OPERATIONS. AERIAL PHOTOS SINCE 2002 SHOW NEW ROADS BUILT THROUGH POOLS ON THE PRESERVE & EXPANSION OF MINING ACROSS THE PRESERVE BOUNDARY.

Threats:
ROAD BUILDING, EXPANSION OF MINING OPERATIONS.

General:

PLSS: T08N, R06E, Sec. 16 (M)
Accuracy: specific area
Area (acres): 44

UTM: Zone-10 N4267058 E646210
Latitude/Longitude: 38.53993 / -121.32235
Elevation (feet): 65

County Summary:
Sacramento
Carmichael (3812153)

Sources:
BUR10R0001 BURLESON CONSULTING, INC. - 90-DAY REPORT FOR FINDINGS REGARDING BRANCHIOPOD SURVEYS FOR SACRAMENTO MUNICIPAL UTILITY DISTRICT'S EAST CAMPUS-OPERATIONS CENTER, SACRAMENTO COUNTY, CALIFORNIA 2010-07-XX
FAR02F0003 FARMER, M. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2002-03-15
WHI97F0004 WHITNEY, K. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1997-01-24
WHI98F0007 WHITNEY, K. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1998-01-XX
WHI99F0004 WHITNEY, K. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 1999-02-23
# Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<td>Common Name:</td>
<td>vernal pool tadpole shrimp</td>
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<tr>
<td>Micro Habitat:</td>
<td>POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED &amp; HIGHLY TURBID.</td>
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<td>Location:</td>
<td>SYLVA PARCEL, JUST N OF FLORIN RD, W OF EAGLES NEST RD AND S OF JACKSON HWY (SR 16), ABOUT 4 MILES SOUTH OF MATHER AFB.</td>
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<td>Detailed Location:</td>
<td>WEST OF FRYE CREEK; PART OF SACRAMENTO PRAIRIE VERNAL POOL PRESERVE, LOCATED IN THE SW 1/4 OF SECTION 36. MAPPED TO PROVIDED MAPS.</td>
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<td>Ecological:</td>
<td>VERNAL POOLS WITHIN A CALIFORNIA ANNUAL GRASSLAND MATRIX. MOST POOLS DID NOT FULLY POND AND WERE AT ABOUT 1/2 OF NORMAL CAPACITY IN 2008. LINDERIELLA OCCIDENTALIS, BRANCHINECTA LYNCHI, AND B. MESOVALLENSIS ALSO OBSERVED HERE.</td>
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**General:**  
"LOTS" OF INDIVIDUALS FOUND IN 8 POOLS ON 20 FEB 2005, W/AN UNKNOWN NUMBER COLLECTED FOR SACRAMENTO FISH & WILDLIFE OFFICE. LOW ABUNDANCE OF ADULTS (<1 PER STANDARD DIP NET SWEEP) OBSERVED IN 21 POOLS DURING 18 FEB 2008 SURVEYS.

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| County Summary: | Elk Grove (3812143), Carmichael (3812153) |

<table>
<thead>
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<th>Sources:</th>
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<tbody>
<tr>
<td>WIT05F0002</td>
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<tr>
<td>WIT05R0001</td>
</tr>
<tr>
<td>WIT08F0006</td>
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### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

<table>
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<tbody>
<tr>
<td>Key Quad:</td>
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<td>EO Index:</td>
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<td>Occurrence Last Updated:</td>
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</table>

**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2011-02-XX

**Last Survey Date:** 2011-02-XX

**Owner/Manager:** PVT-SACRAMENTO VLY CONSERVANCY

**Presence:** Presumed Extant

**Location:**
EAST END OF KASSIS PARCEL, AT THE END OF ROLLING MEADOW DR, 1.2 MI NW OF FLORIN RD AT EAGLES NEST RD, SACRAMENTO COUNTY.

**Detailed Location:**
SACRAMENTO PRAIRIE VERNAL POOL PRESERVE. MAPPED TO MAPS PROVIDED.

**Ecological:**
VERNAL POOLS WITHIN A CALIFORNIA ANNUAL GRASSLAND MATRIX. MOST POOLS DID NOT FULLY POND AND WERE AT ABOUT 1/2 OF NORMAL CAPACITY IN 2008. BRANCHINECTA LYNCHI, LINDERIELLA OCCIDENTALIS ALSO OBS IN AREA. SURROUNDING LAND USE: CATTLE GRAZING.

**Threats:**

**General:**
"LOTS" OF INDIVIDUALS OBSERVED ON 20 FEB 2005; UNKNOWN # COLLECTED FOR SACRAMENTO FISH & WILDLIFE OFFICE. LOW ABUNDANCE OF ADULTS (<1 PER STANDARD DIP NET SWEEP) OBSERVED IN TWO POOLS ON 18 FEB 2008, AND IN FEB 2011.

**PLSS:** T08N, R06E, Sec. 35 (M)

**Accuracy:** specific area

**UTM:** Zone-10 N4263279 E649975

**Latitude/Longitude:** 38.50526 / -121.27999

**Elevation (feet):** 120

**County Summary:** Sacramento

**Quad Summary:** Carmichael (3812153)

**Sources:**
- WITHAM, C. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2005-02-20
- WITHAM, C. - SACRAMENTO PRAIRIE VERNAL POOL PRESERVE, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
- WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & BRANCHINECTA MESOVALLENSIS & LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 2008-02-18
**Occurrence Report**

California Department of Fish and Wildlife  
California Natural Diversity Database

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<th>Scientific Name:</th>
<th>Lepidurus packardi</th>
<th>Common Name:</th>
<th>vernal pool tadpole shrimp</th>
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<td>State:</td>
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**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UPLLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

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<th>Last Date Observed:</th>
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<td>2006-05-05</td>
<td>Occurrence Rank:</td>
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<td>Owner/Manager:</td>
<td>SAC COUNTY</td>
<td>Trend:</td>
<td>Unknown</td>
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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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</table>

**Location:**  
1 MI NE OF JCT OF EAGLES NEST RD & KEIFER BLVD ND 0.4 MI W OF SUNRISE BLVD, S OF MATHER GOLF COURSE.

**Detailed Location:**  
POOL AT THE NE END OF UNNAMED LOOP ROAD, JUST EAST OF MATHER VERNAL POOL PRESERVE. MAPPED TO PROVIDED MAP.

**Ecological:**  
VERNAL POOLS IN CALIFORNIA GRASSLAND MATRIX, SURROUNDED BY UNGRAZED PASTURES. LIGHT RECREATION IN AREA.

**Threats:**  
**General:**  
FOUND IN LOW NUMBERS (NO-TO-FEW INDIVIDUALS PER DIP NET SWEEP) DURING SURVEYS BETWEEN 24 FEB AND 14 APR 2005. OBSERVED IN LOW ABUNDANCE IN POOL DURING SURVEYS CONDUCTED BETWEEN 28 FEB AND 5 MAY 2006.

**PLSS:**  
T08N, R07E, Sec. 18 (M)  
Accuracy: 80 meters  
Area (acres): 0

**UTM:**  
Zone-10 N4267216 E652451  
Latitude/Longitude: 38.54030 / -121.25074  
Elevation (feet): 158

**County Summary:**  
Sacramento  
Buffalo Creek (3812152), Carmichael (3812153)

**Sources:**

- WIT05F0005 WITHAM, C. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2005-XX-XX
- WIT05R0002 WITHAM, C. - MATHER FIELD VERNAL POOLS, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
- WIT06F0003 WITHAM, C. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2006-04-11
**Scientific Name:** Lepidurus packardi  
**Common Name:** vernal pool tadpole shrimp  
**Listing Status:**  
- **Federal:** Endangered  
- **State:** None  
**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3  

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.  
**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2013-01-29  
**Occurrence Type:** Natural/Native occurrence  
**Trend:** Unknown  
**Presence:** Presumed Extant  

**Location:**  
EAST SIDE OF EXCELSIOR RD, FROM ABOUT 0 TO 1.0 MILES EAST OF EXCELSIOR RD BETWEEN GERBER RD AND SPIVA RD.  
**Detailed Location:**  
MAPPED TO LOCATIONS GIVEN FOR OCCUPIED POOLS. LAGUNA PARCEL AT SW END OF OCCURRENCE. KLOTZ PROPERTY OPEN SPACE PRESERVE ENCOMPASSES N TO NE PORTION OF OCCURRENCE.  

**Ecological:**  
KLOTZ PROPERTY A 320-ACRE PRESERVE WITH VERNAL POOLS, VERNAL SWALES, AND GRAZED GRASSLAND. LAGUNA PARCEL PROTECTED BY A CONSERVATION EASEMENT. BRANCHINECTA LYNCHI AND LINDERIELLA OCCIDENTALIS ALSO FOUND.  

**Threats:**  

**PLSS:** T07N, R06E, Sec. 11 (M)  
**UTM:** Zone-10 N4260202 E649025  
**Accuracy:** specific area  
**Latitude/Longitude:** 38.47770 / -121.29153  
**Area (acres):** 226  
**Elevation (feet):** 95

**County Summary:**  
Sacramento  
**Detailed Location:** Elk Grove (3812143)

**Sources:**  
BAR08R0001 BARTLEY, N. (ECORP CONSULTING, INC.) - 90-DAY REPORT OF FINDINGS REGARDING BRANCHIOPOD ASSESSMENT SURVEY KLOTZ PROPERTY OPEN SPACE PRESERVE 2008-02-01  
ECO06R0008 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING BRANCHIOPOD ASSESSMENT SURVEY, KLOTZ PROPERTY OPEN SPACE PRESERVE 2006-03-27  
ECO07F0001 ECORP CONSULTING, INC. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2007-02-27  
ECO07R0001 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING BRANCHIOPOD ASSESSMENT SURVEY, KLOTZ PROPERTY OPEN SPACE PRESERVE 2007-05-11  
ECO09R0022 ECORP CONSULTING, INC. - 90-DAY REPORT OF FINDINGS REGARDING FEDERALLY LISTED BRANCHIOPODS FOR KLOTZ PROPERTY OPEN SPACE PRESERVE SACRAMENTO COUNTY, CALIFORNIA 2009-04-23  
PAP13D0001 PAPATHAKIS, C. (VOLLMAR CONSULTING) - SPECIAL STATUS SPECIES COMPILATION BY VOLLMAR NATURAL LANDS CONSULTING 2013-01-29  
WIT08F0007 WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 2008-03-22  
WIT11U0004 WITHAM, C. - LAGUNA AND WERRE SOUTH PARCELS, BRANCHIOPOD MONITORING, 90-DAY REPORT, RECOVERY PERMITS TE-799570-3, SERVICE FILE NO. 1-1-04-F-096, 2010-0243 2011-05-17
### Scientific Name: Lepidurus packardi

**Common Name:** vernal pool tadpole shrimp

### Listing Status:
- **Federal:** Endangered
- **State:** None

### CNDDB Element Ranks:
- **Global:** G3
- **State:** S2S3

### General Habitat:
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

### Micro Habitat:
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

### Last Date Observed:
2009-03-11

### 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, PLAGIOBOTHRYS STIPITATUS & LASTHENIA GLABERRIMA. HISTORICAL GRAADING CAUSED POOLS TO BE POORLY DEFINED & SHALLOW. DEEPEST POOLS OCCUR BY BERMS & ROADS.

### Threats:
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.

### PLSS:
T06N, R04E, Sec. 12 (M)

### UTM:
Zone-10 N4248973 E631264

### Accuracy:
specific area

### Latitude/Longitude:
38.37933 / -121.49717

### Area (acres):
63

### Elevation (feet):
10

### Quad Summary:
Sacramento, Bruceville (3812134), Florin (3812144), Clarksburg (3812145)

### Sources:
- CAS09S0012: CALIFORNIA ACADEMY OF SCIENCES - CAS INVERTEBRATE SPECIMEN #180498 COLLECTED BY E. PIMENTEL ET AL. 2009-03-10
- DWR10D0001: CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
- PIM09F0003: PIMENTEL, E. (EDAW, INC.) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2009-03-06
**Map Index Number:** 82006

**Key Quad:** Florin (3812144)

**Occurrence Number:** 273

**EO Index:** 82983

**Element Code:** ICBRA10010

**Occurrence Last Updated:** 2011-03-22

**Scientific Name:** Lepidurus packardi

**Common Name:** vernal pool tadpole shrimp

**Listing Status:** Federal: Endangered

**Rare Plant Rank:** None

**CNDDDB Element Ranks:**
- Global: G3
- State: S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2009-03-11

**Last Survey Date:** 2009-03-11

**Owner/Manager:** DPR

**Presence:** Presumed Extant

**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, PLAGIOBOTHrys STIPITATUS & LASTHENIA GLABERRIMA. HISTORICAL GRADING CAUSED POOLS TO BE POORLY DEFINED & SHALLOW. DEEPEST POOLS OCCUR BY BERMS & ROADS.

**Threats:**

**General:**
10S OF BREEDING ADULTS OBSERVED AT 2 POOLS; 1 SPECIMEN COLLECTED BY E. PIMENTEL ET AL. (CAS-IZ #180499) ON 11 MAR 2009.

**PLSS:**
- T06N, R04E, Sec. 01 (M)

**UTM:**
- Zone-10 N4251023 E632092

**Accuracy:** specific area

**Latitude/Longitude:** 38.39768 / -121.48731

**Area (acres):** 14

**Elevation (feet):** 10

**County Summary:**
Sacramento

**Quad Summary:**
Florin (3812144)

**Sources:**
- CAS09S0013 CALIFORNIA ACADEMY OF SCIENCES - CAS INVERTEBRATE SPECIMEN #180499 COLLECTED BY E. PIMENTEL ET AL. 2009-03-11
- DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
- PIM09F0003 PIMENTEL, E. (EDAW, INC.) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2009-03-06
# Lepidurus packardi

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<tr>
<th>Map Index Number:</th>
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<td>State:</td>
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<td>General Habitat:</td>
<td>INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.</td>
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<tr>
<td>Micro Habitat:</td>
<td>POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED &amp; HIGHLY TURBID.</td>
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<td>Location:</td>
<td>MATHER FIELD VERNAL POOL PRESERVE, 0.6 MI NNW OF KIEFER BLVD AT EAGLES NEST ROAD, SSW OF MATHER GOLF COURSE, MATHER.</td>
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<td>Detailed Location:</td>
<td>IN GRASSSLAND ABOUT 0.85 MI SE OF MATHER HEIGHTS ELEMENTARY SCHOOL. MAPPED TO PROVIDED MAP.</td>
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<td>VERNAL POOLS IN CALIFORNIA GRASSLAND MATRIX, SURROUNDED BY UNGRAZED PASTURES. LIGHT RECREATION IN AREA.</td>
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<td>PLSS:</td>
<td>T08N, R06E, Sec. 24 (M)</td>
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<td>Sacramento Carmichael (3812153)</td>
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<tr>
<td>Sources:</td>
<td>WITHAM, C. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2005-XX-XX</td>
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<td>WITHAM, C. - MATHER FIELD VERNAL POOLS, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17</td>
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## Scientific Name: Lepidurus packardi

- **Common Name:** vernal pool tadpole shrimp
- **Listing Status:** Federal: Endangered
- **State:** None
- **Rare Plant Rank:** None
- **Other Lists:** IUCN_EN-Endangered

## General Habitat:

INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

## Micro Habitat:

POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

## Last Date Observed:

2005-04-14

## Last Survey Date:

2005-04-14

## Presence:

Presumed Extant

## Location:

MATHER FIELD VERNAL POOL PRESERVE, 0.6 MI NNW OF KIEFER BLVD AT EAGLES NEST ROAD, SSW OF MATHER GOLF COURSE, MATHER.

## Detailed Location:

IN GRASSSLAND ABOUT 0.85 MI SE OF MATHER HEIGHTS ELEMENTARY SCHOOL. MAPPED TO PROVIDED MAP.

## Ecological:

VERNAL POOLS IN CALIFORNIA GRASSLAND MATRIX, SURROUNDED BY UNGRAZED PASTURES. LIGHT RECREATION IN AREA.

## Threats:

OBSERVED IN LOW ABUNDANCE IN POOL DURING SURVEYS CONDUCTED BETWEEN 24 FEB AND 14 APR 2006.

## PLSS:

T08N, R06E, Sec. 24 (M)

## Accuracy:

80 meters

## Area (acres):

0

## UTM:

Zone-10 N4266783 E651202

## Latitude/Longitude:

38.53662 / -121.26516

## Elevation (feet):

140

## County Summary:

Sacramento Carmichael (3812153)

## Sources:

WITHAM, C. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2005-XX-XX

WITHAM, C. - MATHER FIELD VERNAL POOLS, SPECIAL STATUS CRUSTACEAN LOCATIONS. 2005-05-17
Map Index Number: 82476
Key Quad: Carmichael (3812153)
Occurrence Number: 280

Scientific Name: Lepidurus packardi
Common Name: vernal pool tadpole shrimp

Listing Status: Federal: Endangered
State: None

CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat: INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Micro Habitat: POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNFLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

Last Date Observed: 2008-07-01
Last Survey Date: 2008-07-01
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location: HEDGE SUBSTATION, 0.5 MILE FROM ELDER CREEK RD AT HEDGE AVE, 2 MILES SE THE SACRAMENTO ARMY DEPOT, SACRAMENTO CO.

Detailed Location: PARCEL B OF SMUD HEDGE SUBSTATION PROJECT SITE. 2008: L. PACKARDI OBS IN SW1, SW2, SW3, SW4, SW8, SW9 & OW1 BASINS.

Ecological: SEASONAL WETLANDS AND SWALES. BRANCHINECTA SP. AND LINDERIELLA OCCIDENTALIS OBSERVED IN AREA. NO LEPIDURUS FOUND IN "PARCEL A" LOCATED JUST TO THE NW DURING 2008 SURVEYS.

Threats:


PLSS: T08N, R06E, Sec. 31 (M)
Accuracy: nonspecific area
Area (acres): 6

UTM: Zone-10 N4263181 E643333
Latitude/Longitude: 38.50547 / -121.35615
Elevation (feet): 55

County Summary: Sacramento
Quad Summary: Carmichael (3812153)

Sources:
HEL08F0018 HELM, B. (HELM BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2008-01-17
HEL09R0001 HELM, B. & T. WOOD (HELM BIOLOGICAL CONSULTING) - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPods AT THE SMUD HEDGE TRAINING FACILITY 2009-03-25
ROZ08R0001 ROZUMOWICZ, B. & B. HELM (HELM BIOLOGICAL CONSULTING) - WET SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPods AT THE SMUD HEDGE SUBSTATION TRAINING FACILITY 2008-07-XX
Sources:
SUG93U0001  SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
WIT08F0006  WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & BRANCHINECTA MESOVALLENSIS & LINDERIELLA OCIDENTALIS & LEPIDURUS PACKARDI 2008-02-18

Map Index Number: 82536
EO Index: 83547
Key Quad: Carmichael (3812153)
Element Code: ICBRA10010
Occurrence Number: 281
Occurrence Last Updated: 2015-01-13

Scientific Name: Lepidurus packardi
Common Name: vernal pool tadpole shrimp

Listing Status: Federal: Endangered
State: None

CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat:
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Micro Habitat:
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

Last Date Observed: 2011-02-XX
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2011-02-XX
Occurrence Rank: Excellent

Owner/Manager: PVT-SACRAMENTO VLY CONSERVANCY
Trend: Unknown

Presence: Presumed Extant

Location:
KASSIS PARCEL, N & S OF ROLLING MEADOWS DR, 0.9 MI NNE OF FLORIN RD AT EXCELSIOR RD, 3 MI S OF OLD MATHER AFB, SAC CO.

Detailed Location:
KASSIS PARCEL IS PART OF THE SACRAMENTO VERNAL POOL PRESERVE AREA. ABOUT 0.9 MI WSW OF TWELVE MILE HOUSE (HISTORICAL) ALONG JACKSON RD (SR 16). MAPPED ACCORDING TO PROVIDED MAP. 1993 SUGNET REPORT: VERNAL POOL SOMEWHERE IN SEC 35.

Ecological:
VERNAL POOLS IN A MATRIX OF CALIFORNIA ANNUAL GRASSLAND. MOST POOLS DID NOT FULLY POND AND WERE AT ABOUT 1/2 OF NORMAL CAPACITY IN 2008. SURROUNDING LAND USE: CATTLE GRAZING. BRANCHINECTA LYNCHI & LINDERIELLA OCCIDENTALIS ALSO ON PARCEL.

Threats:
General:
OBSERVED 2 APR 1992 IN VERNAL POOL, SUGNET RECORD #150. INDIVIDUALS FOUND IN LOW ABUNDANCE IN 6 POOLS DURING SURVEYS CONDUCTED 5 & 18 FEB 2008 AND JAN-FEB 2011.

PLSS: T08N, R06E, Sec. 35 (M)
Accuracy: specific area
Area (acres): 30

UTM: Zone-10 N4263451 E649046
Latitude/Longitude: 38.50697 / -121.29060
Elevation (feet): 120

County Summary:
Sacramento
Carmichael (3812153)

Information Expires 3/1/2016
<table>
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<th><strong>Map Index Number:</strong></th>
<th>82859</th>
<th><strong>EO Index:</strong></th>
<th>83860</th>
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<td><strong>Key Quad:</strong></td>
<td>Carmichael (3812153)</td>
<td><strong>Element Code:</strong></td>
<td>ICBRA10010</td>
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<td><strong>Occurrence Number:</strong></td>
<td>282</td>
<td><strong>Occurrence Last Updated:</strong></td>
<td>2011-06-27</td>
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**Scientific Name:** *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

**Listing Status:**
- **Federal:** Endangered
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S2S3

**General Habitat:**
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2006-05-05

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Good

**Presence:** Presumed Extant

**Location:**
MATHER FIELD VERNAL POOL PRESERVE, 0.5 MI NE OF KIEFER BLVD AT EXCELSIOR ROAD, S END OF DECOMMISSIONED MATHER AFB.

**Detailed Location:**
MAPPED TO PROVIDED MAP.

**Ecological:**
VERNAL POOLS IN CALIFORNIA ANNUAL GRASSLAND MATRIX, SURROUNDED BY UNGRAZED PASTURES.

**Threats:**
**General:**
BREEDING ADULTS OBSERVED IN POOL DURING SURVEYS CONDUCTED BETWEEN 14 FEB & 5 MAY 2006.

**PLSS:**
- T08N, R06E, Sec. 14 (M)

**UTM:**
- Zone-10 N4267118 E649467

**Accuracy:** specific area

**Latitude/Longitude:** 38.53993 / -121.28499

**Area (acres):** 10

**Elevation (feet):** 95

**County Summary:**
Sacramento

Carmichael (3812153)

**Sources:**
WIT06F0003 WITHAM, C. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2006-04-11
<table>
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<tr>
<th><strong>Map Index Number:</strong></th>
<th>83344</th>
<th><strong>EO Index:</strong></th>
<th>84353</th>
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<td><strong>Key Quad:</strong></td>
<td>Florin (3812144)</td>
<td><strong>Element Code:</strong></td>
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<td><strong>Occurrence Number:</strong></td>
<td>290</td>
<td><strong>Occurrence Last Updated:</strong></td>
<td>2011-07-08</td>
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<td><strong>Scientific Name:</strong></td>
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<td><strong>Common Name:</strong></td>
<td>vernal pool tadpole shrimp</td>
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<td><strong>Listing Status:</strong></td>
<td>Federal: Endangered</td>
<td><strong>Rare Plant Rank:</strong></td>
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<td><strong>CNDDDB Element Ranks:</strong></td>
<td>Global: G3</td>
<td><strong>Micro Habitat:</strong></td>
<td>POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED &amp; HIGHLY TURBID.</td>
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<td></td>
<td>State: S2S3</td>
<td><strong>General Habitat:</strong></td>
<td>INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.</td>
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<tr>
<td><strong>Last Date Observed:</strong></td>
<td>2003-02-17</td>
<td><strong>Occurrence Type:</strong></td>
<td>Natural/Native occurrence</td>
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<tr>
<td><strong>Last Survey Date:</strong></td>
<td>2003-02-17</td>
<td><strong>Occurrence Rank:</strong></td>
<td>Excellent</td>
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<tr>
<td><strong>Owner/Manager:</strong></td>
<td>PVT</td>
<td><strong>Trend:</strong></td>
<td>Unknown</td>
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<tr>
<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
<td></td>
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<tr>
<td><strong>Location:</strong></td>
<td>LAGUNA STONELAKE PRESERVE, 1 MI NORTHEAST INTERSECTION OF I-5 AND HOOD-FRANKLIN RD, 0.7 MI NORTHWEST OF FRANKLIN (TOWN).</td>
<td></td>
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<tr>
<td><strong>Detailed Location:</strong></td>
<td>ECOSYSTEM 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.</td>
<td></td>
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<tr>
<td><strong>Threats:</strong></td>
<td>UNKNOWN NUMBER OBSERVED IN A COMPENSATION POOL ON 17 FEB 2003; 1,000'S OBSERVED IN A TOTAL OF 6 POOLS AT ENTIRE PRESERVE SITE.</td>
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<td><strong>PLSS:</strong></td>
<td>T06N, R05E, Sec. 07 (M)</td>
<td><strong>Accuracy:</strong></td>
<td>80 meters</td>
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<td>Zone-10 N4249756 E634136</td>
<td><strong>Latitude/Longitude:</strong></td>
<td>38.38596 / -121.46416</td>
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<td><strong>County Summary:</strong></td>
<td>Sacramento</td>
<td><strong>Quad Summary:</strong></td>
<td>Florin (3812144)</td>
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**Sources:**
FAR03F00019  FARMER, M. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2003-02-17
**Map Index Number:** 83345  
**EO Index:** 84354  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 291  
**Occurrence Last Updated:** 2011-07-08

**Map Index Number:** 83345  
**EO Index:** 84354  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 291  
**Occurrence Last Updated:** 2011-07-08

**Map Index Number:** 83345  
**EO Index:** 84354  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 291  
**Occurrence Last Updated:** 2011-07-08

**Map Index Number:** 83345  
**EO Index:** 84354  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 291  
**Occurrence Last Updated:** 2011-07-08

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<th>Lepidurus packardi</th>
<th>Common Name:</th>
<th>vernal pool tadpole shrimp</th>
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<tr>
<td>Listing Status:</td>
<td>Federal: Endangered State: None</td>
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<td>IUCN_EN-Endangered</td>
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<td>CNNDB Element Ranks: Global: G3 State: S2S3</td>
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**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2003-02-17  
**Last Survey Date:** 2003-02-17  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**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.

**Threats:**  
General:  
UNKNOWN NUMBER OF SHRIMP OBSERVED IN 3 COMPENSATION POOLS ON 17 FEB 2003; 1,000'S OBSERVED IN A TOTAL OF 6 POOLS AT ENTIRE PRESERVE SITE.

**PLSS:** T06N, R05E, Sec. 08 (M)  
**Accuracy:** specific area  
**Area (acres):** 21

**UTM:** Zone-10 N4249727 E634834  
**Latitude/Longitude:** 38.38559 / -121.45617  
**Elevation (feet):** 17

**County Summary:**  
Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
FAR03F0019 FARMER, M. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2003-02-17
**Map Index Number:** 93188  
**EO Index:** 94328  
**Occurrence Number:** 299  
**Occurrence Last Updated:** 2014-08-06  
**Scientific Name:** Lepidurus packardi  
**Common Name:** vernal pool tadpole shrimp  
**Listing Status:** Federal: Endangered  
State: None  
**CNDDB Element Ranks:** Global: G3  
State: S2S3  
**Micro Habitat:** POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.  
**General Habitat:** INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.  
**Last Date Observed:** 2002-02-01  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant  
**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.  
**Threats:**  
**General:** FOUND IN 1 OF 4 VERNAL POOLS SAMPLED 4 FEB 1993. 1 ADULT OBSERVED ON 1 FEB 2002; NO AQUATIC SAMPLING CONDUCTED.  
**PLSS:** T07N, R05E, Sec. 32 (M)  
**UTM:** Zone-10 N4252625 E634880  
**Accuracy:** 80 meters  
**Latitude/Longitude:** 38.41169 / -121.45510  
**Elevation (feet):** 20  
**County Summary:** Florin (3812144)  
**Sources:**  
HUD02F0007 HUDDLESTON, R. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2002-02-01  
SUG93U0001 SUGNET & ASSOCIATES - PRINTOUT OF LOCATION (T-R-S) OF FAIRY SHRIMP SAMPLING. (OBTAINED FROM THE U.S. FISH AND WILDLIFE SERVICE) 1993-XX-XX
**Occurrence Report**  
California Department of Fish and Wildlife  
California Natural Diversity Database

<table>
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<tr>
<th>Map Index Number:</th>
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<td>EO Index:</td>
<td>94331</td>
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<td>Element Code:</td>
<td>ICBRA10010</td>
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<td>Occurrence Last Updated:</td>
<td>2014-07-31</td>
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**Scientific Name:** *Lepidurus packardi*  
**Common Name:** vernal pool tadpole shrimp

**Listing Status:**  
- **Federal:** Endangered  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2007-10-03  
**Last Survey Date:** 2007-10-03  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Unknown  
**Trend:** Unknown

**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.

**Threats:**  
**General:**  
LEPIDURUS PACKARDI CYSTS FOUND IN DRY SAMPLES TAKEN 3 OCT 2007.

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<th>PLSS:</th>
<th>T07N, R05E, Sec. 12 (M)</th>
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<th>Specific area</th>
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<td>Latitude/Longitude:</td>
<td>38.47256 / -121.38642</td>
<td>Elevation (feet):</td>
<td>35</td>
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**County Summary:**  
Sacramento  
Florin (3812144)

**Sources:**  
- HEL07F0022 HELM, B. (HELM BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR LEPI DURUS PACKARDI 2007-10-03  
- HEL07R0014 HELM, B. (HELM BIOLOGICAL CONSULTING) - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE DEANE-VINTAGE PROPERTIES 2007-10-XX
**Scientific Name:** Lepidurus packardi  
**Common Name:** vernal pool tadpole shrimp  

**Listing Status:**  
Federal: Endangered  
State: None  

**CNDDDB Element Ranks:**  
Global: G3  
State: S2S3  

**Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.  
Micro Habitat: POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.  

**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.  

**Accuracy:** 80 meters  
**Area (acres):** 0  
**Latitude/Longitude:** 38.46719 / -121.38549  
**Elevation (feet):** 35  

**PLSS:** T07N, R05E, Sec. 12 (M)  
**UTM:** Zone-10 N4258887 E640849  
**County Summary:** Florin (3812144)  

**Owner/Manager:** PVT  
**Trend:** Unknown  
**Presence:** Presumed Extant  
**Occurrence Rank:** Unknown  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Last Updated:** 2014-07-16  

**Map Index Number:** 93192  
**EO Index:** 94332  
**Element Code:** ICBRA10010  
**Occurrence Number:** 301  

**Detailed Location:** MAPPED TO BASIN "POND 1,2,3" ON DEANE-VINTAGE CREEK I PROPERTY.  

**Sources:**  
HEL05F0010 HELM, B. (HELM BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2005-10-15  
HEL07R0014 HELM, B. (HELM BIOLOGICAL CONSULTING) - DRY-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE DEANE-VINTAGE PROPERTIES 2007-10-XX
### Scientific Name: *Lepidurus packardi*

**Common Name:** vernal pool tadpole shrimp

### Listing Status:

**Federal:** Endangered  
**State:** None

### CNDBB Element Ranks:

**Global:** G3  
**State:** S2S3

### General Habitat:

**INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.**

### Micro Habitat:

**POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.**

### Last Date Observed: 2011-02-01

### Owner/Manager: PVT

### Presence: Presumed Extant

### Location:

ASPEN VII SOUTH SITE, ABOUT 0.3 MILES NW OF ELDER CREEK RD AT EXCELSIOR RD, 2.1 MILES SE OF BRADSHAW RD AT JACKSON RD.

### Detailed Location:

MAPPED TO COORDINATES GIVEN FOR OCCUPIED POOL DSW4.

### Ecological:

"CLASSIC VERNAL POOL" COVERING 3500 SQ FEET, 14 INCHES DEEP, IN FALLOW CATTLE PASTURAGE CHARACTERIZED BY NON-NATIVE ANNUAL GRASSLAND SPECIES. LINERIELLA OCCIDENTALIS AND BRANCHINECTA LYNCHI CO-OCCURRED IN THE POOL.

### Threats:

DETECTED IN LOW ABUNDANCE IN 1 OF 13 FEATURES SURVEYED ON 1 FEB 2011.

### Sources:

GiB11R0001  
**GIBSON & SKORDAL, LLC - LISTED VERNAL POOL BRANCHIOPODS WET SEASON SURVEY 90-DAY REPORT ASPEN VII SOUTH, SACRAMENTO COUNTY, CALIFORNIA 2011-05-XX**
Map Index Number: 95051
Key Quad: Elk Grove (3812143)
Occurrence Number: 334

Scientific Name: Lepidurus packardi
Common Name: vernal pool tadpole shrimp

Listing Status: Federal: Endangered
State: None

CNDDB Element Ranks: Global: G3
State: S2S3

General Habitat:
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Micro Habitat:
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

Last Date Observed: 2013-01-15
Last Survey Date: 2013-01-15
Owner/Manager: PVT, SACTO VALLEY CONSERVANCY
Presence: Presumed Extant

Location:
NW CORNER OF GRANT LINE RD AT CALVINE RD, FROM ABOUT 200' TO 1.0 MI N OF CALVINE RD AND 0.4 TO 1.8 MI E OF EXCELSIOR RD.

Detailed Location:
MAPPED TO LOCATIONS PROVIDED FOR OCCUPIED POOLS. INCLUDES CHESTER DRIVE PARCEL TOWARDS MIDDLE OF OCCURRENCE, AND WERRE SOUTH PARCEL AT WEST SIDE OF OCCURRENCE.

Ecological:
WERRE SOUTH PARCEL PRESERVED BY SACRAMENTO VALLEY CONSERVANCY. CHESTER DRIVE PARCEL PROPOSED FOR MITIGATION BANK AS OF 2013. GRAZED ANNUAL GRASSLAND, VERNAL POOLS, DISTURBED SEASONAL WETLANDS. ORCUTTIA TENUIS NEARBY.

Threats:
NON-NATIVE INVASIVE VEGETATION, ILLEGAL DUMPING (2013).

General:

PLSS: T07N, R06E, Sec. 13 (M)
Accuracy: specific area
Area (acres): 212

UTM: Zone-10 N4258920 E650340
Latitude/Longitude: 38.46594 / -121.27673
Elevation (feet): 90

County Summary:
Sacramento Elk Grove (3812143)

SOURCES:
HIR11R0001 HIRKALA, M. (GIBSON & SKORDAL, LLC) - BRANCHIOPOD SURVEY RESULTS FOR CHESTER DRIVE PARCEL, SACRAMENTO COUNTY, CALIFORNIA 2011-05-16
HIR13F0002 HIRKALA, M. (GIBSON & SKORDAL, LLC) - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2013-01-15
MUT13U0001 MUTH, D. (LSA ASSOCIATES, INC.) - SCIENTIFIC COLLECTING REPORT OF SPECIMENS CAPTURED OR SALVAGED [SC-001944] 2013-02-06
WIT08F0007 WITHAM, C. - FIELD SURVEY FORM FOR BRANCHINECTA LYNCHI & LINDERIELLA OCCIDENTALIS & LEPIDURUS PACKARDI 2008-03-22
WIT11U0004 WITHAM, C. - LAGUNA AND WERRE SOUTH PARCELS, BRANCHIOPOD MONITORING, 90-DAY REPORT, RECOVERY PERMITS TE-799570-3, SERVICE FILE NO. 1-1-04-F-096, 2010-TA-0243 2011-05-17
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 95369  
**Key Quad:** Elk Grove (3812143)  
**Occurrence Number:** 360

**EO Index:** 96504  
**Element Code:** ICBRA10010  
**Occurrence Last Updated:** 2015-03-04

**Scientific Name:** *Lepidurus packardi*  
**Common Name:** vernal pool tadpole shrimp

**Listing Status:**  
- **Federal:** Endangered  
- **State:** None

**CNNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S2S3

**General Habitat:**  
INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

**Micro Habitat:**  
POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

**Last Date Observed:** 2014-01-03  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2014-01-03  
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
ABOUT 0.5 MILES SW OF VINEYARD RD AT GERBER RD, 0.8 MILES NE OF BRADSHAW RD AT ROGERS RD; NNE OF ELK GROVE.

**Detailed Location:**  
MAPPED TO PROVIDED COORDINATES.

**Ecological:**  
LARGE REMNANT VERNAL POOL AND ISOLATED SEASONAL POND IN FIELD WITH RECENT HISTORY OF ROUTINE DISKING. SURROUNDED BY HAY FIELDS, ANNUAL GRASSLAND, VACANT LOTS, AND RESIDENTIAL DEVELOPMENT.

**Threats:**  
AGRICULTURE, DISKING, DEVELOPMENT.

**General:**  
CYSTS COLLECTED FROM 2 FEATURES WERE CULTURED AND BEGAN TO HATCH 8 DAYS AFTER SOIL SAMPLE INUNDATION; INSTARS IDENTIFIED AS LEPIDURUS PACKARDI.

**PLSS:** T07N, R06E, Sec. 09 (M)  
**Accuracy:** specific area  
**Area (acres):** 6

**UTM:** Zone-10 N4259852 E646446  
**Latitude/Longitude:** 38.47498 / -121.32116  
**Elevation (feet):** 70

**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Quad Summary:**

**Sources:**  
HEL14F0010  HELM, B. - FIELD SURVEY FORM FOR LEPIDURUS PACKARDI 2014-01-03
**Scientific Name:** Dumontia oregonensis  
**Common Name:** hairy water flea

**General Habitat:** VERNAL POOLS. IN CALIFORNIA, KNOWN ONLY FROM MATHER FIELD.

**Micro Habitat:**

**Last Date Observed:** 2004-04-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2004-04-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** SAC COUNTY  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:** MATHER FIELD.

**Detailed Location:**

**Ecological:**

**Threats:**

**General:** SPECIES KNOWN ONLY FROM ONE LOCALITY IN OREGON WHEN DESCRIBED. NO ADDITIONAL COLLECTING DATA GIVEN.

**PLSS:** T08N, R06E, Sec. 13 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 6,011

**UTM:** Zone-10 N4268528 E649927  
**Latitude/Longitude:** 38.55255 / -121.27941  
**Elevation (feet):** 130

**County Summary:** Sacramento  
**Quad Summary:** Buffalo Creek (3812152), Carmichael (3812153)

**Sources:**

ROGO4U0003  ROGERS, D.C. - EMAIL WITH CALIFORNIA LOCALITY RECORD FOR DUMONTIA OREGONENSIS. 2004-10-22

ROGO5U0001  ROGERS, D.C. - EMAIL WITH DATA FOR VARIOUS CRUSTACEAN SPECIES. 2005-01-26

SAN03A0001  SANTOS-FLORES, C.J. & S.I. DODSON - DUMONTIA OREGONENSIS N. FAM., N. GEN., N. SP., A CLADOCERAN REPRESENTING A NEW FAMILY OF "WATER FLEAS" (CRUSTACEA, ANOMOPODA) FROM USA, W/ NOTES ON CLASSIF. OF THE ORDER ANOMOPODA. 2003-XX-XX
**Scientific Name:** Cicindela hirticollis abrupta  
**Common Name:** Sacramento Valley tiger beetle

**Listing Status:**  
- Federal: None  
- State: None

**CNNDDB Element Ranks:**  
- Global: G5TH  
- State: SH

**General Habitat:**  
SANDY FLOODPLAIN HABITAT IN THE SACRAMENTO VALLEY. NO BEETLES LOCATED DURING INTENSIVE 2001-2004 SURVEYS.

**Micro Habitat:**  
REQUIRES FINE TO MEDIUM SAND, TERRACED FLOODPLAINS OR LOW SANDY WATER EDGE FLATS.

**Last Date Observed:** 1955-08-01  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1955-08-01  
**Occurrence Rank:** None

**Presence:** Extirpated  
**Trend:** Unknown

**Location:**  
SANDY BANKS ALONG THE SACRAMENTO RIVER BETWEEN SACRAMENTO AND WEST SACRAMENTO.

**Detailed Location:**  
EXACT LOCATION UNKNOWN; COLLECTED FROM "SACRAMENTO" (1918, 1950, 1955) AND "SACRAMENTO WEST" (1944). COLLECTION SITES MAY HAVE BEEN NEAR THE CONFLUENCE OF THE SACRAMENTO AND AMERICAN RIVERS.

**Ecological:**  
LITTLE SUITABLE HABITAT REMAINS, AND THE POTENTIAL HABITAT THAT REMAINS, SANDY BEACHES NEAR DISCOVERY PARK, ARE HIGHLY IMPACTED BY RECREATION.

**Threats:**  
**General:**  

**PLSS:** T09N, R04E, Sec. 35 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 404

**UTM:** Zone-10 N4272471 E629958  
**Latitude/Longitude:** 38.59122 / -121.50776  
**Elevation (feet):** 2

**County Summary:**  
Sacramento, Yolo  
Sacramento West (3812155)

**Sources:**

1. KNISLEY, C.B. (RANDOLPH-MACON COLLEGE) - BIOLOGY AND CONSERVATION OF THE SACRAMENTO VALLEY TIGER BEETLE, CICINDELA HIRTICOLLIS ABRUPTA. REPORT TO USFWS SACRAMENTO FIELD OFFICE. 2004-11-10
### Scientific Name: Desmocerus californicus dimorphus

**Common Name:** valley elderberry longhorn beetle

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**CNNDDB Element Ranks:**
- **Global:** G3T2
- **State:** S2

### General Habitat:

OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

### Micro Habitat:

PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

### Occurrence Type:

Natural/Native occurrence

### Presence:

Presumed Extant

### Location:

ALONG THE AMERICAN RIVER, VICINITY OF RIVERBEND PARK & ANCIL HOFFMAN PARK, 2.1 MI W OF HWY 50 & SUNRISE BLVD JCT.

### Detailed Location:

SITE DESCRIBED AS ONE OF THE EARLIEST KNOWN POPULATIONS OF VELB IN 1970-80'S. GOETHE PARK REFERENCED AS BEING CRITICAL HABITAT. MAPPED TO GOETHE PARK (RIVER BEND PARK) & ANCIL HOFFMAN PARK. AREA REQUIRES FURTHER SURVEYING.

### Ecological:

NUMEROUS ELDERBERRY TRANSPLANTS, ELDERBERRY SEEDLINGS, AND OTHER NATIVE TREES AND SHRUBS. GRASS AND FLOWER VEGETATION LARGELY NON-NATIVE.

### Threats:

POSSIBLE THREAT DUE TO FIRE AND RECREATION.

### General:

1 MALE COLLECTED ON 20 APR 1976; SEVERAL EXIT HOLES OBSERVED. COLLECTED "IN RECENT YEARS" 1984. 4 ADULTS OBS IN 1985. 2 FEMALES OBS ON 18 APR 2008. 1 ADULT OBS ON 15 MAY 2013. 0 OBS AT 2 MITIGATION SITES NEAR S EDGE FROM 2009-2014.

**PLSS:** T09N, R06E, Sec. 27 (M)

**UTM:** Zone-10 N4274788 E647371

**Latitude/Longitude:** 38.60937 / -121.30741

**Accuracy:** nonspecific area

**Elevation (feet):** 60

**Area (acres):** 715

**County Summary:** Sacramento

**Quad Summary:** Carmichael (3812153), Citrus Heights (3812163)
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Sources:
AGU13F0001 AGUILERA, A. (U.S. FISH AND WILDLIFE SERVICE) - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 2013-05-15
ARN85U0001 ARNOLD, R.A. (ENTOMOLOGICAL CONSULTING SERVICES) - LETTER TO JACK PARNELL, DIRECTOR, DFG PROVIDING COLLECTION DATA FOR VELB. 1985-09-18
EYA76R0001 EYA, B.K. - REPORT ON THE DISTRIBUTION & STATUS OF A LONGHORN BEETLE, DESMOCERUS CALIFORNICUS DIMORPHUS (COLEOPTERA: CERAMBYCIDAE). OBTAINED THROUGH DR. LARRY ENG. 1976-XX-XX
FED78R0001 FEDERAL REGISTER - VOL. 43 NO. 155 PAGE 35643. 1978-08-10
FWS84R0002 U.S. FISH & WILDLIFE SERVICE - RECOVERY PLAN FOR THE VALLEY ELDERBERRY LONGHORN BEETLE. 1984-XX-XX
MAR11R0001 MARET, M. (SACRAMENTO COUNTY PARKS) - 2011 ANNUAL REPORT (YEAR 1 OF 10) VALLEY ELDERBERRY LONGHORN BEETLE MITIGATION FOR THE WATT AVENUE BRIDGE WIDENING PROJECT 2011-12-XX
MAR12R0002 MARET, M. (SACRAMENTO COUNTY PARKS) - 2012 ANNUAL REPORT (YEAR 2 OF 10) VALLEY ELDERBERRY LONGHORN BEETLE MITIGATION FOR THE WATT AVENUE BRIDGE WIDENING PROJECT (1-1-97-F-52) DECEMBER 2012 2012-12-XX
MAR13R0001 MARET, M. (SACRAMENTO COUNTY PARKS) - 2013 ANNUAL REPORT (YEAR 3 OF 10), VALLEY ELDERBERRY LONGHORN BEETLE MITIGATION FOR THE WATT AVENUE BRIDGE WIDENING PROJECT (1-1-97-F-52) 2013-12-XX
MAR14R0001 MARET, M. - 2014 ANNUAL REPORT (YEAR 4 OF 10) VALLEY ELDERBERRY LONGHORN BEETLE, MITIGATION FOR THE WATT AVENUE BRIDGE WIDENING PROJECT (1-1-97-F-52), DECEMBER 2014 2014-12-XX
RIC08F0052 RICKABAUGH, S. (U.S. FISH AND WILDLIFE SERVICE) - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 2008-04-18
SCO09R0001 SCOTT, S. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - YEAR ONE MONITORING REPORT FOR THE ARDEN PARALLEL FORCE MAIN PROJECT VALLEY ELDERBERRY LONGHORN BEETLE MITIGATION SITE AT RIVERBEND PARK, SAC. CA 2009 USFWS FILE #1-1-03-F-0023 2009-12-28
SCO14R0001 SCOTT, S. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - YEAR FIVE MONITORING REPORT FOR THE ARDEN PARALLEL FORCE MAIN PROJECT VALLEY ELDERBERRY LONGHORN BEETLE MITIGATION SITE AT RIVERBEND PARK, SACRAMENTO, CA 2014-01-XX
SCO15R0001 SCOTT, S. (SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT BUFFERLANDS) - YEAR SIX MONITORING REPORT FOR THE ARDEN PARRALLEL FORCE MAIN PROJECT VALLEY ELDERBERRY LONGHORN BEETLE MITIGATION SITE AT RIVERBEND PARK, SACRAMENTO, CA 2015-02-17
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Desmocerus californicus dimorphus*

**Common Name:** valley elderberry longhorn beetle

**Listing Status:**
- Federal: Threatened
- State: None

**CNDDDB Element Ranks:**
- Global: G3T2
- State: S2

**General Habitat:**
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*Sambucus mexicana*).

**Micro Habitat:**
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 1984-06-XX

**Presence:** Presumed Extant

**Location:**
JUST SOUTH OF HIGHWAY 160 AT DEL PASO BLVD, JOHNSON INDUSTRIAL PARK.

**Detailed Location:**
SACRAMENTO ZONE - JOHNSON INDUSTRIAL PARK CRITICAL HABITAT.

**Ecological:**
LARVAE ARE BORERS; ADULTS FEED ON FOLIAGE.

**Threats:**

**General:**
ADULTS OBSERVED BY ARNOLD IN 1984.

**PLSS:** T09N, R05E, Sec. 30 (M)

**Accuracy:** specific area

**Area (acres):** 27

**UTM:** Zone-10 N4273301 E633403

**Latitude/Longitude:** 38.59819 / -121.46807

**Elevation (feet):** 25

**County Summary:**
Sacramento

**Quad Summary:**
Sacramento East (3812154)

**Sources:**

- ARN84R0001  
  ARNOLD, R. - DISTRIBUTIONAL AND ECOLOGICAL STUDIES OF FIVE ENDANGERED INSECTS 1984-07-27

- ARN84U0002  

- EYA76R0001  
  EYA, B.K. - REPORT ON THE DISTRIBUTION & STATUS OF A LONGHORN BEETLE, DESMOCERUS CALIFORNICUS DIMORPHUS (COLEOPTERA: CERAMBYCIDAE). OBTAINED THROUGH DR. LARRY ENG. 1976-XX-XX

- FWS84R0002  
  U.S. FISH & WILDLIFE SERVICE - RECOVERY PLAN FOR THE VALLEY ELDERBERRY LONGHORN BEETLE. 1984-XX-XX
Desmocerus californicus dimorphus

valley elderberry longhorn beetle

Sacramento East (3812154)

SAC AREA FLOOD CONTROL AGENCY

Presumed Extant

S BANK AMERICAN RIVER, ~0.4 MI N OF ELVAS AVE AT C ST, 0.9 MI ESE OF I-80 BRIDGE, VICINITY OF SANDBURG DR, SACRAMENTO.

MAPPED TO PROVIDED MAPS. 1983 CAPTURE WAS HELD FOR TWO DAYS, IN WHICH TIME IT FORAGED ON ELDERBERRY LEAVES AND LAID 10 EGGS, BEFORE BEING RELEASED. 1984 SURVEYS CONDUCTED BY R. ARNOLD; LOCATION DESCRIBED AS GLENN HALL PARK, RIVER MILE 7.

SITE SERVES AS AN ON-SITE MITIGATION AREA FOR THE SACRAMENTO RIVER BANK PROTECTION PROJECT. HABITAT COMPOSED OF COTTONWOOD, ALDER, BOX ELDER, ROSE, ARROYO & SANDBAR WILLOW. ELDERBERRY SHRUB HEALTH ASSESSED IN 2010, VELB NOT SURVEYED.


PLSS: T08N, R05E, Sec. 04 (M) Accuracy: nonspecific area Area (acres): 112
UTM: Zone-10 N4271387 E636513 Latitude/Longitude: 38.58047 / -121.43274 Elevation (feet): 25
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<td>ARN84R0003</td>
<td>ARNOLD, R.A. - REPORTS: THE FINDINGS OF MY RECENT FIELD STUDIES OF THE ENDANGERED VALLEY ELDERBERRY LONGHORN BEETLE; LETTERS FROM: DOWNEY, BRAND, SEYMORE &amp; ROHWER; USFWS; UC BERKELEY. 1984-06-21</td>
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<td>BUC01R0001</td>
<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - STATUS OF HABITAT MITIGATION AND MONITORING FOR LOWER AMERICAN RIVER PROJECT: SITES 1, 2, 3, AND 4 2001-12-21</td>
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<td>BUC04R0001</td>
<td>BUCK, P. - LOWER AMERICAN RIVER PROJECT (YEAR 5) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2004-12-XX</td>
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<td>BUC05R0001</td>
<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - LOWER AMERICAN RIVER PROJECT (YEAR 6) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2005-12-XX</td>
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<td>BUC06R0001</td>
<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 7 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2006-12-XX</td>
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<td>BUC08R0001</td>
<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2008-04-XX</td>
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<td>CRO10R0001</td>
<td>CROSBIE, L. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT, LOWER AMERICAN RIVER SITES YEAR 11 MITIGATION MONITORING REPORT 2010-12-XX</td>
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<td>ENG83F0001</td>
<td>ENG, L.L. - FIELD SURVEY FORM FOR DESMOCRUS CALIFORNICUS DIMORPHUS 1983-XX-XX</td>
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<td>SAC08R0001</td>
<td>SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2008-09-30</td>
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<td>SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 10 MITIGATION MONITORING REPORT 2009-12-XX</td>
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California Department of Fish and Wildlife  
California Natural Diversity Database

| Map Index Number: | 11398 | EO Index: | 22739 |
| Key Quad: | Sacramento East (3812154) | Element Code: | IICOL48011 |
| Occurrence Number: | 8 | Occurrence Last Updated: | 1998-07-15 |

**Scientific Name:** *Desmocerus californicus dimorphus*  
**Common Name:** valley elderberry longhorn beetle

**Listing Status:** Federal: Threatened  
**Rare Plant Rank:** None

**CNDDB Element Ranks:** Global: G3T2  
**Other Lists:** State: S2

**General Habitat:** OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

**Micro Habitat:** PREFERENCES TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCES SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** XXXX-XX-XX  
**Last Survey Date:** 1984-06-XX  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant  
**Location:** BUSHY LAKE, NEAR CAL EXPO.

**Detailed Location:**

**Ecological:** LARVAE ARE ELDERBERRY STEM BORERS AND ADULTS FEED ON ELDERBERRY FOLIAGE.

**Threats:** COLLECTIONS KNOWN FROM THIS AREA. NO ADULTS OR FRESH EXIT HOLES OBSERVED IN 1984.

**PLSS:** T09N, R05E, Sec. 33 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4272184 E636307  
**Latitude/Longitude:** 38.58768 / -121.43495  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:**  
ARN84R0001 ARNOLD, R. - DISTRIBUTIONAL AND ECOLOGICAL STUDIES OF FIVE ENDANGERED INSECTS 1984-07-27

FWS84R0002 U.S. FISH & WILDLIFE SERVICE - RECOVERY PLAN FOR THE VALLEY ELDERBERRY LONGHORN BEETLE. 1984-XX-XX

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### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Desmocerus californicus dimorphus  
**Common Name:** valley elderberry longhorn beetle

**Listing Status:**  
- Federal: Threatened  
- State: None

**CNDDDB Element Ranks:**  
- Global: G3T2  
- State: S2

**General Habitat:**  
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCA MEXICANA).

**Micro Habitat:**  
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 1984-06-00  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1984-06-00  
**Occurrence Rank:** Unknown

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
AMERICAN RIVER FLOODPLAIN 22 ACRE PARCEL BETWEEN RAILROAD TRACK OVERPASSES (BTWN I-80 & HWY 160).

**Detailed Location:**  
ADULTS OBSERVED ON "STRESSED" ELDERBERRIES IN RIPARIAN VEGETATION ALONG THE AMERICAN RIVER.

**Ecological:**

**Threats:**

**General:**  
NORTH SACRAMENTO LAND COMPANY PROPERTY.

**PLSS:** T09N, R05E, Sec. 32 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4272354 E633690  
**Latitude/Longitude:** 38.58961 / -121.46495  
**Elevation (feet):** 10

**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:**

- ARN84R0001: ARNOLD, R. - DISTRIBUTIONAL AND ECOLOGICAL STUDIES OF FIVE ENDANGERED INSECTS 1984-07-27

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Report Printed on Tuesday, September 15, 2015  
Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch

Information Expires 3/1/2016
Scientific Name: *Desmocerus californicus dimorphus*  
Common Name: valley elderberry longhorn beetle

Listing Status: Federal: Threatened  
State: None  
CNNDDB Element Ranks: Global: G3T2  
State: S2

General Habitat:  
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*Sambucus mexicana*).

Micro Habitat:  
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Last Date Observed: 1984-06-00  
Occurrence Type: Natural/Native occurrence

Location: BETWEEN MILEAGE MARKERS 6 & 7 ON AMERICAN RIVER PARKWAY BIKE TRAIL.

Detailed Location:  
ADULTS OBSERVED BY ARNOLD ON "STRESSED" ELDERBERRIES IN RIPARIAN VEGETATION ALONG THE AMERICAN RIVER.

Ecological:  
Threats:  
General:  
PLSS: T08N, R05E, Sec. 03 (M)  
Accuracy: 1/5 mile  
Area (acres): 0

UTM: Zone-10 N4271467 E637721  
Latitude/Longitude: 38.58101 / -121.41885  
Elevation (feet): 10

Presumed Extant

Owner/Manager: UNKNOWN

Trend: Unknown

County Summary: Sacramento  
Sacramento East (3812154)

Sources:  
ARN84R0001 ARNOLD, R. - DISTRIBUTIONAL AND ECOLOGICAL STUDIES OF FIVE ENDANGERED INSECTS 1984-07-27
ARN84R0003 ARNOLD, R.A. - REPORTS: THE FINDINGS OF MY RECENT FIELD STUDIES OF THE ENDANGERED VALLEY ELDERBERRY LONGHORN BEETLE; LETTERS FROM: DONWEE, BRAND, SEYMORE & ROHWER; USFWS; UC BERKELEY. 1984-06-21
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Desmocerus californicus dimorphus

**Common Name:** valley elderberry longhorn beetle

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3T2
- **State:** S2

**General Habitat:**
- OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

**Micro Habitat:**
- PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 1984-06-00

**Location:**
- JUNCTION OF GARDEN HIGHWAY AND NORTHGATE BLVD.

**Detailed Location:**
- 10 ACRE PARCEL, REFERRED TO AS THE NORTHGATE TRIANGLE.

**Ecological:**
- MOST BEETLES FOUND ON "STRESSED" ELDERBERRIES.

**Threats:**
- GENERAL: ADULTS OBSERVED BY ARNOLD.

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**County Summary:**
- Sacramento

**Quad Summary:**
- Sacramento East (3812154)

**Sources:**
- ARN84R0001
  - ARNOLD, R. - DISTRIBUTIONAL AND ECOLOGICAL STUDIES OF FIVE ENDANGERED INSECTS 1984-07-27

- ARN84R0003

- ARN84U0002
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 11171

**Key Quad:** Sacramento West (3812155)

**Occurrence Number:** 18

**EO Index:** 22733

**Element Code:** IICOL48011

**Occurrence Last Updated:** 1989-08-11

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**Scientific Name:** Desmocerus californicus dimorphus

**Common Name:** valley elderberry longhorn beetle

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**Rare Plant Rank:**
- **Global:** G3T2
- **State:** S2

---

**General Habitat:**
Occurs only in the central valley of California, in association with blue elderberry (Sambucus mexicana).

**Micro Habitat:**
Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.

**Last Date Observed:** XXXX-XX-XX

**Last Survey Date:** 1985-04-24

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:** SACRAMENTO RIVER MI 62.5 W AT I-80.

**Detailed Location:**

**Ecological:**
Habitat is a nearly-pure elderberry stand located along the railroad tracks, with a high density (50%) of exit holes.

**Threats:**

**General:**
No beetles observed; site visited too late in the day.

**PLSS:** T09N, R04E, Sec. 28 (M)

**UTM:** Zone-10 N4272946 E626445

**Accuracy:** 1/5 mile

**Latitude/Longitude:** 38.59601 / -121.54801

**Area (acres):** 0

**Elevation (feet):** 20

**County Summary:** Sacramento, Yolo

**Quad Summary:** Sacramento West (3812155)

**Sources:**

### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

<table>
<thead>
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<tr>
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<td>22734</td>
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<td>Taylor Monument (3812165)</td>
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<td>Element Code:</td>
<td>IICOL48011</td>
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<td>Occurrence Number:</td>
<td>19</td>
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<td>Occurrence Last Updated:</td>
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**Scientific Name:** *Desmocerus californicus dimorphus*  
**Common Name:** valley elderberry longhorn beetle

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**CNDDB Element Ranks:**  
**Global:** G3T2  
**State:** S2

**General Habitat:**  
OCCKRS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*SAMBUCUS MEXICANA*).

**Micro Habitat:**  
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

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<tr>
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<td>Location:</td>
<td>SACRAMENTO RIVER MI 65.5W.</td>
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**Ecological:**

<table>
<thead>
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<th>Threats:</th>
</tr>
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**General:**  
GOOD HABITAT, BUT ONLY TWO OLD EXIT HOLES WERE OBSERVED. NO SURVEY WAS MADE DURING THE FLIGHT PERIOD.

**PLSS:** T09N, R04E, Sec. 17 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4277791 E624796  
**Latitude/Longitude:** 38.63989 / -121.56607  
**Elevation (feet):** 20

**County Summary:**  
Sacramento, Yolo  
**Quad Summary:** Taylor Monument (3812165)

**Sources:**  
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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- **Scientific Name:** *Desmocerus californicus dimorphus*  
- **Common Name:** valley elderberry longhorn beetle

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| CNDDB Element Ranks: | Global: G3T2  
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### General Habitat:

OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*Sambucus mexicana*).  

### Micro Habitat:

PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

- **Last Date Observed:** 1985-09-04
- **Last Survey Date:** 1985-09-04
- **Owner/Manager:** PVT
- **Presence:** Presumed Extant

### Location:

SACRAMENTO RIVER, OPPOSITE MOUTH OF AMERICAN RIVER, AT RIVER MI 60.3, W BANK.

### Detailed Location:

HABITAT CONSISTS OF ELDERBERRY SAVANNAH AND ELDERBERRY TREES IN A COTTONWOOD RIPARIAN WOODLAND.

### Threats:

THREAT OF DEVELOPMENT INTO LIGHTHOUSE MARINA PROJECT.

### General:

EXIT HOLES FOUND.

<table>
<thead>
<tr>
<th>PLSS:</th>
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<td>UTM:</td>
<td>Zone-10 N4273153 E629684</td>
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<td>Elevation (feet):</td>
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### County Summary:

Sacramento, Yolo

Sacramento West (3812155)

### Sources:

- SCH85F0025  
  SCHONHOLTZ, R. - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 1985-09-04

- SEE86R0001  
  LARRY SEEMAN & ASSOCIATES ET AL. FOR EDAW, INC. - DEIR-EIS FOR LIGHTHOUSE MARINA PROJECT 1986-03-XX

- SEE86R0002  
  LARRY SEEMAN & ASSOCIATES, INC. - BIOLOGICAL SURVEY OF LIGHTHOUSE MARINA PROJECT, FOR VALLEY ELDERBERRY LONGHORN BEETLE (PART OF DEIR). 1986-XX-XX
### Scientific Name:
**Desmocerus californicus dimorphus**

### Common Name:
Valley elderberry longhorn beetle

### Listing Status:
- **Federal:** Threatened
- **State:** None

### CNDDB Element Ranks:
- **Global:** G3T2
- **State:** S2

### General Habitat:
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

### Micro Habitat:
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

### Last Date Observed:
1985-09-04

### Location:
Sacramento River, Opposite Mouth of American River, River MI 59.8, W Bank.

### Detailed Location:
HABITAT CONSISTS OF ELDERBERRY SAVANNAH AND ELDERBERRY TREES IN A COTTONWOOD RIPARIAN WOODLAND.

### Threats:
THREAT OF DEVELOPMENT INTO THE LIGHTHOUSE MARINA PROJECT.

### General Habitat:
EXIT HOLES FOUND.

### PLSS:
**T09N, R04E, Sec. 35 (M)**

### Accuracy:
1/5 mile

### UTM:
**Zone-10 N4272507 E629839**

### Latitude/Longitude:
38.59156 / -121.50913

### Area (acres):
0

### Elevation (feet):
0

### Presence:
Presumed Extant

### Owner/Manager:
PVT

### Trend:
Unknown

### Sources:
- SCH85F0025  SChonHoltz, R. - Field Survey Form for Desmocerus Californicus Dimorphus 1985-09-04
- SEE86R0001  Larry Seeman & Associates ET Al. For EDAW, INC. - DEIR-EIS for Lighthouse Marina Project 1986-03-XX
### Scientific Name
*Desmocerus californicus dimorphus*

#### Common Name
valley elderberry longhorn beetle

### Listing Status
**Federal:** Threatened

**State:** None

### CNDDDB Element Ranks
**Global:** G3T2

**State:** S2

### General Habitat
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*Sambucus mexicana)*.

### Micro Habitat
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

### Last Date Observed
1985-09-04

### Occurrence Type
Natural/Native occurrence

### Occurrence Rank
Unknown

### Presence
Presumed Extant

### Location
SACRAMENTO RIVER, OPPOSITE JCT WITH NATOMAS, MAIN DRAINAGE CANAL, RIVER MILE 61.

### Detailed Location
HABITAT CONSISTS OF ELDERBERRY AND SAVANNAH/ELDERBERRY TREES IN A COTTONWOOD RIPARIAN WOODLAND.

### Threats
THREAT OF DEVELOPMENT.

### General
YELLOW WARBLER AND SWAINSON'S HAWK ALSO OBSERVED AT THE SITE.

### PLSS
T09N, R04E, Sec. 27 (M)

### Accuracy
1/5 mile

### Area (acres)
0

### UTM
Zone-10 N4273753 E628707

### Latitude/Longitude
38.60295 / -121.52189

### Elevation (feet)
25

### County Summary
Sacramento, Yolo

### Quad Summary
Sacramento West (3812155)

### Sources
SCH85F0025  SCHONHOLTZ, R. - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 1985-09-04
**Map Index Number:** 39509
**Key Quad:** Elk Grove (3812143)
**Occurrence Number:** 163
**EO Index:** 34511
**Element Code:** IIICOL48011
**Occurrence Last Updated:** 1998-08-24

**Scientific Name:** *Desmocerus californicus dimorphus*
**Common Name:** valley elderberry longhorn beetle

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**CNDDDB Element Ranks:**
- **Global:** G3T2
- **State:** S2

**Occurrence Type:** Natural/Native occurrence
**Occurrence Rank:** Unknown
**Trend:** Unknown

**General Habitat:**
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

**Micro Habitat:**
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 1984-XX-XX
**Last Survey Date:** 1984-XX-XX
**Owner/Manager:** UNKNOWN
**Presence:** Presumed Extant

**Location:**
ALONG COSUMNES RIVER, NEAR WILTON.

**Detailed Location:**
STREAM MAPPED, FOR ~4 RIVER MILES AROUND WILTON.

**Ecological:**

**Threats:**
EXIT HOLES OBSERVED DURING MAY AND JUNE SURVEYS, 1984, NO ADULTS OBSERVED.

**PLSS:** T07N, R06E, Sec. 36 (M)
**Accuracy:** nonspecific area
**Area (acres):** 404

**UTM:** Zone-10 N4253483 E650815
**Latitude/Longitude:** 38.41688 / -121.27246
**Elevation (feet):** 60

**County Summary:**
Sacramento
**Quad Summary:** Sloughhouse (3812142), Elk Grove (3812143)

**Sources:**
ARN84R0001 ARNOLD, R. - DISTRIBUTIONAL AND ECOLOGICAL STUDIES OF FIVE ENDANGERED INSECTS 1984-07-27
**Scientific Name:** *Desmocerus californicus dimorphus*

**Common Name:** valley elderberry longhorn beetle

**Listed Status:**
- Federal: Threatened
- State: None

**CNDDDB Element Ranks:**
- Global: G3T2
- State: S2

**General Habitat:**
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*Sambucus mexicana*).

**Micro Habitat:**
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 2005-05-13

**Location:**
0.3 MILE NORTH OF THE INTERSECTION OF SOUTH RIVER ROAD AND BURROWS AVENUE, ON THE WEST SIDE OF THE SACRAMENTO RIVER.

**Detailed Location:**
SITE IS ADJACENT TO RIVER-MILE 52 ON THE RIVER.

**Ecological:**
RIPARIAN GROWING ALONG STEEP BANKS OF AGRICULTURAL CANAL: DOMINATED BY BLUE ELDERBERRY, HIMALAYAN BLACKBERRY, BULL THISTLE, HORSETAIL, MUSTARD, POISON OAK, WILLOWS, OAK TREES. NEW STEMS IN TEMPORARY CONSTRUCTION EASEMENT SLATED FOR REMOVAL.

**Threats:**
THREATENED BY AGRICULTURE-RELATED PESTICIDE DRIFT, HERBICIDE USE NEAR ELDERBERRIES AND SEWER CONSTRUCTION.

**General:**
1 ADULT MALE VELB OBSERVED ON A NEWLY-SPROUTED ELDERBERRY STEM, THEN TAKING FLIGHT, ON 13 MAY 2005.

**PLSS:**
T08N, R04E, Sec. 29 (M)

**Accuracy:**
80 meters

**Area (acres):** 0

**UTM:**
Zone-10 N4263790 E625717

**Latitude/Longitude:**
38.51362 / -121.55801

**Elevation (feet):** 16

**County Summary:**
Yolo

**Quad Summary:**
Sacramento West (3812155)

**Sources:**
ASB05F0001  ASBELL, A. (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 2005-05-13
### Scientific Name: Desmocerus californicus dimorphus

### Common Name: valley elderberry longhorn beetle

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3T2
- **State:** S2

**General Habitat:**
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

**Micro Habitat:**
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 2006-05-17

**Presence:** Presumed Extant

**Location:**
0.6 MILE NNE OF THE INTERSECTION OF DAVIS ROAD & HARMON AVENUE, WEST SACRAMENTO.

**Detailed Location:**
ELDERBERRY BUSH WAS GROWING IMMEDIATELY ADJACENT TO A PERMANENT ACCESS ROAD FOR THE RAILROAD AND SRCSD PIPELINE, BETWEEN THE ACCESS ROAD AND THE RAILROAD TRACKS, AND 20' FROM THE RD-900 CANAL.

**Ecological:**
HABITAT CONSISTS OF A SINGLE ELDERBERRY BUSH GROWING WITH WILLOWS AND HIMILAYAN BLACKBERRY.

**Threats:**
THREATENED BY HERBICIDE SPRAYING BY THE RAILROAD COMPANY & PROPOSED DEVELOPMENT ON THE EAST SIDE OF THE RD-900 CANAL.

**General:**
ON 17 MAY 2006, A MALE AND FEMALE PAIR OBSERVED MATING ON LEAVES LOCATED AT THE 5'6" HEIGHT; A SECOND FEMALE WAS OBSERVED EATING LEAVES ~1.5 FROM THE MATING PAIR, AND SHE WAS LATER SEEN LAYING EGGS.

**PLSS:** T08N, R04E, Sec. 16 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4266720 E627239  
**Latitude/Longitude:** 38.53980 / -121.54003  
**Elevation (feet):** 13

**County Summary:**
Yolo  
Sacramento West (3812155)

**Sources:**
TWE06F0001  
TWEEDY, C. & P. STONE (JONES AND STOKES ASSOCIATES) - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 2006-05-17
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

<table>
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<td>95816</td>
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#### Scientific Name:  
*Desmocerus californicus dimorphus*  
**Common Name:** valley elderberry longhorn beetle

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| CNDDDB Element Ranks: | Global: G3T2  
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<th>OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).</th>
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<tbody>
<tr>
<td>Micro Habitat:</td>
<td>PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR &quot;STRESSED&quot; ELDERBERRIES.</td>
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<td>Owner/Manager:</td>
<td>PVT</td>
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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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**Location:**  
GENERAL AREA BETWEEN WHITE ROCK RD & DOUGLAS RD, APPROXIMATELY 0.1-3.0 MILES E OF SUNRISE BLVD, E OF RANCHO CORDOVA.

**Detailed Location:**  
PROPERTY NAME WAS THE RIO DEL ORO PROPERTY. SPECIFIC LOCATION OF SHRUBS NOT PROVIDED, THEREFORE OCCURRENCE WAS MAPPED TO PROJECT AREA BOUNDARY BASED ON PROVIDED MAPS.

**Ecological:**  
SHRUBS SHOWING EVIDENCE OF VELB WERE ASSOCIATED WITH RIAPRIAN HABITAT. SHRUBS IMPACTED BY DEVELOPMENT WERE PROPOSED FOR ON-SITE TRANSPALNTATION OR AVOIDENCE AS PART OF MITIGATION EFFORT.

**Threats:**  
PROPOSED DEVELOPMENT; HIGH, MEDIUM, & LOW DENSITY RESIDENTIAL, SCHOOLS, COMMERCIAL, WETLAND PRESERVE, & OPEN SPACE.

**General:**  
42 SHRUBS WITH EXIT HOLES OBSERVED DURING SURVEYS CONDUCTED BETWEEN JUL-AUG 2000; A TOTAL OF 329 SHRUBS WERE DETECTED DURING SURVEYS.

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| County Summary: | Sacramento  
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<tbody>
<tr>
<td>Quad Summary:</td>
<td>Buffalo Creek (3812152), Carmichael (3812153)</td>
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**Sources:**  
ECO07R0020  
ECORP CONSULTING, INC. - DRAFT VALLEY ELDERBERRY LONGHORN BEETLE MITIGATION PLAN FOR RIO DEL ORO, SACRAMENTO COUNTY, CALIFORNIA 2007-09-11
**Desmocerus californicus dimorphus**

**Common Name:** valley elderberry longhorn beetle

**Scientific Name:** Desmocerus californicus dimorphus

**Listing Status:**
- Federal: Threatened
- State: None

**Rare Plant Rank:**
- Global: G3T2
- State: S2

**General Habitat:**
Occurs only in the central valley of California, in association with blue elderberry (Sambucus mexicana).

**Micro Habitat:**
Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.

**Last Date Observed:** 2007-05-14
**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Unknown

**Presence:** Presumed Extant

**Location:**
Along Road 16 about 0.2 mi W of junction w/ County Rd 117, 2.4 mi N of Elverta Rd & Garden Hwy Jct, NW of Sacramento.

**PLSS:** T10N, R03E, Sec. 01 (M)
**Accuracy:** specific area
**Area (acres):** 14

**UTM:** Zone-10 N4289846 E621535
**Latitude/Longitude:** 38.74895 / -121.60141
**Elevation (feet):** 30

**Sources:**
GALLAWAY CONSULTING, INC. - VALLEY ELDERBERRY LONGHORN BEETLE SURVEY, PG&E LINE 407 WEST NATURAL GAS TRANSMISSION PIPELINE, YOLO AND SUTTER COUNTIES, CALIFORNIA 2007-08-XX
<table>
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<tr>
<th>Scientific Name:</th>
<th>Desmocerus californicus dimorphus</th>
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<th>Valley elderberry longhorn beetle</th>
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**General Habitat:**
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCE MEXICANA).

**Micro Habitat:**
PREFERENCES TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 2011-02-XX  
**Last Survey Date:** 2011-02-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant  
**Location:**  
ALONG OLD RIVER RD, ABOUT 0.4 MI SE OF INTERSECTION WITH COUNTY RD 124, 1.3 MI SW OF I-5 & AIRPORT BLVD INTERSECTION.  
**Detailed Location:**  
MAPPED ACCORDING TO PROVIDED COORDINATES FOR SHRUB LOCATION, SHRUB MONITORED BY PG&E. 2009 EXIT HOLE COUNT LIKELY AN OVERESTIMATION. 2010-2011 RE-EVALUATION BY PG&E/GARCIA & ASSOCIATES, DETERMINED VELB EXIT HOLES TO BE PRESENT.

**Ecological:**  
HABITAT GENERALLY DESCRIBED AS NON-RIPARIAN/AGRICULTURAL. ADDITIONAL ELDERBERRY PLANTS IN ADJACENT SPAN. PLANT HEALTH RECORDED AS "REPRODUCTIVE." PLANT UNDERGOES PRUNING BY PG&E.

**Threats:**  
POTENTIAL THREAT DUE TO PROXIMITY OF ROAD AND AGRICULTURAL ACTIVITIES.

**General:**  

**PLSS:** T09N, R03E, Sec. 12 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4279610 E621109  
**Latitude/Longitude:** 38.65679 / -121.60809  
**Elevation (feet):** 40

**County Summary:** Taylor Monument (3812165)
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 95200
Key Quad: Sacramento East (3812154)
Occurrence Number: 276
EO Index: 96337
Element Code: IICOL48011
Occurrence Last Updated: 2015-02-12

Scientific Name: Desmocerus californicus dimorphus
Common Name: valley elderberry longhorn beetle

Listing Status: Federal: Threatened
State: None
CNDDDB Element Ranks: Global: G3T2
State: S2

General Habitat:
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

Micro Habitat:
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Last Date Observed: 2013-05-17
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2013-05-17
Occurrence Rank: Good

Presence: Presumed Extant
Trend: Unknown

Location:
ABOUT 0.3 MI SW OF EXPOSITION BLVD & CAPITAL CITY FWY INTERCHANGE, 0.9 MI NNW OF ELVAS AVE AT MCKINLEY BLVD, SACRAMENTO.

Detailed Location:
MAPPED TO PROVIDED MITIGATION SITE BOUNDARY. BEETLES DETECTED DURING ANNUAL PROTOCOL SURVEYS. MITIGATION SITE NEAR THE AMERICAN RIVER BIKE TRAIL ON N SIDE OF AMERICAN RIVER; MITIGATION FOR SITES# 1 & 2 OF SAC RIVER BANK PROTECTION PROJECT.

Ecological:
SURROUNDING VEGETATION INCLUDED ELDERBERRY SHRUBS, SYCAMORE TREES, VALLEY OAKS, MULE FAT, BLACK BERRY BUSHES, AND CALIFORNIA ROSE. 3 SHRUBS WERE TRANSPLANTED IN 1999.

Threats:

General:
2 OLD POTENTIAL EXIT HOLES OBS 20 MAR & 27 JUN 2001. NO VELB OR EXIT HOLES OBSERVED IN 2004-06. 2 "ADULT VELB OR EXIT HOLES" OBS IN 2007. 0 VELB OR EXIT HOLES OBS IN 2008-2010. 2 VELB OBSERVED CRAWLING ON ELDERBERRY LEAVES ON 17 MAY 2013.

PLSS: T09N, R05E, Sec. 32 (M)
Accuracy: nonspecific area
Area (acres): 28

UTM: Zone-10 N4272842 E635125
Latitude/Longitude: 38.59379 / -121.44838
Elevation (feet): 30

County Summary:
Sacramento
Sacramento East (3812154)
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

<table>
<thead>
<tr>
<th>Sources:</th>
</tr>
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<tbody>
<tr>
<td>BUC01R0001 BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - STATUS OF HABITAT MITIGATION AND MONITORING FOR LOWER AMERICAN RIVER PROJECT: SITES 1, 2, 3, AND 4 2001-12-21</td>
</tr>
<tr>
<td>BUC04R0001 BUCK, P. - LOWER AMERICAN RIVER PROJECT (YEAR 5) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2004-12-XX</td>
</tr>
<tr>
<td>BUC05R0001 BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - LOWER AMERICAN RIVER PROJECT (YEAR 6) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2005-12-XX</td>
</tr>
<tr>
<td>BUC06R0001 BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 7 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R, 2006-12-XX</td>
</tr>
<tr>
<td>BUC08R0001 BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R, 2008-04-XX</td>
</tr>
<tr>
<td>CRO10R0001 CROSBIE, L. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT, LOWER AMERICAN RIVER SITES YEAR 11 MITIGATION MONITORING REPORT 2010-12-XX</td>
</tr>
<tr>
<td>LEF13F0001 LEFEVRE, J. (U.S. ARMY CORPS OF ENGINEERS) - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 2013-05-17</td>
</tr>
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<td>SAC08R0001 SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2008-09-30</td>
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<tr>
<td>SAC09R0001 SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 10 MITIGATION MONITORING REPORT 2009-12-XX</td>
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<td>Key Quad:</td>
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</table>

**Scientific Name:** Desmocerus californicus dimorphus  
**Common Name:** valley elderberry longhorn beetle

**Listing Status:**  
Federal: Threatened  
State: None

**CNDDB Element Ranks:**  
Global: G3T2  
State: S2

**General Habitat:**  
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).  
Micro Habitat: PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

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<th>Last Date Observed:</th>
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<tr>
<td>Last Survey Date:</td>
<td>2006-06-XX</td>
<td>Occurrence Rank:</td>
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</table>

**Owner/Manager:** SAC COUNTY  
**Presence:** Presumed Extant  
**Location:**  
~0.2 MI SE OF GARDEN HWY & TRUXEL RD INTERSECTION, 1 MI NE OF AMERICAN RIVER & SACRAMENTO RIVER CONFLUENCE, SACRAMENTO.

**Detailed Location:**  

**Ecological:**  
584 ELDERBERRY SEEDLINGS PLANTED AND 75 SHRUBS TRANSPLANTED IN 2005. COTTONWOOD, VALLEY OAK, CALIFORNIA SYCAMORE, OREGON ASH, VARIOUS WILLOW SPECIES, CALIFORNIA ROSE, CALIFORNIA GRAPE, AND COYOTE BRUSH WERE ALSO PLANTED.

**Threats:**  
FLOODING AND LITTER/TRASH DUMPING.

**General:**  
ONE SHRUB OBSERVED WITH 1 NEW & 1 OLD EXIT HOLE DURING JUL 2005 SURVEY; 3 ADDITIONAL SHRUBS, EACH WITH 3 OLD EXIT HOLES, ALSO OBS DURING SURVEYS. ABOUT 9 OLD EXIT HOLES OBS JUN 2006; PRESUMABLY OLD EXIT HOLES NOTED IN 2005.

**PLSS:** T09N, R04E, Sec. 25 (M)  
**Accuracy:** 1/10 mile  
**Area (acres):** 0

**UTM:** Zone-10 N4274184 E631077  
**Latitude/Longitude:** 38.60649 / -121.49459  
**Elevation (feet):** 25

**County Summary:** Sacramento  
**County Summary:** Sacramento East (3812154)

**Sources:**

<table>
<thead>
<tr>
<th>HOL05R0001</th>
<th>HOLYOAK, M. &amp; M. KOCH (U.S. FISH AND WILDLIFE SERVICE) - 2005 MONITORING REPORT FOR ARDEN PARALLEL FORCE MAIN PROJECT VALLEY ELDERBERRY LONGHORN BEETLE MITIGATION SITE IN DISCOVERY PARK, SACRAMENTO, CA (FILE NUMBER 1-1-03-F-0023) 2005-12-20</th>
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<tr>
<td>HOL06R0002</td>
<td>HOLYOAK, M. &amp; M. KOCH (U.S. FISH AND WILDLIFE SERVICE) - 2006 MONITORING REPORT FOR ARDEN PARALLEL FORCE MAIN PROJECT VALLEY ELDERBERRY LONGHORN BEETLE MITIGATION SITE IN DISCOVERY PARK, SACRAMENTO, CA (FILE NUMBER 1-1-03-F-0023) 2006-11-20</td>
</tr>
</tbody>
</table>
### Scientific Name: Desmocerus californicus dimorphus

**Common Name:** valley elderberry longhorn beetle

### Listing Status:
- **Federal:** Threatened
- **State:** None

### Rare Plant Rank:
- **Other Lists:**
  - **Global:** G3T2
  - **State:** S2

### General Habitat:
- **OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).**

### Micro Habitat:
- PREFERENCES TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

### Last Date Observed:
- 2009-XX-XX

### Occurrence Type:
- Natural/Native occurrence

### Presence:
- Presumed Extant

### Location:
ALONG N BANK OF AMERICAN RIVER, ~0.9 MI NE OF HWY 50 & HOWE AVE INTERSECTION, 1 MI SW OF WATT AVE AT FAIR OAKS BLVD.

### Detailed Location:
MAPPED TO PROVIDED MAP. SACRAMENTO RIVER BANK PROTECTION PROJECT-SITE #5; 5 SITES ALONG THE LOWER AMERICAN RIVER (LAR). SITE HAD BANK PROTECTION INSTALLED TO PROTECT FROM LATERAL EROSION, MITIGATION MEASURES CONDUCTED ON-SITE.

### Ecological:
SURVIVAL RATE FOR ELDERBERRY SHRUBS APPROXIMATELY 90%; SHRUBS PLANTED IN 1998-1999. HABITAT COMPOSED OF COTTONWOOD, ALDER, ROSE, SYCAMORE, AND SANDBAR WILLOW. UPWARDS OF 22 SHRUBS HAVE HAD SIGNS OF VELB OCCUPANCY VARIOUS LAR SITES.

### Threats:
- NO VELB OR EXIT HOLES OBSERVED IN 2004. EXIT HOLES ESTIMATED TO BE ABOUT 1 YEAR OLD OBS IN 2005 & 2006; REPORTED AS "PRESENT" BOTH YEARS. UNK NUMBER OF EXIT HOLES OBS IN 2007-2009. REPORT FOR 2010 SURVEYS HAD NO VELB DETECTION INFO.

### PLSS:
- T08N, R05E, Sec. 11 (M)

### Accuracy:
- nonspecific area

### Area (acres):
- 41

### UTM:
- Zone-10 N4269588 E639569

### Latitude/Longitude:
- 38.56379 / -121.39802

### Elevation (feet):
- 40

### Presence:
- Presumed Extant

### Owners/Managers:
- SAC AREA FLOOD CONTROL AGENCY

### Trend:
- Unknown

### Last Survey Date:
- 2009-XX-XX

### Occurrence Rank:
- Unknown
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<tr>
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<td>BUCK, P. - LOWER AMERICAN RIVER PROJECT (YEAR 5) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2004-12-XX</td>
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<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - LOWER AMERICAN RIVER PROJECT (YEAR 6) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2005-12-XX</td>
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<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 7 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2006-12-XX</td>
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<tr>
<td>BUC08R0001</td>
<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2008-04-XX</td>
</tr>
<tr>
<td>CRO10R0001</td>
<td>CROSBIE, L. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT, LOWER AMERICAN RIVER SITES YEAR 11 MITIGATION MONITORING REPORT 2010-12-XX</td>
</tr>
<tr>
<td>HOL08R0002</td>
<td>HOLYOAK, M. &amp; M. KOCH-MUNZ (UNIVERSITY OF CALIFORNIA, DAVIS) - THE EFFECTS OF SITE CONDITIONS AND MITIGATION PRACTICES ON SUCCESS OF ESTABLISHING THE VALLEY ELDERBERRY LONGHORN BEETLE AND ITS HOST PLANT, BLUE ELDERBERRY 2008-XX-XX</td>
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<tr>
<td>SAC08R0001</td>
<td>SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2008-09-30</td>
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<tr>
<td>SAC09R0001</td>
<td>SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 10 MITIGATION MONITORING REPORT 2009-12-XX</td>
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Map Index Number: 95208
EO Index: 96349
Key Quad: Sacramento East (3812154)
Element Code: IIICOL48011
Occurrence Number: 279
Occurrence Last Updated: 2015-05-07

Scientific Name: Desmocerus californicus dimorphus
Common Name: valley elderberry longhorn beetle

Listing Status: Federal: Threatened
State: None

CNDDDB Element Ranks: Global: G3T2
State: S2

General Habitat:
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

Micro Habitat:
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Last Date Observed: 2009-XX-XX
Occurrence Type: Natural/Native occurrence

Presence: Presumed Extant

Location:
ALONG S BANK OF AMERICAN RIVER, N OF HWY 50, ~0.7 MI NNE OF INTERSECTION W/ 65TH, 0.8 MI NW OF POWER INN RD INTXN.

Detailed Location:
MAPPED TO PROVIDED MAP. SACRAMENTO RIVER BANK PROTECTION PROJECT-SITE #4; 5 SITES ALONG THE LOWER AMERICAN RIVER (LAR). SITE HAD BANK PROTECTION INSTALLED TO PROTECT FROM LATERAL EROSION, MITIGATION MEASURES CONDUCTED ON-SITE.

Ecological:
SURVIVAL RATE FOR ELDERBERRY SHRUBS APPROXIMATELY 90%; SHRUBS PLANTED IN 1999. VEGETATION GROWING WELL (2009). HABITAT GENERALLY COMPOSED OF COTTONWOOD AND SYCAMORE. UPWARDS OF 22 SHRUBS HAVE HAD SIGNS OF VELB OCCUPANCY VARIOUS LAR SITES.

Threats:
General:

PLSS: T08N, R05E, Sec. 10 (M)
Accuracy: nonspecific area
Area (acres): 31

UTM: Zone-10 N4269191 E637561
Latitude/Longitude: 38.56052 / -121.42114
Elevation (feet): 40

County Summary:
Sacramento
Quad Summary:
Sacramento East (3812154)
Sources:

BU01R0001  BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - STATUS OF HABITAT MITIGATION AND MONITORING FOR LOWER AMERICAN RIVER PROJECT: SITES 1, 2, 3, AND 4 2001-12-21

BU04R0001  BUCK, P. - LOWER AMERICAN RIVER PROJECT (YEAR 5) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2004-12-XX

BU05R0001  BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - LOWER AMERICAN RIVER PROJECT (YEAR 6) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2005-12-XX

BU06R0001  BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 7 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2006-12-XX

BU08R0001  BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2008-04-XX

CRO10R0001  CROSBIE, L. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT, LOWER AMERICAN RIVER SITES YEAR 11 MITIGATION MONITORING REPORT 2010-12-XX

SAC08R0001  SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2008-09-30

SAC09R0001  SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 10 MITIGATION MONITORING REPORT 2009-12-XX
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 95214
Key Quad: Sacramento East (3812154)
Occurrence Number: 280
EO Index: 96353
Element Code: IIICOL48011
Occurrence Last Updated: 2015-05-07

Scientific Name: Desmocerus californicus dimorphus
Common Name: valley elderberry longhorn beetle

Listing Status: Federal: Threatened
State: None

CNDDDB Element Ranks: Global: G3T2
State: S2

General Habitat: OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

Micro Habitat: PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Last Date Observed: 2009-XX-XX
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2009-XX-XX
Occurrence Rank: Unknown
Owner/Manager: SAC AREA FLOOD CONTROL AGENCY
Trend: Unknown
Presence: Presumed Extant

Location: ALONG S BANK OF AMERICAN RIVER, JUST NW OF I-80 BRIDGE, ABOUT 0.7 MI SSW OF TRIBUTE RD & EXPOSITION BLVD INTERSECTION.

Detailed Location: MAPPED TO PROVIDED MAP. SACRAMENTO RIVER BANK PROTECTION PROJECT-SITE #2; 5 SITES ALONG THE LOWER AMERICAN RIVER (LAR). 2005 & 2006 SURVEYS CONDUCTED AS PART OF STUDY EVALUATING SITE CONDITIONS AND SUCCESS OF VELB, EXACT LOCATION UNK.

Ecological: SURVIVAL RATE FOR ELDERBERRY SHRUBS APPROXIMATELY 90%; SHRUBS PLANTED IN 1999. HABITAT COMPOSED OF COTTONWOOD, ALDER, BOX ELDER, ROSE, ARROYO WILLOW, & SANDBAR WILLOW. UPWARDS OF 22 SHRUBS HAVE HAD SIGNS OF VELB OCCUPANCY VARIOUS LAR SITES.

Threats:

General:

PLSS: T09N, R05E, Sec. 32 (M)
Accuracy: nonspecific area
Area (acres): 53

UTM: Zone-10 N4272258 E635016
Latitude/Longitude: 38.58854 / -121.44975
Elevation (feet): 30

County Summary: Sacramento
Quad Summary: Sacramento East (3812154)
### Scientific Name: *Desmocerus californicus dimorphus*

**Common Name:** valley elderberry longhorn beetle

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3T2
- **State:** S2

### General Habitat:

Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*).

Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.

### Last DateObserved:
2009-XX-XX

### Occurrence Type:
Natural/Native occurrence

### Occurrence Rank:
Unknown

### Trend:
Unknown

### Presence:
Presumed Extant

### Location:
S Bank of American River, near HWY 160 Bridge, about 0.7 Mi E of Richards Blvd & 7th St Intersection, Sacramento.

### Detailed Location:
Mapped to provided map. Sacramento River Bank Protection Project-Site #1; 5 sites along the Lower American River (LAR).

### Ecological:

Survival rate for elderberry shrubs approximately 90%; shrubs planted in 1999. Habitat composed of cottonwood, alder, box elder, rose, and sandbar willow.

### Threats:


Report for 2010 surveys had no information regarding velb detections, only elderberry shrub health assessed.

### PLSS:
T09N, R05E, Sec. 31 (M)

### Accuracy:
Nonspecific area

### Area (acres):
45

### UTM:
Zone-10 N4273043 E632582

### Latitude/Longitude:
38.59598 / -121.47754

### Elevation (feet):
30

### County Summary:
Sacramento

Sacramento East (3812154)

### Sources:

- **BUCC01R0001** Buck, P. (Sacramento Area Flood Control Agency) - Status of Habitat Mitigation and Monitoring for Lower American River Project: Sites 1, 2, 3, and 4 2001-12-21
- **BUCC04R0001** Buck, P. - Lower American River Project (Year 5) Mitigation Monitoring Report. Bank Protection Sites 1-5, and Offsite Mitigation Areas at RM 0.9R, RM 3.3R, 11.6R 2004-12-XX
- **BUCC05R0001** Buck, P. (Sacramento Area Flood Control Agency) - Lower American River Project (Year 6) Mitigation Monitoring Report. Bank Protection Sites 1-5, and Offsite Mitigation Areas at RM 0.9R, RM 3.3R, 11.6R 2005-12-XX
- **BUCC06R0001** Buck, P. (Sacramento Area Flood Control Agency) - Lower American River Project (Year 7) Mitigation Monitoring Report. Bank Protection Sites 1-5, Offsite Mitigation Sites RM 0.9R, RM 3.3R, 11.6R 2006-12-XX
- **BUCC08R0001** Buck, P. (Sacramento Area Flood Control Agency) - Lower American River Project (Year 8) Mitigation Monitoring Report. Bank Protection Sites 1-5, Offsite Mitigation Sites RM 0.9R, RM 3.3R, 11.6R 2008-04-XX
- **CRO10R0001** Crosbie, L. (Sacramento Area Flood Control Agency) - Sacramento River Bank Protection Project, Lower American River Sites Year 11 Mitigation Monitoring Report 2010-12-XX
- **SAC08R0001** Sacramento Area Flood Control Agency - Sacramento River Bank Protection Project Lower American River Sites Year 8 Mitigation Monitoring Report. Bank Protection Sites 1-5, Offsite Mitigation Sites RM 0.9R, RM 3.3R, 11.6R 2008-09-30
- **SAC09R0001** Sacramento Area Flood Control Agency - Sacramento River Bank Protection Project Lower American River Sites Year 10 Mitigation Monitoring Report 2009-12-XX
Map Index Number: 95226
EO Index: 96356
Key Quad: Carmichael (3812153)
Element Code: IICOL48011
Occurrence Number: 282
Occurrence Last Updated: 2015-02-19

Scientific Name: *Desmocerus californicus dimorphus*
Common Name: valley elderberry longhorn beetle

Listing Status: Federal: Threatened
State: None
CNDDB Element Ranks: Global: G3T2
State: S2

General Habitat:
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*Sambucus mexicana*).

Micro Habitat:
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Last Date Observed: 2013-05-13
Last Survey Date: 2013-05-13
Owner/Manager: SAC AREA FLOOD CONTROL AGENCY
Presence: Presumed Extant
Location:
N BANK OF AMERICAN RIVER, ~0.4 MI S OF JACOB LN AT AMERICAN RIVER DR, 1 MI NNW OF HWY 50 AT BRADSHAW RD, E SACRAMENTO.

Detailed Location:
MAPPED TO PROVIDED MAP. SACRAMENTO RIVER BANK PROTECTION PROJECT-SITE 11.6R, SITE ALONG THE LOWER AMERICAN RIVER SERVING AS OFF-SITE MITIGATION FOR PROJECT SITE #5.

Ecological:
ELDERBERRY SHRUBS PLANTED IN 2000-2001. AN ADDITIONAL 100 SHRUBS PLANTED IN 2004. HABITAT COMPOSED OF OREGON ASH, BOX ELDER, SANDBAR WILLOW, SYCAMORE, AND CALIFORNIA BLACKBERRY.

Threats:
General:

PLSS: T08N, R06E, Sec. 05 (M)
Accuracy: nonspecific area
Area (acres): 51

UTM: Zone-10 N4271283 E643886
Latitude/Longitude: 38.57837 / -121.34814
Elevation (feet): 45

County Summary:
Sacramento
Carmichael (3812153)

Detailed Location:
MAPPED TO PROVIDED MAP. SACRAMENTO RIVER BANK PROTECTION PROJECT-SITE 11.6R, SITE ALONG THE LOWER AMERICAN RIVER SERVING AS OFF-SITE MITIGATION FOR PROJECT SITE #5.
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<tr>
<td>BUC04R0001</td>
<td>BUCK, P. - LOWER AMERICAN RIVER PROJECT (YEAR 5) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2004-12-XX</td>
</tr>
<tr>
<td>BUC05R0001</td>
<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - LOWER AMERICAN RIVER PROJECT (YEAR 6) MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, AND OFFSITE MITIGATION AREAS AT RM 0.9R, RM 3.3R, 11.6R 2005-12-XX</td>
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<tr>
<td>BUC06R0001</td>
<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 7 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2006-12-XX</td>
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<tr>
<td>BUC08R0001</td>
<td>BUCK, P. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2008-04-XX</td>
</tr>
<tr>
<td>CRO10R0001</td>
<td>CROSBIE, L. (SACRAMENTO AREA FLOOD CONTROL AGENCY) - SACRAMENTO RIVER BANK PROTECTION PROJECT, LOWER AMERICAN RIVER SITES YEAR 11 MITIGATION MONITORING REPORT 2010-12-XX</td>
</tr>
<tr>
<td>KAH13F0001</td>
<td>KAHLER, H. (U.S. FISH AND WILDLIFE SERVICE) - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 2013-05-13</td>
</tr>
<tr>
<td>SAC08R0001</td>
<td>SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 8 MITIGATION MONITORING REPORT. BANK PROTECTION SITES 1-5, OFFSITE MITIGATION SITES RM 0.9R, RM 3.3R, 11.6R. 2008-09-30</td>
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<tr>
<td>SAC09R0001</td>
<td>SACRAMENTO AREA FLOOD CONTROL AGENCY - SACRAMENTO RIVER BANK PROTECTION PROJECT LOWER AMERICAN RIVER SITES YEAR 10 MITIGATION MONITORING REPORT 2009-12-XX</td>
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</tbody>
</table>
Scientific Name: Desmocerus californicus dimorphus
Common Name: valley elderberry longhorn beetle

Listing Status: Federal: Threatened
State: None

CNDB Element Ranks: Global: G3T2
State: S2

General Habitat:
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

Micro Habitat:
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Last Date Observed: 1949-05-06
Last Survey Date: 1949-05-06
Owner/Manager: UNKNOWN
Presence: Presumed Extant

Location:
SACRAMENTO, VICINITY OF I-5 AND I-80 INTERCHANGE.

Detailed Location:
MAPPED GENERALLY TO SACRAMENTO, NEAR SACRAMENTO RIVER. PROVIDED LOCATION DESCRIPTION GIVEN ONLY AS "SACRAMENTO." EXACT LOCATION OF COLLECTIONS UNKNOWN, THIS OCCURRENCE SERVES AS A PLACEHOLDER.

Ecological:
ALLOTYPES AND PARATYPES COLLECTED IN 1921 COMPOSED OF 2 MALES AND 2 FEMALES (USNM #24678); COLLECTED ON ELDERBERRY.

Threats:
General:
ALLOTYPE/PARATYPES COLLECTED MAY-JUN 1921. INDIVIDUAL BEETLES COLLECTED ON 2 MAY 1926, 17 MAY 1944, 21 MAY 1944 (4 COLLECTED), 1 JUN 1948, AND 6 MAY 1949. COLLECTIONS HELD AT UC BERKELEY ESSIG MUSEUM OF ENTOMOLOGY ID# EMEC61120-61127.
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

<table>
<thead>
<tr>
<th>Sources:</th>
<th>Details</th>
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<tr>
<td>FIS21A0001</td>
<td>FISHER, W. - A NEW CERAMBYCID BEETLE FROM CALIFORNIA. PROCEEDINGS OF THE ENTOMOLOGICAL SOCIETY OF WASHINGTON, 23:2006-2008 (1921) 1921-12-XX</td>
</tr>
<tr>
<td>HAM44S0001</td>
<td>HAMSHER, C.A. (UNIVERSITY OF CALIFORNIA, BERKELEY) - ESSIG MUSEUM OF ENTOMOLOGY #EMEC61127 COLLECTED AT &quot;SACRAMENTO&quot; 1944-05-17</td>
</tr>
<tr>
<td>MCC44S0001</td>
<td>MCCLAY, A.T. (UNIVERSITY OF CALIFORNIA, BERKELEY) - ESSIG MUSEUM OF ENTOMOLOGY #EMEC61122 COLLECTED AT &quot;SACRAMENTO&quot; 1944-05-21</td>
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<td>MCC44S0002</td>
<td>MCCLAY, A.T. (UNIVERSITY OF CALIFORNIA, BERKELEY) - ESSIG MUSEUM OF ENTOMOLOGY #EMEC61123 COLLECTED AT &quot;SACRAMENTO&quot; 1944-05-21</td>
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<tr>
<td>MCC44S0003</td>
<td>MCCLAY, A.T. (UNIVERSITY OF CALIFORNIA, BERKELEY) - ESSIG MUSEUM OF ENTOMOLOGY #EMEC61124 COLLECTED AT &quot;SACRAMENTO&quot; 1944-05-21</td>
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<tr>
<td>MCC44S0004</td>
<td>MCCLAY, A.T. (UNIVERSITY OF CALIFORNIA, BERKELEY) - ESSIG MUSEUM OF ENTOMOLOGY #EMEC61126 COLLECTED AT &quot;SACRAMENTO&quot; 1944-05-21</td>
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<tr>
<td>MCC48S0001</td>
<td>MCCLAY, A.T. (UNIVERSITY OF CALIFORNIA, BERKELEY) - ESSIG MUSEUM OF ENTOMOLOGY #EMEC61121 COLLECTED AT &quot;SACRAMENTO&quot; 1948-06-01</td>
</tr>
<tr>
<td>MCC49S0001</td>
<td>MCCLAY, A.T. (UNIVERSITY OF CALIFORNIA, BERKELEY) - ESSIG MUSEUM OF ENTOMOLOGY #EMEC61120 COLLECTED AT &quot;SACRAMENTO&quot; 1949-05-06</td>
</tr>
<tr>
<td>THO21S0001</td>
<td>THOMPSON, B. (U.S. NATIONAL MUSEUM OF NATURAL HISTORY) - USNM ENTOMOLOGY 24678 COLLECTED IN SACRAMENTO 1921-05-03</td>
</tr>
<tr>
<td>WIL26S0001</td>
<td>WILSON, C.C. (UNIVERSITY OF CALIFORNIA, BERKELEY) - ESSIG MUSEUM OF ENTOMOLOGY #EMEC61125 COLLECTED AT &quot;SACRAMENTO&quot; 1926-05-02</td>
</tr>
</tbody>
</table>
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Map Index Number:** 95234

**EO Index:** 96370

**Key Quad:** Taylor Monument (3812165)

**Occurrence Number:** 285

**Occurrence Last Updated:** 2015-02-13

**Scientific Name:** *Desmocerus californicus dimorphus*

**Common Name:** valley elderberry longhorn beetle

**Listing Status:**
- Federal: Threatened
- State: None

**CNDDDB Element Ranks:**
- Global: G3T2
- State: S2

**General Habitat:**
- OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

**Micro Habitat:**
- PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 2011-02-XX

**Last Survey Date:** 2011-02-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
ALONG OLD RIVER RD, 1 MI SE OF INTERSECTION OF W/ COUNTY RD 124, 1.4 MI WSW OF DEL PASO RD AT POWER LINE RD, SACRAMENTO.

**Detailed Location:**
MAPPED TO PROVIDED MAP LOCATIONS. SHRUBS PREDOMINANTLY LOCATED ALONG OLD RIVER RD. 1 SHRUB LOCATED ABOUT 115 METERS WEST OF ROAD ON PRIVATE PROPERTY. 2011 RE-EVALUATION SURVEYS CONDUCTED BY GARCIA AND ASSOCIATES FOR PG&E.

**Ecological:**
- REPORTED AS "MIXTURE OF TYPES" AND "AGRICULTURAL."

**Threats:**
- ROAD MAINTENANCE INCLUDING VEGETATION MANAGEMENT AND PRUNING.

**General:**
- 2 SHRUBS W/ POTENTIAL EXIT HOLES (13 HOLES IN EACH) OBSERVED ON 17 OCT 2007; EXIT HOLE COUNT LIKELY AN OVERESTIMATE, SHRUBS RE-EVALUATED IN 2010-2011. UNKNOWN NUMBER OF EXIT HOLES FOUND IN ABOUT 4 SHRUBS DURING NOV 2010-FEB 2011 SURVEYS.

**PLSS:** T09N, R03E, Sec. 12 (M)

**Accuracy:** specific area

**Area (acres):** 23

**UTM:** Zone-10 N4278672 E621536

**Latitude/Longitude:** 38.64827 / -121.60335

**Elevation (feet):** 40

**County Summary:** Yolo

**Quad Summary:** Taylor Monument (3812165)

**Sources:**
- BEE07R0001 BEESLEY, P. (PG&E) - VALLYER ELDERBERRY LONGHORN BEETLE CONSERVATION PROGRAM 2006 BIENNIAL MONITORING REPORT. 2007-12-XX
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

<table>
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<th>Map Index Number:</th>
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<td>Key Quad:</td>
<td>Carmichael (3812153)</td>
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<tr>
<td>Occurrence Number:</td>
<td>293</td>
</tr>
<tr>
<td>EO Index:</td>
<td>96405</td>
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<tr>
<td>Element Code:</td>
<td>IIICOL48011</td>
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<tr>
<td>Occurrence Last Updated:</td>
<td>2015-02-19</td>
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**Scientific Name:** *Desmocerus californicus dimorphus*

**Common Name:** valley elderberry longhorn beetle

**Listing Status:**
- Federal: Threatened
- State: None

**CNDDDB Element Ranks:**
- Global: G3T2
- State: S2

**General Habitat:**
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*Sambucus mexicana*).

**Micro Habitat:**
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 2008-04-28

**Location:**
~0.1 MI SW OF CLAYTON WAY & CRONDALL DR INTERSECTION, 0.7 MI SE OF WATT AVE & FAIR OAKS BLVD INTERSECTION, SACRAMENTO.

**Detailed Location:**
MAPPED TO PROVIDED COORDINATES. ALONG THE NORTHERN BANK OF THE LOWER AMERICAN RIVER, SMALL RIPARIAN CORRIDOR BETWEEN THE RIVER AND RESIDENTIAL HOUSING.

**Ecological:**
LARGE ELDERBERRY SHRUB COMPLEX. URBAN HOUSING AND AMERICAN RIVER PARKWAY LANDS SURROUND COMPLEX.

**Threats:**
POSSIBLE THREAT DUE TO LEVEE MAINTENANCE ACTIVITIES.

**General:**
1 ADULT BEETLE DETECTED ON 28 APR 2008.

**PLSS:** T08N, R06E, Sec. 06 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4270285 E641913  
**Latitude/Longitude:** 38.56969 / -121.37098  
**Elevation (feet):** 50

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**
WEINRICH, D. (U.S. FISH AND WILDLIFE SERVICE-SACRAMENTO) - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 2008-04-28
### Scientific Name: *Desmocerus californicus dimorphus*  
**Common Name:** valley elderberry longhorn beetle

### Listing Status:  
**Federal:** Threatened  
**State:** None  

### CNDDB Element Ranks:  
**Global:** G3T2  
**State:** S2

### General Habitat:  
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*Sambucus mexicana*). PREFERENCES TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCES SHOWN FOR "STRESSED" ELDERBERRIES.

### Last Date Observed: 2006-09-XX  
### Last Survey Date: 2006-09-XX  
### Presence: Presumed Extant

### Location:  
ALONG AMERICAN RIVER, VICINITY OF SACRAMENTO BAR, ABOUT 0.1 TO 2 MILES DOWNSTREAM OF SUNRISE BLVD BRIDGE, SACRAMENTO.

### Detailed Location:  
1976 LOCATION WAS LOWER SUNRISE RECREATIONAL AREA. 1982 SURVEY LOCATION DESCRIBED AS "ROSSMOOR BAR... ABOUT 0.2 MI N OF INTERSECTION OF AMBASSADOR DR AND EL MANTO DR." 1985 SURVEY CONDUCTED IN THE VICINITY OF SACRAMENTO BAR.

### Ecological:  
ELDERBERRY SAVANNAH, LIVE OAK WOODLAND, VALLEY OAK WOODLAND, OLD FIELDS, DREDGE TAILING PONDS, AND DREDGE TRAILING OLD FIELDS. UNDERSTORY COMPOSED OF ELYMUS TRITICOIDES, CONIUM MACULATUM, SOME VITUS CALIFORNICUS, AND RUBUS SPECIES.

### Threats:  
**General:**


### PLSS:

T09N, R06E, Sec. 23 (M)  
Accuracy: nonspecific area  
Area (acres): 515

### UTM:

Zone-10 N4276688 E649952  
Latitude/Longitude: 38.62611 / -121.28150  
Elevation (feet): 60

### Sources:

1. **ARN82F0001** ARNOLD, R.A. - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 1982-XX-XX
2. **EYA76R0001** EYA, B.K. - REPORT ON THE DISTRIBUTION & STATUS OF A LONGHORN BEETLE, DESMOCERUS CALIFORNICUS DIMORPHUS (COLEOPTERA: CERAMBYCIDAE). OBTAINED THROUGH DR. LARRY ENG. 1976-XX-XX
3. **FWS84R0002** U.S. FISH & WILDLIFE SERVICE - RECOVERY PLAN FOR THE VALLEY ELDERBERRY LONGHORN BEETLE. 1984-XX-XX
5. **SEE85R0001** LARRY SEEMAN & ASSOCIATES, INC. - AMERICAN RIVER CORRIDOR BEETLE STUDY 1985-08-XX
<table>
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<tr>
<th>Map Index Number: 95289</th>
<th>EO Index: 96428</th>
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<tr>
<td>Key Quad: Folsom (3812162)</td>
<td>Element Code: IIICOL48011</td>
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<tr>
<td>Occurrence Number: 296</td>
<td>Occurrence Last Updated: 2015-02-23</td>
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**Scientific Name:** *Desmocerus californicus dimorphus*

**Common Name:** valley elderberry longhorn beetle

**Listing Status:**
- **Federal:** Threatened
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3T2
- **State:** S2

**General Habitat:**
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*Sambucus mexicana*).

**Micro Habitat:**
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

**Last Date Observed:** 1985-06-XX

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1985-06-XX

**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
AMERICAN RIVER, VICINITY OF SAILOR BAR, ABOUT 1.3 AIR MILES W OF NIMBUS DAM, 1.3 MILES E OF SUNRISE BLVD, SACRAMENTO.

**Detailed Location:**
MAPPED BY CNDDB IN THE VICINITY OF SAILOR BAR ALONG THE AMERICAN RIVER; EXACT LOCATION OF BEETLES UNKNOWN.

**Ecological:**

**Threats:**

**General:**
3 BEETLES OBSERVED DURING MAY-JUN 1985 SURVEYS CONDUCTED BY R. ARNOLD.

**PLSS:** T09N, R07E, Sec. 17 (M)

**Accuracy:** nonspecific area

**Area (acres):** 277

**UTM:** Zone-10 N4277891 E652953

**Latitude/Longitude:** 38.63638 / -121.24264

**Elevation (feet):** 100

**County Summary:**
Sacramento

**Quad Summary:**
Folsom (3812162), Citrus Heights (3812163)

**Sources:**
ARN85U0001 ARNOLD, R.A. (ENTOMOLOGICAL CONSULTING SERVICES) - LETTER TO JACK PARNELL, DIRECTOR, DFG PROVIDING COLLECTION DATA FOR VELB. 1985-09-18
<table>
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<th>Map Index Number: 60652</th>
<th>EO Index: 60688</th>
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<td>Key Quad: Carmichael (3812153)</td>
<td>Element Code: IIICOL5V010</td>
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<td>Occurrence Number: 5</td>
<td>Occurrence Last Updated: 2005-03-29</td>
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</table>

**Scientific Name:** Hydrochara rickseckeri  
**Common Name:** Ricksecker's water scavenger beetle

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G2?  
- State: S2?

**General Habitat:** AQUATIC.  
**Micro Habitat:**

**Last Date Observed:** 1997-XX-XX  
**Last Survey Date:** 1997-XX-XX

**Owner/Manager:** SAC COUNTY

**Presence:** Presumed Extant

**Location:** MATHER FIELD REGIONAL PARK.

**Detailed Location:** NO OTHER LOCATION INFORMATION GIVEN.

**Ecological:**

**Threats:**

**General:**

**PLSS:** T08N, R06E, Sec. 13 (M)  
**UTM:** Zone-10 N4267728 E651496

**Accuracy:** specific area  
**Area (acres):** 1,605

**Latitude/Longitude:** 38.54508 / -121.26159  
**Elevation (feet):** 140

**County Summary:** Sacramento  
**Quad Summary:** Bufalo Creek (3812152), Carmichael (3812153)

**Sources:** JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
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<td><strong>Occurrence Last Updated:</strong></td>
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<tr>
<td><strong>Scientific Name:</strong></td>
<td><em>Andrena subapasta</em></td>
</tr>
<tr>
<td><strong>Common Name:</strong></td>
<td>an andrenid bee</td>
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<td><strong>Listing Status:</strong></td>
<td>Federal: None</td>
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<td>State: None</td>
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<td><strong>CNDDB Element Ranks:</strong></td>
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<td><strong>General Habitat:</strong></td>
<td>COLLECTS POLLEN PRIMARILY FROM ARENARIA CALIFORNICA BUT ALSO ORTHOCARPUS ERIANTHUS &amp; LASTHENIA SP.</td>
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<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
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<td><strong>Location:</strong></td>
<td>ROSEVILLE.</td>
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<td><strong>Detailed Location:</strong></td>
<td>RECORD DATES FROM 1932, SO OLDER AREA OF ROSEVILLE MAPPED.</td>
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<tr>
<td><strong>Ecological:</strong></td>
<td>FEMALES OF THIS SPECIES COLLECT POLLEN PRIMARILY FROM ARENARIA, BUT ALSO ORTHOCARPUS ERIANTHUS AND LASTHENIA SP.</td>
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<tr>
<td><strong>Threats:</strong></td>
<td>FEMALE COLLECTED 12 MAR 1932 BY E. FOURNESS, IN COLLECTION OF AMERICAN MUSEUM OF NATURAL HISTORY.</td>
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<td><strong>PLSS:</strong></td>
<td>T10N, R06E, Sec. 02 (M)</td>
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<td><strong>Area (acres):</strong></td>
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<td><strong>Elevation (feet):</strong></td>
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<td><strong>County Summary:</strong></td>
<td>Placer</td>
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<td><strong>Quad Summary:</strong></td>
<td>Citrus Heights (3812163), Roseville (3812173)</td>
</tr>
</tbody>
</table>

**Sources:**

FOU32S0001  FOURNESS, E. - ANDRENA SUBAPASTA SPECIMEN AMNH_BEE00110380 1932-03-12

**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 59354  
**EO Index:** 59390  
**Key Quad:** Citrus Heights (3812163)  
**Occurrence Number:** 4  
**Occurrence Last Updated:** 2012-05-09

**Scientific Name:** *Andrena subapasta*  
**Common Name:** an andrenid bee

**Listing Status:**  
**Federal:** None  
**State:** None  

**CNDDB Element Ranks:**  
**Global:** G1G2  
**State:** S1S2

**General Habitat:**  
COLLECTS POLLEN PRIMARILY FROM ARENARIA CALIFORNICA BUT ALSO ORTHOCARPUS ERIANTHUS & LASTHENIA SP.

**Last Date Observed:** 1954-04-18  
**Last Survey Date:** 1954-04-18  
**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:**  
FAIR OAKS.

**Detailed Location:**  
EXACT LOCATION UNKNOWN; SPECIMEN LOCALITY STATES "FAIR OAKS."

**Ecological:**  
FEMALES OF THIS SPECIES COLLECT POLLEN PRIMARILY FROM ARENARIA, BUT ALSO ORTHOCARPUS ERIANTHUS AND LASTHENIA SP.

**Threats:**  
FEMALE COLLECTED 18 APR 1954 BY R.R. SNELLING, IN COLLECTION OF AMERICAN MUSEUM OF NATURAL HISTORY.

**PLSS:** T09N, R06E, Sec. 12 (M)  
**Accuracy:** 1 mile  
**Area (acres):** 0  
**UTM:** Zone-10 N4278860 E650386  
**Latitude/Longitude:** 38.64555 / -121.27192

**Elevation (feet):** 170  
**County Summary:**  
Sacramento  
**Quad Summary:**  
Citrus Heights (3812163)

**Sources:**

SNE54S0001  
SNELLING, R.R. - ANDRENA SUBAPASTA AMNH_BEE00110381 1954-04-18

THO69A0002  
| **Map Index Number:** | 80869 |
| **Key Quad:** | Liberty Island (3812136) |
| **Occurrence Number:** | 223 |
| **EO Index:** | 81811 |
| **Element Code:** | PDAPI19030 |
| **Occurrence Last Updated:** | 2010-11-29 |

**Scientific Name:** *Lilaeopsis masonii*  
**Common Name:** Mason's lilaeopsis

**Listing Status:**  
- **Federal:** None  
- **State:** Rare

**CNDDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
FRESHWATER AND BRACKISH MARSHES, RIPARIAN SCRUB.

**Micro Habitat:**  
TIDAL ZONES, IN MUDDY OR SILTY SOIL FORMED THROUGH RIVER DEPOSITION OR RIVER BANK EROSION. 0-10 M.

**Last Date Observed:** 2009-09-17  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2009-09-17  
**Occurrence Rank:** Good

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant

**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 XIPHIOIDES, AND PASPALUM. SOME AREAS ARE IN SHADE OF ALDERS AND RIPARIAN TREES.

**Threats:**  
EROSION AND RECREATION ARE THREATS.

**General:**  
MANY SCATTERED PATCHES OBSERVED IN 2009.

**PLSS:**  
T06N, R03E, Sec. 10 (M)

**UTM:**  
Zone-10 N4248115 E619600

**Accuracy:** specific area  
**Latitude/Longitude:** 38.37324 / -121.63082  
**Area (acres):** 794  
**Elevation (feet):**

**County Summary:** Solano, Yolo  
**Quad Summary:** Liberty Island (3812136), Clarksburg (3812145), Saxon (3812146)

**Sources:**  
DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
## Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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### Scientific Name: Symphyotrichum lentum

### Common Name: Suisun Marsh aster

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### CNDDDB Element Ranks: Global: G2

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MARSHES AND SWAMPS (BRACKISH AND FRESHWATER).

<table>
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<th>Micro Habitat:</th>
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</table>

MOST OFTEN SEEN ALONG SLOUGHS WITH PHRAGMITES, SCIRPUS, BLACKBERRY, TYPHA, ETC. 0-3 M.

### Last Date Observed: 2013-10-23

### Occurrence Type: Natural/Native occurrence

### Occurrence Last Updated: 2013-12-20

### Owner/Manager: DFG-YOLO BYPASS WA

### Presence: Presumed Extant

### Location:

SW END OF GREENS LAKE, YOLO WILDLIFE AREA, BETWEEN WEST SACRAMENTO AND DAVIS.

### Detailed Location:

MAPPED BY CNDDDB AS 2 POLYGONS IN THE SW 1/4 OF THE NW 1/4 AND THE NW 1/4 OF THE SW 1/4 OF SECTION 12.

### Ecological:

ASSOCIATED WITH Polygonum amphibium, Schoenoplectus acutus, Cynodon dactylon, Salix gooddingii, Fraxinus latifolia, Lolium multiflorum, Polygonum lapathifolium, Euthamia occidentalis, Toxicodendron diversilobum, Lepidium latifolium, ETC.

### Threats:

SITE MODERATELY IMPACTED BY COMPETITION WITH EXOTICS.

### General:

OBSERVED DURING 2005 VEGETATION SURVEYS. SCATTERED CLUMPS IN 2013. PRESTON BELIEVES THIS OCCURRENCE IS NOT S. LENTUM BUT ANOTHER, POSSIBLY UNDESCRIBED, TAXON. PLANTS IN AREA MAY BE "S. LENTUM VAR. MEDIUM." KEPT UNDER S. LENTUM FOR NOW.

### PLSS:

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### Accuracy: specific area

| Area (acres): 10 |

### UTM: Zone-10 N4268452 E621917

### Latitude/Longitude: 38.55615 / -121.60077

### Elevation (feet): 1

### County Summary: Sacremento West (3812155)

### Sources:

PRE13F0003  PRESTON, R. (ICF INTERNATIONAL, INC.) - FIELD SURVEY FORM FOR SYMPHYOTRICHUM LENTUM 2013-10-23

VEG05F0213  VEGETATION CLASSIFICATION AND MAPPING PROGRAM (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR SYMPHYOTRICHUM LENTUM 2005-09-12

VEG05F0215  VEGETATION CLASSIFICATION AND MAPPING PROGRAM (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - FIELD SURVEY FORM FOR SYMPHYOTRICHUM LENTUM 2005-09-12
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 80988
EO Index: 81938

Key Quad: Clarksburg (3812145)
Occurrence Number: 12
Occurrence Last Updated: 2013-07-29

Scientific Name: Lepidium latipes var. heckardii
Common Name: Heckard's pepper-grass

Listing Status: Federal: None
State: None

Rare Plant Rank: 1B.2
Others Lists:

CNDDDB Element Ranks: Global: G4T2
State: S2

General Habitat: VALLEY AND FOOTHILL GRASSLAND.
Micro Habitat: GRASSLAND, AND SOMETIMES VERNAL POOL EDGES. ALKALINE SOILS. 2-200 M.

Last Date Observed: 2010-03-29
Last Survey Date: 2010-03-29
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Good
Trend: Unknown

Owner/Manager: UNKNOWN
Presence: Presumed Extant

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.

Threats:
DISTURBED BY GRAZING.

General:
150 PLANTS OBSERVED IN 2009. 400 PLANTS OBSERVED IN 2010.

PLSS: T06N, R04E, Sec. 11 (M)
Accuracy: specific area
Area (acres): 1

UTM: Zone-10 N4249295 E630361
Latitude/Longitude: 38.38236 / -121.50745
Elevation (feet): 5

County Summary:
Sacramento

Quad Summary:
Clarksburg (3812145)

Sources:
DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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<th>VALLEY AND FOOTHILL GRASSLAND.</th>
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<td>GRASSLAND, AND SOMETIMES VERNAL POOL EDGES. ALKALINE SOILS. 2-200 M.</td>
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<tr>
<th>Location:</th>
<th>JUST SOUTH OF STONE LAKE; ~1.2 AIR MILES WNW OF JUNCTION OF I-5 AND HOOD FRANKLIN RD, SOUTH OF SACRAMENTO.</th>
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<tr>
<td>Detailed Location:</td>
<td>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.</td>
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| Ecological:                       | NEAR POOL AND PONDED AREA. ASSOCIATED WITH PLAGIOBOTHrys, CERASTIUm, ERODIUM CICUTARIUM, MEDICAGO, GRINDELia, MYOSVUS, POA ANNUA, HEMIZOnIA, LoliUM, RUMEx, CAMOMILLA, ELEOCARiS, AND LEPIDiUM LATIPES VAR. LATIPES. |

| Threats:                          | CATTLE GRAZING. |

| General:                          | 575 PLANTS OBSERVED IN 2010. |

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<td>Sacramento</td>
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**Sources:**
DWR11D0001  CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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<td>EO Index:</td>
<td>5241</td>
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<td>PDCAM060C0</td>
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<td>Occurrence Last Updated:</td>
<td>1994-08-08</td>
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**Scientific Name:** *Downingia pusilla*  
**Common Name:** dwarf downingia

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: GU  
- State: S2

**General Habitat:**  
VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.

**Micro Habitat:**  
VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-445 M.

**Last Date Observed:**  
1994-04-04

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Fair

**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
ABOUT 800 FEET DUE SOUTH OF THE WEST END OF DELANO ROAD, BETWEEN RIO LINDA AND ELVERTA.

**Detailed Location:**  
DELANO ROAD IS JUST SOUTH OF ELVERTA ROAD AND NORTH OF U STREET.

**Ecological:**  
GRASSLAND WITH SEASONAL WETLANDS AND VERNAL POOLS. ASSOCIATED WITH RANUNCULUS BONARIENSIS VAR. TRISEPALUS AND PLAGIOBOTHrys STIPITATUS VAR. MICRANTHUS.

**Threats:**

**General:**  
100+ PLANTS OBSERVED IN 1994. SITE IS NEAR A MICROWAVE TOWER AND A DIRT PARKING AREA. PLANNED ACCESS ROADS NEARBY WILL AVOID THE SITE. MAPPED AS SAME SITE AS 1951 COLLECTION BY CARTER FROM KEITHLY RANCH, RIO LINDA.

**PLSS:** T10N, R05E, Sec. 19 (M)  
**Accuracy:** 80 meters

**UTM:** Zone-10 N4285496 E632468  
**Latitude/Longitude:** 38.70819 / -121.47648

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**

<table>
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<th>Details</th>
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<tr>
<td>CAR51S0001</td>
<td>CARTER, A. - CARTER #3015 CAS, JEPS #22252, UC #1101471 1951-04-01</td>
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<tr>
<td>CRU34S0002</td>
<td>CRUM, E. - CRUM #1603 UC #903069 1934-04-01</td>
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<tr>
<td>MAS34S0007</td>
<td>MASON, H. - MASON #7935 JEPS #18420, UC #769993 1934-03-25</td>
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<td>YOR94F0001</td>
<td>YORK, R. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1994-04-04</td>
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### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Downingia pusilla  
**Common Name:** dwarf downingia

**Listing Status:**  
- Federal: None  
- State: None

**CNDDDB Element Ranks:**  
- Global: GU  
- State: S2

**General Habitat:**  
VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.

**Micro Habitat:**  
VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-445 M.

**Last Date Observed:** 2002-04-02  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2002-04-02  
**Occurrence Rank:** Fair

**Owner/Manager:** PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**  
EAST SIDE OF WATERMAN ROAD, BETWEEN SHELDON ROAD AND BOND ROAD, ELK GROVE.

**Detailed Location:**  

**Ecological:**  
DEEP, CENTRAL PORTIONS OF VERNAL POOLS, DOMINATED BY ALLOCARYA STIPITATA MIRANTHA, RANUNCULUS BONARIENSIS TRISEPALUS, ERYNGIUM VASEYI VALLICOLA, GLYCERIA DECLINATA, TRIFOLIUM WILLDENOVII, AND ELEOCHARIS MACROSTACHYA.

**Threats:**  
POOLS IN AREA HEAVILY DAMAGED BY EXHAUSTIVE DAIRY CATTLE GRAZING. THREATENED WITH DEVELOPMENT.

**General:**  
APPROXIMATELY 200 PLANTS OBSERVED IN WESTERN POOL IN 1991. IN 2002, 2 PLANTS WERE FOUND IN THE WESTERN POOL AND APPROXIMATELY 50 WERE SEEN IN THE EASTERN POOL.

**PLSS:** T07N, R06E, Sec. 29 (M)  
**Accuracy:** specific area  
**Area (acres):** 0

**UTM:** Zone-10 N4254957 E643989  
**Latitude/Longitude:** 38.43128 / -121.35032  
**Elevation (feet):** 55

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**
- DAI91F0013  
  DAINS, V. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1991-04-26
- DAI91R0001  
  DAINS, V. & R. HOLLAND - SPECIAL STATUS SPECIES SURVEY FOR SHELDON LAKES SUBDIVISION SITE, SACRAMENTO COUNTY, CALIFORNIA 1991-07-10
- ROB02F0004  
  ROBISON, R. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 2002-04-02
- ROB02R0001  
  ROBISON, R. - SHELDON LAKES RARE PLANT SURVEY REPORT 2002-08-07
- WIT91F0023  
  WITHAM, C. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1991-04-26
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** Downingia pusilla  
**Common Name:** dwarf downingia

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: GU  
- State: S2

**General Habitat:**  
VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.

**Micro Habitat:**  
VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-445 M.

**Last Date Observed:** 1991-04-XX  
**Occurrence Type:** Natural/Native occurrence

**Location:**  
NORTHWEST CORNER OF BOND ROAD AND WATERMAN ROAD, ELK GROVE.

**Detailed Location:**  
TWO CONCENTRATIONS OF PLANTS MAPPED; ONE ALONG EAST SIDE OF WATERMAN ABOUT 0.2 MILE NORTH OF BOND. THE OTHER IS ABOUT 0.35 MILE WEST OF WATERMAN AND 0.1 MILE NORTH OF BOND.

**Ecological:**  
6 POPULATIONS IN NATURAL POOLS; 2 POPULATIONS IN SCRAPED DEPRESSIONS. NATURAL POOLS HAVE A WELL DEVELOPED NATIVE FLORA. LEGENERE LIMOSA ALSO OCCURS IN ONE POOL.

**Threats:**  
AS OF 1991 THE CURRENT USE WAS GRAZING; DEVELOPMENT PLAN WAS BEING PREPARED.

**General:**  
300 PLANTS OBSERVED IN 1991. QUALITY OF NATURAL POOLS IS EXCELLENT, QUALITY OF SCRAPED DEPRESSIONS IS FAIR.

**PLSS:** T07N, R06E, Sec. 30 (M)  
**Accuracy:** specific area  
**Area (acres):** 12

**UTM:** Zone-10 N4254377 E643607  
**Latitude/Longitude:** 38.42612 / -121.35481  
**Elevation (feet):** 60

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
DAI91F0007 DAINS, V. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1991-04-XX
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Downingia pusilla*

**Common Name:** dwarf downingia

**Scientific Name:** *Downingia pusilla*

**State:** None

**Rare Plant Rank:** 2B.2

**CNDDB Element Ranks:**
- **Global:** GU
- **State:** S2

**General Habitat:**
VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.

**Micro Habitat:**
VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES.
IN SEVERAL TYPES OF VERNAL POOLS. 1-445 M.

**Last Date Observed:** 2010-05-13

**Last Survey Date:** 2010-05-13

**Owner/Manager:** SAC COUNTY-PARKS & REC

**Presence:** Presumed Extant

**Location:**
WEST OF I-5 AT THE ELK GROVE BLVD INTERCHANGE, ELK GROVE.

### Detailed Location:

### 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.

### Threats:
PAST ROAD CONSTRUCTION MAY HAVE INFLUENCED HYDROLOGY. THREATENED BY GRAZING, VEHICLE TRAVEL, AND GLYCERIA DECLINATA.

### General:
HUNDREDS TO THOUSANDS OF PLANTS OBSERVED IN 1990. 500 PLANTS OBSERVED IN 2009. 1161 PLANTS REPORTED IN 2010.

**PLSS:** T06N, R04E, Sec. 01 (M)  
**Accuracy:** specific area  
**Area (acres):** 9

**UTM:** Zone-10 N4252231 E631925  
**Latitude/Longitude:** 38.40858 / -121.48900  
**Elevation (feet):** 10

**County Summary:**
Sacramento  
Florin (3812144)

**Sources:**
- DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
- DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
- RAN90F0001 RANLETT, J. ET AL. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1990-04-16
- STO90F0003 STONE, R. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1990-04-15
- STO90F0004 STONE, R. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1990-04-15
- STO90F0005 STONE, R. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1990-04-20
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**Scientific Name:** Downingia pusilla  
**Common Name:** dwarf downingia

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<th>State: None</th>
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**CNDDDB Element Ranks:**  
**Global:** GU  
**State:** S2

**General Habitat:**  
VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.

**Micro Habitat:**  
VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-445 M.

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<th>1991-05-26</th>
<th><strong>Occurrence Type:</strong> Natural/Native occurrence</th>
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<td>1997-06-18</td>
<td><strong>Occurrence Rank:</strong> None</td>
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**Owner/Manager:** PVT  
**Presence:** Extirpated  
**Location:**  
0.2 MILE SOUTH OF ELVERTA ROAD AND 0.6 MILE EAST OF 16TH STREET, RIO LINDA.

**Detailed Location:**  
LOCATED ABOUT 0.5 MILE SOUTHWEST OF GIBSON RANCH COUNTY PARK, NORTH OF DRY CREEK.

**Ecological:**  
GROWING ON BORDER OF A CREATED PONDED DEPRESSION IN ASSOCIATION WITH GRATIOLA EBRACTEATA, DOWNINGIA ORNATISSIMA, AND ELEOCHARIS MACROSTACHYA. WAS NOT A TYPICAL VERNAL POOL BUT A SEMI-PERMANANT MARSH WITH WILLOWS AND TULES.

**Threats:**  
**General:**  
50 PLANTS OBSERVED IN 1991. SITE EXTIRPATED, CONVERTED TO A SUBDIVISION BY 1997. FORMER POPULATION SITE IS NOW NEAR THE EAST END OF RUSHING RIVER COURT OFF OF CHERRY BROOK DRIVE.

**PLSS:** T10N, R05E, Sec. 22 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4285955 E637569  
**Latitude/Longitude:** 38.71154 / -121.41774  
**Elevation (feet):** 75

**County Summary:**  
Sacramento  
**Quad Summary:**  
Rio Linda (3812164)

**Sources:**  
DAI91F0008  
DAINS, V. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1991-05-26

NOS97F0011  
NOSAL, T. ET AL. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1997-06-18
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 26042
Key Quad: Rio Linda (3812164)
Occurrence Number: 58
EO Index: 5243
Element Code: PDCAM060C0
Occurrence Last Updated: 1997-08-11

Scientific Name: Downingia pusilla
Common Name: dwarf downingia

Listing Status:
- Federal: None
- State: None

CNDDB Element Ranks:
- Global: GU
- State: S2

General Habitat:
VALLEY AND Foothill Grassland (Mesic Sites), Vernal Pools.

Micro Habitat:
Vernal Lake and Pool Margins with a Variety of Associates. In Several Types of Vernal Pools. 1-445 M.

Last Date Observed: 1993-04-22
Occurrence Type: Natural/Native occurrence

Last Survey Date: 1997-06-18
Occurrence Rank: Fair

Owner/Manager: PVT
Trend: Unknown

Presence: Presumed Extant

Location:
UNDER TRANSMISSION LINE WEST OF EAST LEVEE ROAD AND 1 MILE NORTH OF ELKHORN BLVD, RIO LINDA.

Detailed Location:
APPROXIMATELY 600 FEET WEST OF EAST LEVEE ROAD IMMEDIATELY SOUTH OF TWIN TRANSMISSION LINE TOWERS. WITHIN THE NE 1/4 OF THE NE 1/4 OF SECTION 25.

Ecological:
NORTHERN HARDPAN VERNAL POOL DOMINATED BY PLAGIOBOTHRYS STIPITATUS VAR. MICRANTHUS AND HEMIZONIA. LINDERIELLA OCCIDENTALIS HAS ALSO BEEN OBSERVED IN THIS POOL.

Threats:
MAY HAVE BEEN DISKED IN THE PAST; NO PRESENT DISTURBANCES.

General:
50 PLANTS OBSERVED IN 1993. POTENTIAL DISTURBANCE TO SITE IF LANDOWNER SELLS TOPSOIL AND LEVELS THE AREA FOR AGRICULTURE AS NEIGHBORING LANDOWNERS HAVE ALREADY DONE. HABITAT INTACT IN 1997, BUT NO PLANTS SEEN (SURVEY WAS TOO LATE).

PLSS:
T10N, R04E, Sec. 25 (M)

Accuracy: 80 meters
Area (acres): 0

UTM:
Zone-10 N4284528 E631498

Latitude/Longitude: 38.69961 / -121.48781
Elevation (feet): 30

County Summary:
Sacramento
Rio Linda (3812164)

Sources:
LEA93F0003 LEACH, S. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1993-04-22
NOS97F0010 NOSAL, T. ET AL. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1997-06-18
Map Index Number: 26043
EO Index: 5242
Key Quad: Rio Linda (3812164)
Element Code: PDCAM060C0
Occurrence Number: 59
Occurrence Last Updated: 2013-10-31

Scientific Name: Downingia pusilla
Common Name: dwarf downingia

Listing Status:

Federal: None
State: None

Rare Plant Rank: 2B.2
Other Lists:

CNDDDB Element Ranks:

Global: GU
State: S2

General Habitat:
VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.

Micro Habitat:
VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES.
IN SEVERAL TYPES OF VERNAL POOLS. 1-445 M.

Last Date Observed: 1993-05-12
Last Survey Date: 1997-06-18
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Good
Trend: Unknown

Owner/Manager: PVT
Presence: Presumed Extant

Location:
ABOUT 0.6 AIR MILE SOUTH OF ELVERTA ROAD JUST WEST OF EAST LEVEE ROAD, WEST OF RIO LINDA.

Detailed Location:
VERNAL POOL ON SOUTH SIDE OF GRAVEL ACCESS ROAD TO PRIVATE PROPERTY. WITHIN THE NE 1/4 OF THE SE 1/4 OF SECTION 24.

Ecological:
NORTHERN HARDPAN VERNAL POOL ON SAN JOAQUIN SOILS. ASSOCIATED WITH PLAGIOBOTHRYS STIPITATUS VAR. MICRANTHUS, ERYNGIUM VASEYI, LASTHENIA GLABERRIMA, RANUNCULUS BONARIENSIS VAR. TRISEPALUS, AND LIMNANTHES DOUGLASII.

Threats:
AGRICULTURE; SITE IS USED FOR A MIXED SPECIES FORAGE CROP (HAY).

General:
OVER 150 PLANTS IN 1993. OWNER HAS INDIcATED THAT HE PLANS TO LEVEL THE SITE AND SELL SURFACE MATERIAL TO SAC METRO AIRPORT FOR ONGOING DEVELOPMENT. CA LINDERIELLA ALSO HERE. NO PLANTS SEEN IN 1997 (SURVEYED LATE), BUT HABITAT WAS INTACT.

PLSS: T10N, R04E, Sec. 24 (M)
Accuracy: 80 meters
Area (acres): 0

UTM: Zone-10 N4285236 E631603
Latitude/Longitude: 38.70598 / -121.48647
Elevation (feet): 28

County Summary:
Sacramento
Rio Linda (3812164)

SOURCES:
LEA93F0002 LEACH, S. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1993-05-12
NOS97F0009 NOSAL, T. ET AL. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 1997-06-18
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| Listing Status | Federal: None  
State: None |
| Rare Plant Rank | 2B.2 |
| Other Lists | |
| CNDDDB Element Ranks | Global: GU  
State: S2 |
| General Habitat | VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS. |
| Micro Habitat | VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-445 M. |
| Last Date Observed | 2006-05-03 |
| Last Survey Date | 2006-05-03 |
| Owner/Manager | PVT |
| Presence | Presumed Extant |
| Location | JUST EAST OF PALLADAY ROAD (KNOW ROAD), 1.1 ROAD MILES SOUTH OF ITS INTERSECTION WITH BASE LINE ROAD, ROSEVILLE. |
| Detailed Location | VERNAL POOL SOUTH OF DIRT DRIVEWAY. IN THE NW 1/4 OF THE SE 1/4 OF SECTION 9. |
| Ecological | IN MIDDLE OF VERNAL POOL. ASSOCIATED WITH PLAGIOBOTHRYS STIPITATUS VAR. MICRANTHUS, LASTHENIA GLABERRIMA, GRATIOLA EBRACETATA, DOWNINGIA BICORNUTA, AND DOWNINGIA ORNATISSIMA. |
| Threats | IN 2006 DEVELOPMENT WAS PLANNED FOR THIS SITE. HEAVY HORSE GRAZING WAS NOTED IN 2005. |
| General | 200 PLANTS OBSERVED IN 2006. |
| PLSS | T10N, R05E, Sec. 09 (M) |
| Accuracy | 80 meters |
| Area (acres) | 0 |
| UTM | Zone-10 N4288654 E635840 |
| Latitude/Longitude | 38.73612 / -121.43708 |
| Elevation (feet) | 60 |
| County Summary | Placer |
| Quad Summary | Rio Linda (3812164) |

**Sources:**  
ROB06F0016 ROBISON, R. - FIELD SURVEY FORM FOR DOWNINGIA PUSILLA 2006-05-03
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 30207
EO Index: 8195

Key Quad: Elk Grove (3812143)
Element Code: PDCAM0C010

Occurrence Number: 27
Occurrence Last Updated: 2006-12-27

Scientific Name: Legenerere limosa
Common Name: legenere

Listing Status: Federal: None
Rare Plant Rank: 1B.1
State: None
Other Lists: BLM_S-Sensitive

CNDDDB Element Ranks: Global: G2
State: S2

General Habitat: VERNAL POOLS.
Micro Habitat: IN BEDS OF VERNAL POOLS. 1-880 M.

Last Date Observed: 1991-04-XX
Last Survey Date: 1991-04-XX

Owner/Manager: PVT
Trend: Unknown

Presence: Presumed Extant

Location:
NORTHWEST CORNER OF BOND ROAD AND WATERMAN ROAD, ELK GROVE.

Detailed Location:
FIVE SUB-POPULATIONS FOUND IN NATURAL VERNAL POOLS AND FIVE IN DISTURBED/CREATED SEASONAL DEPRESSIONS.

Ecological:
NATURAL AND CREATED VERNAL POOLS/SEASONAL DEPRESSIONS. ASSOCIATES IN NATURAL POOLS INCLUDE ELEOCHARIS MACROSTACHYA, LASTHENIA GLABERRIMA, GRATIOLA HETEROSEPALA, AND DOWNINGIA PUSILLA.

Threats:
CATTLE GRAZING, DEVELOPMENT PLANNED FOR THIS SITE AS OF 1991.

General:
THOUSANDS OF PLANTS OBSERVED AT THIS SITE IN 1991. NATURAL POOLS ARE OF EXCELLENT QUALITY; CREATED DEPRESSIONS ARE OF FAIR QUALITY. MOST OF THE LEGENERERE POPULATIONS WILL BE PRESERVED ALTHOUGH SOME LESSER QUALITY POOLS WILL BE DESTROYED.

PLSS: T07N, R06E, Sec. 30 (M)
Accuracy: specific area
Area (acres): 35

UTM: Zone-10 N4254626 E643142
Latitude/Longitude: 38.42844 / -121.36009
Elevation (feet): 50

County Summary: Elk Grove (3812143)

Sources:
DAI91F0010 DAINS, V. - FIELD SURVEY FORM FOR LEGENERERE LIMOSA 1991-04-XX
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 30205  
**EO Index:** 4847

**Key Quad:** Elk Grove (3812143)  
**Element Code:** PDCAM0C010

**Occurrence Number:** 28  
**Occurrence Last Updated:** 1995-11-14

**Scientific Name:** *Legenera limosa*  
**Common Name:** legenere

**Listing Status:**  
- **Federal:** None  
- **State:** None

**Rare Plant Rank:** 1B.1

**CNDDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
**Micro Habitat:** IN BEDS OF VERNAL POOLS. 1-880 M.

**Last Date Observed:** 1988-03-26

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Excellent

**Last Survey Date:** 1988-03-26

**Trend:** Unknown

**Owner/Manager:** SAC COUNTY-PARKS & REC

**Presence:** Presumed Extant

**Location:**  
SOUTH FLORIN COUNTY PARK, ABOUT 1 MILE SOUTH OF FLORIN ROAD AND 0.7 MILE EAST OF EXCELSIOR ROAD, NORTHEAST OF ELK GROVE.

**Detailed Location:**  

**Ecological:**  
VERNAL POOLS. ASSOCIATED WITH ELEOCHARIS MACROSTACHYS AND LASTHENIA GLABERRIMA.

**Threats:**  
PARK SLATED FOR DEVELOPMENT (1988).

**General:**  
ABOUT 100 PLANTS OBSERVED WITHIN THE PARK (INCLUDING OCCURRENCE #29). POPULATION MAY BE LOW DUE TO DRY YEAR. SITE IS RELATIVELY UNDISTURBED/UNGRAZED. HIGH QUALITY SEASONAL WETLAND.

**PLSS:** T07N, R06E, Sec. 02 (M)  
**Accuracy:** specific area

**UTM:** Zone-10 N4260767 E649657  
**Latitude/Longitude:** 38.48269 / -121.28417

**Area (acres):** 19  
**Elevation (feet):** 90

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
DAI88F0003 DAINS, V. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1988-03-26

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Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch
Report Printed on Tuesday, September 15, 2015
Information Expires 3/1/2016

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**Scientific Name:** *Legenere limosa*  
**Common Name:** legenere

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G2  
**State:** S2

**General Habitat:**  
**Micro Habitat:** IN BEDS OF VERNAL POOLS.  1-880 M.

**Last Date Observed:** 1988-03-26  
**Last Survey Date:** 1988-03-26

**Owner/Manager:** SAC COUNTY-PARKS & REC  
**Presence:** Presumed Extant

**Location:**  
SOUTH FLORIN COUNTY PARK, ABOUT 0.2 MILE SOUTH OF FLORIN ROAD AND 0.7 MILE EAST OF EXCELSIOR RD, NORTHEAST OF ELK GROVE.

**Detailed Location:**  

**Ecological:**  
VERNAL POOLS. ASSOCIATED WITH ELEOCHARIS MACROSTACHYA AND LASTHENIA GLABERRIMA.

**Threats:**  
PARK SLATED FOR DEVELOPMENT (1988).

**General:**  
ABOUT 100 PLANTS OBSERVED WITHIN THE PARK (INCLUDING OCCURRENCE #28). POPULATION MAY BE LOW DUE TO DRY YEAR. ONLY A FEW PLANTS SEEN AT EACH LOCATION. SITE IS RELATIVELY UNDISTURBED/UNGRAZED. THESE ARE HIGH QUALITY SEASONAL WETLANDS.

**PLSS:** T07N, R06E, Sec. 02 (M)  
**Area (acres):** 10

**UTM:** Zone-10 N4261835 E649578  
**Latitude/Longitude:** 38.49232 / -121.28485  
**Elevation (feet):** 110

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
DAI88F0003 DAINS, V. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1988-03-26
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** Legenere limosa  
**Common Name:** legenere

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G2  
- State: S2

**General Habitat:** VERNAL POOLS.

**Location:**  
SOUTHEAST CORNER OF THE INTERSECTION OF SHELDON ROAD AND WATERMAN ROAD, ELK GROVE.

**Detailed Location:**  
FOUR COLONIES IN THE SOUTH 1/2 OF THE NW 1/4 OF SECTION 29. IN POOLS VP15, VP20, VP23, AND SWALE SW2.

**Ecological:**  
LARGE SEASONAL WETLAND AND VERNAL POOL WITHIN A DAIRY PASTURE. DOMINANTS INCLUDE LASTHENIA GLABERRIMA, ALLOCARYA BRACETATUS, ELEOCHARIS MACROSTACHYA, RANUNCULUS BONARIENSIS VAR. TRISEPALUS, AND PLAGIOBOTHRYS STIPITATUS VAR. MICRANTHUS.

**Threats:**  
HEAVILY DAMAGED BY CATTLE GRAZING; HOME DEVELOPMENT IN AREA.

**General:**  
300-400 PLANTS OBSERVED IN 1991 IN THE THREE WESTERN COLONIES. 2200 OBSERVED IN 2002 IN ALL FOUR COLONIES COMBINED.

**PLSS:** T07N, R06E, Sec. 29 (M)  
**Accuracy:** specific area  
**Area (acres):** 2

**UTM:** Zone-10 N4255045 E644212  
**Latitude/Longitude:** 38.43204 / -121.34775  
**Elevation (feet):** 50

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
- DA191F0014 DAINS, V. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1991-05-06  
- DA191R0001 DAINS, V. & R. HOLLAND - SPECIAL STATUS SPECIES SURVEY FOR SHELDON LAKES SUBDIVISION SITE, SACRAMENTO COUNTY, CALIFORNIA 1991-07-10  
- ROB02F0006 ROBISON, R. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 2002-04-02  
- ROB02R0001 ROBISON, R. - SHELDON LAKES RARE PLANT SURVEY REPORT 2002-08-07  
- WIT91F0024 WITHAM, C. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1991-04-26
**Map Index Number:** 26234  
**EO Index:** 14087  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 31  
**Occurrence Last Updated:** 2010-04-28

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**CNDDB Element Ranks:**  
Global: G2  
State: S2

**General Habitat:**  
VERNAL POOLS.

**Micro Habitat:**  
IN BEDS OF VERNAL POOLS. 1-880 M.

**Last Date Observed:** 1993-05-06  
**Occurrence Type:** Natural/Native occurrence  
**Last Survey Date:** 1993-05-06  
**Occurrence Rank:** None  
**Owner/Manager:** PVT  
**Trend:** Unknown  
**Presence:** Extirpated

**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.

**Threats:**  
PROPOSED HOUSING DEVELOPMENT, POOLS SCHEDULED TO BE FILLED.

**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.

**PLSS:** T07N, R05E, Sec. 24 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0  
**UTM:** Zone-10 N4256015 E640659  
**Latitude/Longitude:** 38.44134 / -121.38825  
**Elevation (feet):** 35  

**County Summary:**  
Sacramento  
**Quad Summary:**  
Florin (3812144)

**Sources:**  
PRE93F0009  
PRESTON, R. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1993-05-06  
PRE93S0002  
PRESTON, R. - PRESTON #623 UCR #79729, DAV #126393 1993-05-06  
WIT08U0003  
WITHAM, C. - EMAIL TO R. BITTMAN REGARDING EXTIRPATED VERNAL POOL SITES 2008-08-12
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Legenere limosa*  
**Common Name:** legenere

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:** VERNAL POOLS.  
**Micro Habitat:** IN BEDS OF VERNAL POOLS. 1-880 M.

**Last Date Observed:** 1991-05-26  
**Last Survey Date:** 1997-06-18  
**Owner/Manager:** PVT  
**Presence:** Extirpated

**Location:**  
SOUTH OF ELVERTA ROAD AND 0.5 MILE SOUTHWEST OF GIBSON RANCH, RIO LINDA.

**Detailed Location:**  
MAPPED IN SEASONAL POND 0.2 MILE SOUTH OF ELVERTA ROAD AND 0.75 MILE EAST OF 16TH STREET. NEAR THE CENTER OF THE NE 1/4 OF SECTION 22.

**Ecological:**  
ARTIFICIAL POND EXCAVATED WITHIN A VERNAL POOL LANDSCAPE. ASSOCIATED WITH ELEOCHARIS MACROSTACHYA AND LASTHENIA GLABERRIMA IN ADDITION TO MANY WEEDY SPECIES. LARGELY OPEN GROUND.

**Threats:**  
DEVELOPMENT IS PLANNED FOR THIS SITE.

**General:**  
150 PLANTS SEEN IN 1991. WETLAND MITIGATION FOR THIS PROPERTY COULD INCLUDE THIS POPULATION. SITE WAS A SUBDIVISION IN 1997; FORMER POPULATION WAS UNDER INTERSECTION OF RANCH RIVER DR AND COLONNADE WAY.

**PLSS:** T10N, R05E, Sec. 22 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4285893 E637752  
**Latitude/Longitude:** 38.71096 / -121.41565  
**Elevation (feet):** 75

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**
- DAINS, V. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1991-05-26  
- NOSAL, T. ET AL. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1997-06-18
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

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**Scientific Name:** *Legenera limosa*  
**Common Name:** legenere

**Listing Status:**  
Federal: None  
State: None

**Rare Plant Rank:** 1B.1  
**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:**  
Global: G2  
State: S2

**General Habitat:** VERNAL POOLS.

**Micro Habitat:** IN BEDS OF VERNAL POOLS. 1-880 M.

**Last Date Observed:** 1991-05-11  
**Last Survey Date:** 1997-06-18

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**  
EAST OF ROSE STREET & SOUTH OF MAGPIE DRAIN, ROBLA, JUST NORTH OF SACRAMENTO.

**Detailed Location:**  
MAPPED ABOUT 0.4 MILE NNE OF WHERE MARYSVILLE ROAD AND RIO LINDA BLVD JOIN. WITHIN THE NW 1/4 OF THE NE 1/4 OF SECTION 10.

**Ecological:**  
SEASONAL WETLAND DOMINATED BY RANUNCULUS BONARIENSIS TRISEPALUS, PLAGIOBOTHRYS BRActEATUS, LASTHENIA GLABERRIMA, AND ELEOCHARIS MACROSTACHY.A. FRITILLARIA AGRESTIS IS FOUND IN NEARBY GRASSLAND.

**Threats:**  
SITE TO BE DEVELOPED, WETLAND DISKED ANNUALLY FOR FIRE BREAK; "DIRT-BIKE" USE & REFUSE DUMPING ALSO IMPACT THIS SITE.

**General:**  
1000-10,000 PLANTS OBSERVED IN 1991. PLANTS ROBUST, UP TO 6" TALL. PORTION OF THIS SITE WILL NOT BE DEVELOPED. NO PLANTS SEEN IN 1997 (PROB TOO LATE). HABITAT STILL EXISTS.

**PLSS:** T09N, R05E, Sec. 10 (M)  
**Accuracy:** specific area  
**Area (acres):** 6

**UTM:** Zone-10 N4281044 E635255  
**Latitude/Longitude:** 38.66766 / -121.44530  
**Elevation (feet):** 35

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
NOS97F0004 NOSAL, T. ET AL. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1997-06-18  
WIT91F0025 WITHAM, C. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1991-05-11
## Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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### Scientific Name: *Legenere limosa*  
**Common Name:** legenere

#### Listing Status:  
**Federal:** None  
**State:** None

#### Rare Plant Rank: 1B.1  
**Other Lists:** BLM_S-Sensitive

#### CNDDB Element Ranks:  
**Global:** G2  
**State:** S2

### General Habitat:  
VERNAL POOLS.

### Micro Habitat:  
IN BEDS OF VERNAL POOLS.  1-880 M.

### Last Date Observed:  
1995-05-15  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Poor  
**Trend:** Unknown

### Location:  
ABOUT 1.5 MI E OF STONE LAKE, 1.4 MI SW OF JCT 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.

#### Threats:  
LAND USED FOR CATTLE PRODUCTION; GRAZING THREATENS. 2009 AERIAL IMAGERY SHOWS SIGNIFICANT DEVELOPMENT IN THE AREA.

### 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.

#### PLSS:  
T06N, R05E, Sec. 06 (M)  
**Accuracy:** 1/5 mile  
**Area (acres):** 0

#### UTM:  
Zone-10 N4250706 E633619  
**Latitude/Longitude:** 38.39459 / -121.46990  
**Elevation (feet):** 13

### County Summary:  
Sacramento  
**Quad Summary:**  
Florin (3812144)

### Sources:  
CUR95F0002  
CURLETTE, J. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1995-05-15

WIT08U0003  
WITHAM, C. - EMAIL TO R. BITTMAN REGARDING EXTIRPATED VERNAL POOL SITES 2008-08-12
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 29099
Key Quad: Florin (3812144)
Occurrence Number: 41
EO Index: 30940
Element Code: PDCAM0C010
Occurrence Last Updated: 1997-03-27

Scientific Name: *Legenere limosa*
Common Name: legenere

Listing Status:
- Federal: None
- State: None

Rare Plant Rank: 1B.1
Other Lists: BLM_S-Sensitive

CNDDDB Element Ranks:
- Global: G2
- State: S2

General Habitat: VERNAL POOLS.
Micro Habitat: IN BEDS OF VERNAL POOLS. 1-880 M.

Last Date Observed: 1995-05-20
Last Survey Date: 1995-05-20
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Good
Trend: Unknown

Owner/Manager: SRCSD-BUFFERLANDS
Presence: Presumed Extant

Location:
ALONG N SIDE OF SIMS ROAD, 0.15-0.4 MI E OF JCT WITH FRANKLIN BLVD.

Detailed Location:
300 FT N OF SIMS ROAD.

Ecological:
VERNAL POOL COMPLEX WITH LASTHENIA GLABERRIMA, RANUNCULUS BONARIENSIS, PLAGIOBOTHrys STIPITATUS, DOWNINGIA ORNATISSIMA, D. BICORNUTA AND LEPIDIUM LATIPES.

Threats:
TREE PLANTING/RESTORATION ADJACENT TO VERNAL POOLS.

General:
300 PLANTS IN 1995. SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT LAND.

PLSS: T07N, R05E, Sec. 20 (M)
Accuracy: nonspecific area
Area (acres): 12

UTM: Zone-10 N4255662 E635162
Latitude/Longitude: 38.43901 / -121.45128
Elevation (feet): 18

County Summary:
Sacramento
Florin (3812144)

Sources:
CUR95F0001 CURLETTE, J. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 1995-05-20
**Occurrence Report**

California Department of Fish and Wildlife

California Natural Diversity Database

---

**Map Index Number:** 41012  
**EO Index:** 41012  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 44  
**Occurrence Last Updated:** 2002-09-19  
**Element Code:** PDCAM0C010

---

**Scientific Name:** *Legenere limosa*  
**Common Name:** legenere  
**Listing Status:**  
**Federal:** None  
**State:** None  
**Rare Plant Rank:** 1B.1  
**Other Lists:** BLM_S-Sensitive

---

**CNDDB Element Ranks:**  
**Global:** G2  
**State:** S2

---

**General Habitat:**  
**Micro Habitat:** IN BEDS OF VERNAL POOLS. 1-880 M.

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**Last Date Observed:** 1999-05-02  
**Last Survey Date:** 1999-05-02  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Good  
**Trend:** Unknown

---

**Owner/Manager:** SAC COUNTY  
**Presence:** Presumed Extant  
**Location:**  
MATHER FIELD, WEST OF ANDERS DRIVE AND BETWEEN THE AIRPORT AND MORRISON CREEK, RANCHO CORDOVA.  
**Detailed Location:**  
MAPPED IN 4 POOLS JUST EAST OF THE WASTEWATER TREATMENT PONDS. JSA POOL #S 1192, 1193, 1492, AND 1524.  
**Ecological:** GROWING IN VERNAL POOLS.  
**Threats:**  
**General:** SEVERAL HUNDRED PLANTS OBSERVED IN 1997. UNKNOWN NUMBER OF PLANTS OBSERVED IN 1999 BY GREENHOUSE.

---

**PLSS:** T08N, R06E, Sec. 14 (M)  
**Accuracy:** specific area  
**Area (acres):** 12

**UTM:** Zone-10 N426779 E648484  
**Latitude/Longitude:** 38.54605 / -121.29613  
**Elevation (feet):** 75

---

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

---

**Sources:**  
GRE99S0001 GREENHOUSE, J. - GREENHOUSE SN JEPS #95777 1999-05-02  
JSA97R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
**Scientific Name:** *Legenere limosa*

**Common Name:** legenere

**Listing Status:**
- Federal: None
- State: None

**CNDDB Element Ranks:**
- Global: G2
- State: S2

**General Habitat:** VERNAL POOLS.

**Micro Habitat:** IN BEDS OF VERNAL POOLS. 1-880 M.

**Last Date Observed:** 1997-XX-XX

**Last Survey Date:** 1997-XX-XX

**Owner/Manager:** SAC COUNTY

**Presence:** Presumed Extant

**Location:**
MATHER FIELD, ABOUT 0.5 MILE WEST OF EXCELSIOR ROAD ALONG NORTH SIDE OF KIEFER BLVD, RANCHO CORDOVA.

**Detailed Location:**
PLANTS FOUND IN 2 NEIGHBORING POOLS, OCCURRENCE MAPPED AS A SINGLE POLYGON BY JSA AND CNDDB. JSA POOL #1121.

**Ecological:**
GROWING IN VERNAL POOLS.

**Threats:**
SEVERAL HUNDRED PLANTS OBSERVED IN 1997.

**PLSS:** T08N, R06E, Sec. 23 (M)

**UTM:** Zone-10 N4266491 E649501

**Accuracy:** specific area

**Latitude/Longitude:** 38.53428 / -121.28474

**Area (acres):** 1

**Elevation (feet):** 110

**Presence Rank:** Good

**Trend:** Unknown

**Sources:**
JSA97R0002

JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
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<td>Detailed Location:</td>
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<td>County Summary:</td>
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Sources:
- JSA93R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLANT AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03
- JSA97R0002 JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX
## Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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| Location: | MATHER FIELD, ABOUT 0.6 MILE EAST OF EAGLES NEST ROAD ALONG NORTH SIDE OF KIEFER BLVD, RANCHO CORDOVA. |
| Detailed Location: | MAPPED IN 1 POOL IMMEDIATELY NORTH OF KIEFER BLVD. JSA POOL #1390. |

| Ecological: | GROWING WITHIN AN INTERCONNECTED VERNAL POOL AND SWALE SYSTEM. ASSOCIATED WITH ELEOCHARIS MACROSTACHYA, LASTHENIA GLABERRIMA, ERYNGIUM, GRATIOLA EBRACATEATA, DOWNINGIA SPP., ISOETES, AND PILULARIA AMERICANA. |

| PLSS: | T08N, R07E, Sec. 19 (M) |
| Accuracy: | specific area |
| Area (acres): | 3 |
| UTM: | Zone-10 N4265647 E652423 |
| Latitude/Longitude: | 38.52618 / -121.25141 |
| Elevation (feet): | 145 |

| County Summary: |
| Sacramento: |
| Buffalo Creek (3812152), Carmichael (3812153) |

| Sources: |
| JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS PLAN AND WILDLIFE SURVEY RESULTS FOR THE MATHER REDEVELOPMENT PLAN AREA, SACRAMENTO COUNTY. PREPARED FOR: SAC HOUSING & REDEVELOPMENT AGENCY 1993-08-03 |
| JONES & STOKES ASSOCIATES, INC. - SPECIAL STATUS SPECIES SURVEY CONDUCTED FOR THE MATHER FIELD SPECIFIC PLAN AND MATHER SINGLE-FAMILY HOUSING PROJECT. INCLUDES REPORT + MAPS. PREPARED FOR: COUNTY OF SACRAMENTO. 1997-06-XX |
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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| General Habitat: VERNAL POOLS. | Micro Habitat: IN BEDS OF VERNAL POOLS. 1-880 M. |

| Last Date Observed: 2002-05-23 | Occurrence Type: Natural/Native occurrence |
| Last Survey Date: 2002-05-23 | Occurrence Rank: Excellent |
| Owner/Manager: PVT-ELLIOT CONSERVANCY | Trend: Unknown |
| Presence: Presumed Extant |

| Location: CHURCHILL DOWNS PRESERVE, 0.9 AIR MI SOUTHWEST OF GERBER ROAD AT THE CENTRAL CALIFORNIA RAILROAD TRACKS, EAST OF FLORIN. |
| Ecological: PLANTS FOUND IN VERNAL POOLS IN ASSOCIATION WITH ELEOCHARIS MACROSTACHYA, LASTHENIA GLABERRIMA, L. FREMONTII, PLAGIOBOTHrys SPITATUS, AND DESCHAMPSIA DANTHIOIDES. |
| Threats: NONE NOTED IN 2002. |
| General: THOUSANDS OF PLANTS OBSERVED IN 2002 BY STARR. PLANTS FOUND WITHIN A PRESERVE. SURROUNDED BY RESIDENTIAL DEVELOPMENT AND OPEN PASTURE. |

| PLSS: T07N, R06E, Sec. 07 (M) | Accuracy: 80 meters |
| UTM: Zone-10 N4259639 E643260 | Area (acres): 0 |
| Latitude/Longitude: 38.47358 / -121.35771 | Elevation (feet): 100 |

**County Summary:**  
Sacramento  
Elk Grove (3812143)

**Quad Summary:**

| Sources: |
| STA02F0010 STARR, S. (ECORP CONSULTING, INC.) - FIELD SURVEY FORM FOR LEGENERE LIMOSA 2002-05-23 |

---

Report Printed on Tuesday, September 15, 2015  
Information Expires 3/1/2016
**Scientific Name:** *Legenere limosa*

**Common Name:** legenere

**Listing Status:**
- **Federal:** None
- **State:** None

**Rare Plant Rank:** 1B.1

**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
- **Micro Habitat:**
  - IN BEDS OF VERNAL POOLS. 1-880 M.

**Last Date Observed:** 2002-XX-XX

**Last Survey Date:** 2002-XX-XX

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**
NE CORNER OF THE INTERSECTION OF HWY 99 AND GRANT LINE RD, ELK GROVE.

**Detailed Location:**
POOL IN THE AREA BOUNDED ON THE NORTH BY THE NORTHBOUND GRANT LINE RD OFFRAMP, ON THE EAST BY E STOCKTON BLVD, ON THE SOUTH BY GRANT LINE, AND ON THE WEST BY HWY 99.

**Ecological:**
- **VERNAL POOL.

**Threats:**
ROADWAY INTERCHANGE CONSTRUCTION PROJECT TO OCCUR AT THIS INTERSECTION.

**General:**
- ~1000 PLANTS OBSERVED IN 2002.

**PLSS:** T06N, R06E, Sec. 18 (M)

**UTM:** Zone-10 N4248964 E643090

**Accuracy:** 80 meters

**Latitude/Longitude:** 38.37744 / -121.36183

**Area (acres):** 0

**Elevation (feet):** 40

**County Summary:** Elk Grove (3812143)

**Sources:**
- GAU02R0001 GAUSE, M. - REPORT ON SPECIAL STATUS PLANT STUDIES FOR HWY 99 / GRANT LINE ROAD INTERCHANGE PROJECT, ELK GROVE, CA. 2002-06-17
<table>
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**Scientific Name:** *Legenera limosa*  
**Common Name:** legenere

**Listing Status:**  
- **Federal:** None  
- **State:** None

**Rare Plant Rank:** 1B.1  
**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
VERNAL POOLS

**Micro Habitat:**  
IN BEDS OF VERNAL POOLS. 1-880 M.

**Last Date Observed:** 2003-05-20  
**Last Survey Date:** 2003-05-20  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
0.5 AIR MILES NNE OF THE INTERSECTION OF HIGHWAY 16 (JACKSON HWY) AND EAGLES NEST ROAD.

**Detailed Location:**  
IN THE NW 1/4 OF THE SW 1/4 OF SECTION 30.

**Ecological:**  
VERNAL POOL IN OPEN, UNDULATING GRASSLAND. PLANTS FOUND IN PATCHES THROUGHOUT DEEPER AREAS OF THE POOL. ASSOCIATED WITH ELEOCHARIS MACROSTACHYA, ERYNGIUM VASEYI, RANUNCULUS BONARIENSIS, DOWNINGIA BICORNUTA, AND PLAGIOBOTHRYS STIPITATUS.

**Threats:**  
RESIDENTIAL DEVELOPMENT, CATTLE GRAZING.

**General:**  
300-500 PLANTS OBSERVED IN 2003.

**PLSS:**  
T08N, R07E, Sec. 30 (M)  
**Accuracy:** 80 meters

**UTM:**  
Zone-10 N4264658 E651816  
**Latitude/Longitude:** 38.51738 / -121.25858  
**Area (acres):** 0  
**Elevation (feet):** 150

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

**Sources:**  
AND03F0003 ANDERSON, B. ET AL. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 2003-05-20  
AND03S0001 ANDERSON, B. ET AL. - ANDERSON #4748 JEPS #105479 2003-05-20
### Scientific Name: *Legenere limosa*

#### Common Name: legenere

#### Listing Status:
- **Federal:** None
- **State:** None

#### Rare Plant Rank: 1B.1

#### Other Lists: BLM_S-Sensitive

#### General Habitat:
VERNAL POOLS.

#### Micro Habitat:
IN BEDS OF VERNAL POOLS. 1-880 M.

#### Last Date Observed: 2010-05-13

#### Last Survey Date: 2010-05-13

#### Owner/Manager: UNKNOWN

#### Presence: Presumed Extant

#### 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, PLAGIOBOThRys STIPITATUS, LASTHENIA GLABERRIMA, GRASSES, RUMEX, ERYNGIUM, RANUNCULUS BONARIENSIS, ELEOCHARIS MACROSTACHYA, HORDEUM MARINUM, ETC.

#### Threats:
THREATENED BY CATTLE GRAZING, TRAMPLING, POTENTIAL DISEASE, AND NON-NATIVE GLYCERIA DECLINATA.

#### General:
2010 POPULATION NUMBERS FOR POLYGONS FROM EAST TO WEST: 300, 200, 100, 120, 5150, AND 1000.

#### PLSS:
- **T06N, R04E, Sec. 01 (M)**
- **Accuracy:** specific area
- **Area (acres):** 8

#### UTM:
- **Zone-10 N4252250 E631692**
- **Latitude/Longitude:** 38.40879 / -121.49166
- **Elevation (feet):** 0

#### County Summary: Sacramento

#### Quad Summary:
Florin (3812144)

#### Sources:
DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>General Habitat:</td>
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<td>Micro Habitat:</td>
<td>IN BEDS OF VERNAL POOLS. 1-880 M.</td>
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<td>Last Date Observed:</td>
<td>2010-05-11</td>
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<td>Presence:</td>
<td>Presumed Extant</td>
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<td>Location:</td>
<td>NORTH SIDE OF HOOD FRANKLIN ROAD, FROM 0.3 TO 1.3 MILES EAST OF I-5, SOUTH OF STONE LAKE.</td>
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<tr>
<td>Detailed Location:</td>
<td>SEVERAL COLONIES MAPPED BY CNNDB AS 6 POLYGONS ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM THE DEPARTMENT OF WATER RESOURCES.</td>
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<tr>
<td>Ecological:</td>
<td>POOLS, ROADSIDE DITCHES, AND SWALES. ASSOC W/ PLAGIOBOTHrys SP., ELEOCHARIS MACROSTACHYA, E. ACICULARIS, GRATIOLA EBRACTEATA, RANUNCULUS AQUATILIS, LASTHENIA GLABERRIMA, GLYCERIA DECLINATA, LILAEA SCILLOIDES, PHYLA NODIFLORA, ETC.</td>
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<td>Threats:</td>
<td>THREATENED BY GRAZING AND ROAD MAINTENANCE.</td>
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<td>PLSS:</td>
<td>T06N, R04E, Sec. 13 (M)</td>
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<td>Quad Summary:</td>
<td>Bruceville (3812134), Florin (3812144)</td>
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**Sources:**

- DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
- DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
### California Department of Fish and Wildlife

**California Natural Diversity Database**

**Map Index Number:** 83408  
**EO Index:** 84423  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 81  
**Occurrence Last Updated:** 2011-07-15  
**Element Code:** PDCAMC010

### Sources:

- ANDERSON, B. - FIELD SURVEY FORM FOR LEGENERE LIMOSA 2010-06-02

### Scientific Name:

Legenere limosa  
**Common Name:** legenere

### Listing Status:

- **Federal:** None  
- **State:** None

### CNDDDB Element Ranks:

- **Global:** G2  
- **State:** S2

### General Habitat:

VERNAL POOLS.

### Micro Habitat:

IN BEDS OF VERNAL POOLS. 1-880 M.

### Last Date Observed:

2010-06-02

### Last Survey Date:

2010-06-02

### Owner/Manager:

PVT

### Presence:

Presumed Extant

### Location:

0.83 MILES NNW OF THE INTERSECTION OF STATE ROUTE 16 (JACKSON HWY) AND EAGLES NEST ROAD, SOUTH OF MATHER AIR FORCE BASE.

### Detailed Location:

MAPPED IN THE SW 1/4 OF THE NE 1/4 OF SECTION 25.

### Ecological:

POOL IN OPEN GRASSLAND.

### Threats:

SOME PAST DISTURBANCE; GRAZING.

### General:

30-40 PLANTS OBSERVED IN 2010. SITE MAY BE A FUTURE PRESERVE.

### PLSS:

- **T80N, R06E, Sec. 25 (M) Accuracy:** 80 meters  
- **N4265047 E651125 Area (acres):** 0

### UTM:

- **Zone-10 N 38.52099 / -121.26642 Elevation (feet):** 143

### County Summary:

Sacramento  
Carmichael (3812153)

### Presence:

Presumed Extant

### Occurrence Report

California Department of Fish and Wildlife
California Natural Diversity Database

Report Printed on Tuesday, September 15, 2015

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<table>
<thead>
<tr>
<th>Scientific Name:</th>
<th>Cuscuta obtusiflora var. glandulosa</th>
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<tr>
<td>Common Name:</td>
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<td>General Habitat:</td>
<td>Marshes and swamps (freshwater)</td>
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<td>Micro Habitat:</td>
<td>Freshwater marsh. 15-280 M.</td>
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<td>Last Date Observed:</td>
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<tr>
<td>Location:</td>
<td>6104 doubloon court, laguna lake, north of elk grove blvd, west of foulks ranch road, elk grove.</td>
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<td>Detailed Location:</td>
<td>Mapped as best guess by cnnddb to encompass the backyard laguna lake shoreline of the given address.</td>
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<td>Ecological:</td>
<td>Submerged on myriophyllum sibiricum in freshwater pond.</td>
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<td>General:</td>
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<tr>
<td>Quad Summary:</td>
<td>Florin (3812144)</td>
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<tr>
<td>Sources:</td>
<td>BARBE95S0007 BARBE, G. - BARBE #4466 UC #1778597 &amp; #1776765, RSA #671135, CHSC #79721 1995-06-02</td>
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</table>
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 89775  
**EO Index:** 90783

**Key Quad:** Sacramento West (3812155)  
**Element Code:** PDFAB0F8R3

**Occurrence Number:** 17  
**Occurrence Last Updated:** 2013-07-26

---

**Scientific Name:** *Astragalus tener var. ferrisiae*  
**Common Name:** Ferris’ milk-vetch

**Listing Status:** Federal: None  
State: None

**CNDDB Element Ranks:**  
Global: G2T1  
State: S1

---

**General Habitat:**  
MEADOWS, VALLEY AND FOOTHILL GRASSLAND.

**Micro Habitat:**  
SUBALKALINE FLATS ON OVERFLOW LAND IN THE CENTRAL VALLEY; USUALLY SEEN IN DRY, ADOBE SOIL. 5-75M.

---

**Last Date Observed:** 1954-04-27

**Last Survey Date:** 1954-04-27

**Owner/Manager:** UNKNOWN

**Presence:** Presumed Extant

**Location:**  
YOLO COUNTY: CAUSEWAY.

**Detailed Location:**  
EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB ALONG THE YOLO CAUSEWAY.

**Ecological:**

**Threats:**

**General:**  
ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1954 COLLECTION BY PETERS. NEEDS FIELDWORK.

**PLSS:** T08N, R03E, Sec. 02 (M)  
**Accuracy:** nonspecific area

**UTM:** Zone-10 N4269810 E621058  
**Latitude/Longitude:** 38.56850 / -121.61039

**County Summary:**  
**Quad Summary:**

**Yolo**  
Sacramento West (3812155), Davis (3812156)

---

**Sources:**

PET54S0001   PETERS, E. - ELWOOD SN DAV #105342 1954-04-27
Scientific Name: *Trifolium hydrophilum*
Common Name: saline clover

Listing Status:
- Federal: None
- State: None

Rare Plant Rank: 1B.2

CNDDB Element Ranks:
- Global: G2
- State: S2

General Habitat:
- MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

Micro Habitat:
- MESIC, ALKALINE SITES, 0-300 M.

Last Date Observed: 2009-04-27
Last Survey Date: 2009-04-27

Occurrence Type: Natural/Native occurrence
Occurrence Rank: Fair
Trend: Unknown

Presence: Presumed Extant

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.

Threats:
General:
100 PLANTS OBSERVED IN 2009.

PLSS: T07N, R04E, Sec. 36 (M)  
Accuracy: specific area  
Area (acres): 1

UTM: Zone-10 N4253030 E632149  
Latitude/Longitude: 38.41575 / -121.48629  
Elevation (feet): 10

County Summary: Sacramento
Quad Summary: Florin (3812144)

Sources:
DWR10D0001  CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
Map Index Number: 83566
EO Index: 84598
Key Quad: Florin (3812144)
Occurrence Number: 38
Occurrence Code: PDFAB400R5
Occurrence Last Updated: 2011-08-22

Scientific Name: Trifolium hydrophilum
Common Name: saline clover

Listing Status:
Federal: None
State: None

Rare Plant Rank: 1B.2

CNDDB Element Ranks:
Global: G2
State: S2

General Habitat:
MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

Micro Habitat:
MESIC, ALKALINE SITES. 0-300 M.

Last Date Observed: 2010-05-13
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2010-05-13
Occurrence Rank: Good

Owner/Manager: DPR, UNKNOWN
Trend: Unknown

Presence: Presumed Extant

Location:
EAST SIDE OF ELK GROVE BLVD INTERSECTION WITH I-5, NORTH OF STONE LAKE.

Detailed Location:

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.

Threats:
THREATENED BY GRAZING AND NON-NATIVE SPECIES.

General:
26,134 PLANTS OBSERVED IN 2009. 4,622 PLANTS OBSERVED IN 2010.

PLSS: T06N, R04E, Sec. 01 (M)
Accuracy: specific area
Area (acres): 34

UTM: Zone-10 N4252169 E631753
Latitude/Longitude: 38.40805 / -121.49098
Elevation (feet): 10

County Summary: Florin (3812144)

Sources:
DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-2011-03-23
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**Scientific Name:** *Trifolium hydrophilum*

**Common Name:** saline clover

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:**
- MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

**Micro Habitat:**
- MESIC, ALKALINE SITES, 0-300 M.

**Last Date Observed:** 2009-04-28

**Last Survey Date:** 2009-04-28

**Owner/Manager:** DPR

**Presence:** Presumed Extant

**Location:**
BETWEEN STONE LAKE AND I-5, FROM ABOUT 1.8 TO 2.5 AIR MILES NORTHWEST OF FRANKLIN.

**Detailed Location:**

**Ecological:**
SEASONALLY WET GRASSLANDS, VERNAL POOLS, AND DEPRESSIONS. ASSOC W/ PLAGIOBOTHrys, JUNCUS BUFONIS, HORDEUM MARINUM, DOWNINGIA BICORNUTA, MATRICARIA, ERYNGIUM CASTRENSE, VULPIA BROMOIDES, LEPIDIIUM LATIPES LATIPES, LASTHENIA GLABERRIMA, ETC.

**Threats:**
THREATENED BY GRAZING AND INVASION BY NON-NATIVE SPECIES.

**General:**
2580 PLANTS OBSERVED IN 2009.

**PLSS:** T06N, R04E, Sec. 01 (M)

**Accuracy:** specific area

**Area (acres):** 14

**UTM:** Zone-10 N4250899 E632328

**Latitude/Longitude:** 38.39652 / -121.48464

**Elevation (feet):** 10

**County Summary:**
Sacramento

**Quad Summary:** Florin (3812144)

**Sources:**
DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
### Scientific Name
*Trifolium hydrophilum*

### Common Name
saline clover

### Listing Status
- **Federal:** None
- **State:** None

### CNDDDB Element Ranks
- **Global:** G2
- **State:** S2

### General Habitat
MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

### Micro Habitat
MESIC, ALKALINE SITES, 0-300 M.

### Last Date Observed
2010-05-11

### Last Survey Date
2010-05-11

### Presence
Presumed Extant

### Location
NORTH SIDE OF HOOD FRANKLIN ROAD, FROM ABOUT 1.2 TO 1.9 AIR MILES ENE OF HOOD.

### Detailed Location

### Ecological
GRASSLAND FIELDS, SWALES, VERNAL POOLS, AND DITCHES. ASSOCIATED WITH HORDEUM MARINUM, LOLIUM MULTIFLORUM, LASTHENIA CALIFORNICA, L. CHRYSANTHA, AND PLAGIOBOTHRYS.

### Threats
THREATENED BY GRAZING AND NON-NATIVE GRASSES.

### General
710 PLANTS OBSERVED IN 2009. 200 PLANTS OBSERVED IN NORTHERNMOST POLYGON IN 2010.

### PLSS
T06N, R04E, Sec. 13 (M)

### Accuracy
specific area

### Area (acres)
12

### UTM
Zone-10 N4248937 E631719

### Latitude/Longitude
38.37894 / -121.49197

### Elevation (feet)
10

### County Summary
Sacramento
Brucerlie (3812134), Florin (3812144)

### Sources
- DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
- DWR11D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM / BAY DELTA CONSERVATION PLAN SURVEY DATA 2010 2011-03-23
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California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 83569
EO Index: 84601
Key Quad: Clarksburg (3812145)
Element Code: PDFAB400R5
Occurrence Number: 41
Occurrence Last Updated: 2011-08-22

Scientific Name: Trifolium hydrophilum
Common Name: saline clover

Listing Status: Federal: None
State: None
Rare Plant Rank: 1B.2
Other Lists:

CNDDDB Element Ranks: Global: G2
State: S2

General Habitat: MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.
Micro Habitat: MESIC, ALKALINE SITES, 0-300 M.

Last Date Observed: 2009-04-30
Last Survey Date: 2009-04-30
Presence: Presumed Extant

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.

Threats:
THREATENED BY EXOTIC GRASSES.

General:
30 PLANTS OBSERVED IN NORTHERN COLONY AND 10,000 PLANTS OBSERVED IN SOUTHERN COLONY IN 2009.

PLSS: T06N, R04E, Sec. 02 (M) Accuracy: specific area Area (acres): 1
UTM: Zone-10 N4251626 E630752 Latitude/Longitude: 38.40331 / -121.50255 Elevation (feet): 10

County Summary: Sacramento
Quad Summary: Clarksburg (3812145)

Sources:
DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
### Scientific Name: **Juglans hindsii**

- **Common Name:** Northern California black walnut

### Listing Status:
- **Federal:** None
- **State:** None

### CNDDB Element Ranks:
- **Global:** G1
- **State:** S1

### General Habitat:
RIPARIAN FOREST, RIPARIAN WOODLAND. FEW EXTANT NATIVE STANDS REMAIN; WIDELY NATURALIZED.

### Micro Habitat:
DEEP ALLUVIAL SOIL ASSOCIATED WITH A CREEK OR STREAM. 0-440 M.

### Last Date Observed:
XXXX-XX-XX

### Last Survey Date:
2002-10-XX

### Owner/Manager:
UNKNOWN

### Presence:
Extirpated

### Location:
ALONG THE SACRAMENTO RIVER, BETWEEN FREEPORT AND RIO VISTA, MOSTLY AT WALNUT GROVE.

### Detailed Location:
TREES WERE ALONG BOTH SIDES OF RIVER.

### Ecological:
ON HIGH SPOTS ALONG THE BANK.

### Threats:
TREES NO LONGER REMAIN AT THIS SITE, THEY WERE CUT PRIOR TO 1949 ACCORDING TO SMITH, 1949.

### General:
SITE EXTIRPATED ACCORDING TO CALLIZO (2002).

### PLSS:
T05N, R04E, Sec. 05 (M)

### UTM:
Zone-10 N4240809 E624659

### Accuracy:
nonspecific area

### Area (acres):
5,631

### Elevation (feet):
0

### Sources:
- CAL02F0001  CALLIZO, C. - FIELD SURVEY FORM FOR JUGLANS HINDSII 2002-10-XX
- FUL78U0002  FULLER, T. - CNPS STATUS REPORT FOR JUGLANS HINDSII 1978-XX-XX
- SMI49A0001  SMITH, R. - "LAS NUECES Y BOLBONES" PACIFIC DISCOVERY, NOV-DEC 1949. 1949-XX-XX
### Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:**  
*Hibiscus lasiocarpos var. occidentalis*

**Common Name:**  
woolly rose-mallow

**Listing Status:**  
- **Federal:** None  
- **State:** None

**Rare Plant Rank:** 1B.2

**CNDDDB Element Ranks:**  
- **Global:** G5T2  
- **State:** S2

**General Habitat:**  
MARSHES AND SWAMPS (FRESHWATER).

**Micro Habitat:**  
MOIST, FRESHWATER-SOAKED RIVER BANKS & LOW PEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAPH AND LEVEES. IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-120 M.

**Last Date Observed:** 1988-08-04

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1988-08-04

**Occurrence Rank:** Poor

**Owner/Manager:** CALTRANS

**Presence:** Presumed Extant

**Location:**  
ON-RAMP TO EASTBOUND I-80 FROM WEST EL CAMINO AVE., NORTH OF SACRAMENTO.

**Detailed Location:**  
1/2 MILE NORTH OF SWALLOWS NEST GOLF COURSE IN DRAINAGE DITCH NEXT TO THE ON-RAMP.

**Ecological:**  
DRY DRAINAGE DITCH WITH MANY WEEDY TAXA. ECHINOCHOA CRUSGALLII, SORGHUM HALAPENSE, PICRIS ECHIOIDES, CONVOLVULUS ARVENSIS, AND RUMEX CRISPUS. HELIOTROPUM CURASSAVICUM AND SILYBUM MARIANUM NEARBY.

**Threats:**  
DITCH MAINTENANCE & ROW MOWING ARE THREATS. CALTRANS MAINTENANCE UNITS ADVISED OF THIS SITE.

**General:**  
2 PLANTS OBSERVED BY MARTZ IN 1988. VERY DISTURBED SITE LACKING FRESHWATER SLOUGH/MARSH HABITAT AND ASSOCIATED SPECIES. INTACT SLOUGH HABITAT ON NORTH SIDE OF I-80 IN THIS AREA SHOULD BE SURVEYED.

**PLSS:** T09N, R04E, Sec. 22 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4275126 E627662  
**Latitude/Longitude:** 38.61547 / -121.53364  
**Elevation (feet):** 10

**Sources:**  
MAR88F0013  
MARTZ, C. - FIELD SURVEY FORM FOR HIBISCUS LASIOCARPUS VAR. OCCIDENTALIS 1988-08-04
**Scientific Name:** Hibiscus lasiocarpos var. occidentalis  
**Common Name:** woolly rose-mallow

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<th>Listing Status</th>
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**General Habitat:**  MARSHES AND SWAMPS (FRESHWATER).

**Micro Habitat:**  MOIST, FRESHWATER-SOAKED RIVER BANKS & LOW PEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAP AND LEVEES, IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-120 M.

**Last Date Observed:** 2009-08-25

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Good

**Presence:** Presumed Extant

**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.

**Threats:**

**General:**  2009 POPULATION NUMBERS FOR POLYGONS FROM NORTH TO SOUTH: 19, 5, 2, AND 3.

**PLSS:**  T07N, R04E, Sec. 25 (M)  
**Accuracy:** specific area  
**Area (acres):** 4

**UTM:**  Zone-10 N4254046 E630944  
**Latitude/Longitude:** 38.42509 / -121.49989  
**Elevation (feet):** 0

**County Summary:**  Sacramento

**Quad Summary:**  Florin (3812144)

**Sources:**  DWR10D0001  CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<tr>
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<tr>
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<td>2011-05-24</td>
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**Scientific Name:** *Hibiscus lasiocarpos var. occidentalis*

**Common Name:** woolly rose-mallow

**Listing Status:**

- Federal: None
- State: None

**CNNDDB Element Ranks:**

- Global: G5T2
- State: S2

**General Habitat:**

MARSHES AND SWAMPS (FRESHWATER).

**Micro Habitat:**

MOIST, FRESHWATER-SOAKED RIVER BANKS & LOW PEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAP AND LEVEES. IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-120 M.

**Last Date Observed:** 2009-06-08

**Last Survey Date:** 2009-06-08

**Owner/Manager:** USFWS-STONE LAKES NWR

**Presence:** Presumed Extant

**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:**

TYPOHA MARSH NEAR FREEWAY.

**Threats:**

DISTURBED BY NEARBY FREEWAY. THREATENED BY POLLUTANT RUNOFF.

**General:**

7 PLANTS OBSERVED IN 2009.

**PLSS:**

- T07N, R04E, Sec. 36 (M)

**Accuracy:** specific area

**Area (acres):** 1

**UTM:**

- Zone-10 N4253867 E632026

**Latitude/Longitude:** 38.42331 / -121.48754

**Elevation (feet):** 10

**County Summary:**

Sacramento

**Quad Summary:**

Florin (3812144)

**Sources:**

DWR10D0001  CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 82677  
**EO Index:** 83681  
**Key Quad:** Florin (3812144)  
**Occurrence Number:** 191  
**Occurrence Last Updated:** 2011-05-24

**Scientific Name:** Hibiscus lasiocarpos var. occidentalis  
**Common Name:** woolly rose-mallow

**Listing Status:**  
**Federal:** None  
**State:** None

**Rare Plant Rank:** 1B.2  
**Other Lists:** SB_RSABG-Rancho Santa Ana Botanic Garden

**CNDDDB Element Ranks:**  
**Global:** G5T2  
**State:** S2

**General Habitat:** MARSHES AND SWAMPS (FRESHWATER).

**Micro Habitat:** MOIST, FRESHWATER-SOAKED RIVER BANKS & LOW PEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAP AND LEVEES. IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-120 M.

**Last Date Observed:** 2009-08-25  
**Last Survey Date:** 2009-08-25  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Good  
**Trend:** Unknown

**Owner/Manager:** USFWS-STONE LAKES NWR  
**Presence:** Presumed Extant

**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.

**Threats:**  
**General:** 12 LARGE CLUMPS OF PLANTS OBSERVED IN 2009.

**PLSS:** T07N, R04E, Sec. 36 (M)  
**Accuracy:** specific area  
**Area (acres):** 1

**UTM:** Zone-10 N4253278 E630941  
**Latitude/Longitude:** 38.41816 / -121.50007  
**Elevation (feet):** 0

**County Summary:**  
**Sacramento**

**Sources:**  
DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>SB_RSABG-Rancho Santa Ana Botanic Garden</td>
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| General Habitat:     | MARSHES AND SWAMPS (FRESHWATER).         |
| Micro Habitat:       | MOIST, FRESHWATER-SOAKED RIVER BANKS & LOW PEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAP AND LEVEES, IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-120 M. |

| Last Date Observed:  | 2009-09-01 |
| Last Survey Date:    | 2009-09-01 |
| Owner/Manager:       | UNKNOWN    |
| Presence:            | Presumed Extant |

| 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.

**Threats:**

- General:

  1. PLANT OBSERVED IN 2009.

<table>
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**Accuracy:**

- Specific area

**Area (acres):**

- 1

**Latitude/Longitude:**

- 38.43114 / -121.60406

**Elevation (feet):**

- 5

**County Summary:**

- Yolo

**Quad Summary:**

- Clarksburg (3812145)

**Sources:**

- DWR10D0001  CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Hibiscus lasiocarpos var. occidentalis*

**Common Name:** woolly rose-mallow

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**General Habitat:**

MARSHES AND SWAMPS (FRESHWATER).

**Micro Habitat:** MOIST, FRESHWATER-SOAKED RIVER BANKS & LOW PEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAP AND LEVEES, IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-120 M.

<table>
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<tr>
<td>Last Survey Date:</td>
<td>2009-08-25</td>
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<td>Owner/Manager:</td>
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<td>Presence:</td>
<td>Presumed Extant</td>
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<td>Location:</td>
<td>SACRAMENTO RIVER JUST SOUTHEAST OF CLARKSBURG, ABOUT 0.5 AIR MILE SOUTHEAST OF CLARKSBURG MARINA.</td>
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<td>Detailed Location:</td>
<td>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.</td>
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**Ecological:**

RIPRAP.

**Threats:**

THREATENED BY LEVEE MAINTENANCE.

**General:**

2 PLANTS OBSERVED IN 2009.

<table>
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**Accuracy:** specific area

**Area (acres):** 1

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<th>Latitude/Longitude:</th>
<th>38.41318 / -121.51926</th>
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**Elevation (feet):** 10

**County Summary:**

Sacramento

**Quad Summary:**

Clarksburg (3812145)

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**Sources:**

DWR10D0001  CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29

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Report Printed on Tuesday, September 15, 2015

Information Expires 3/1/2016
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**California Natural Diversity Database**

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**Scientific Name:** *Hibiscus lasiocarpos var. occidentalis*  
**Common Name:** woolly rose-mallow

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G5T2  
**State:** S2

**General Habitat:** MARSHES AND SWAMPS (FRESHWATER).

**Micro Habitat:** MOIST, FRESHWATER-SOAKED RIVER BANKS & LOW PEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAP AND LEVEES. IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-120 M.

**Last DateObserved:** 2009-08-25  
**Last Survey Date:** 2009-08-25  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Fair  
**Trend:** Unknown

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**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.

**Threats:** THREATENED BY LEVEE MAINTENANCE.

**General:**  
2 PLANTS OBSERVED IN 2009.

**PLSS:** T06N, R04E, Sec. 02 (M)  
**Accuracy:** specific area  
**Area (acres):** 1

**UTM:** Zone-10 N4252085 E629600  
**Latitude/Longitude:** 38.40761 / -121.51564  
**Elevation (feet):** 10

**County Summary:** Sacramento  
**Quad Summary:** Clarksburg (3812145)

**Sources:**  
DWR10D0001  
CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
### Scientific Name
**Hibiscus lasiocarpos var. occidentalis**

### Common Name
woolly rose-mallow

### Listing Status
- **Federal:** None
- **State:** None

### CNDDB Element Ranks
- **Global:** G5T2
- **State:** S2

### General Habitat
MARSHES AND SWAMPS (FRESHWATER).

### Micro Habitat
MOIST, FRESHWATER-SOAKED RIVER BANKS & LOWPEAT ISLANDS IN SLOUGHS; CAN ALSO OCCUR ON RIPRAPP AND LEVEES, IN CALIFORNIA, KNOWN FROM THE DELTA WATERSHED. 0-120 M.

### Last Date Observed
2009-08-25

### Last Survey Date
2009-08-25

### Owner/Manager
UNKNOWN

### Presence
Presumed Extant

### 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.

### Threats
THREATENED BY RECREATION.

### General
1 PLANT OBSERVED IN 2009.

### PLSS
T06N, R04E, Sec. 02 (M)

### UTM
Zone-10 N4251204 E629890

### Accuracy
specific area

### Area (acres)
1

### Latitude/Longitude
38.39963 / -121.51248

### Elevation (feet)
10

### Sources
DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 11397  
**EO Index:** 17785

**Key Quad:** Rio Linda (3812164)  
**Element Code:** PDSCR0R060

**Occurrence Number:** 3  
**Occurrence Last Updated:** 2011-01-04

**Scientific Name:** *Gratiola heterosepala*  
**Common Name:** Boggs Lake hedge-hyssop

**Listing Status:**  
**Federal:** None  
**State:** Endangered

**CNDDB Element Ranks:**  
**Global:** G2  
**State:** S2

**General Habitat:**  
MARBLES AND SWAMPS (FRESHWATER), VERNAL POOLS.

**Micro Habitat:**  
CLAY SOILS; USUALLY IN VERNAL POOLS, SOMETIMES ON LAKE MARGINS. 10-2375 M.

**Last Date Observed:** 1960-04-21  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1997-06-18  
**Occurrence Rank:** None

**Owner/Manager:** UNKNOWN  
**Trend:** Decreasing

**Presence:** Possibly Extirpated

**Location:**  
VERNAL POOLS JUST NORTH OF AND ADJACENT TO U STREET, AT NORTHEASTERN BORDER OF RIO LINDA.

**Detailed Location:**  
FOUND OPPOSITE OF MAIL BOX MARKED "CASE." EXACT LOCATION UNKNOWN, MAPPED AS BEST GUESS BY CNDDB ALONG U STREET.

**Ecological:**  
DRIED-UP AND VERY SHALLOW VERNAL POOLS.

**Threats:**  
IN 1977 VISIT, SITE HAD BEEN PLOWED, HARRORED, AND LEVELED OBVIOUSLY IN PREPARATION FOR HOUSING DEVELOPMENT.

**General:**  

**PLSS:** T10N, R05E, Sec. 21 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 132

**UTM:** Zone-10  
**Accuracy:** 38.70480 / -121.43596  
**Elevation (feet):** 65

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**
- BAC60S0007 BACIGALUPI, R. ET AL. - BACIGALUPI #7374 JEPS #25043, RSA #517389, CAS #461644 1960-04-21
- BAC77U0002 BACIGALUPI, R. - CNPS STATUS REPORT ON GRATIOLA HETEROSEPALA, PP 4. 1977-XX-XX
- NOS97F0017 NOSAL, T. ET AL. - FIELD SURVEY FORM FOR GRATIOLA HETEROSEPALA 1997-06-18
- RAE78F0002 RAE, S. - FIELD SURVEY FORM FOR GRATIOLA HETEROSEPALA 1978-06-21
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 23929  
**EO Index:** 21341  
**Key Quad:** Elk Grove (3812143)  
**Occurrence Number:** 33  
**Occurrence Last Updated:** 1995-10-30

---

**Scientific Name:** *Gratiola heterosepala*  
**Common Name:** Boggs Lake hedge-hyssop

---

**Listing Status:**  
**Federal:** None  
**State:** Endangered

---

**CNDDB Element Ranks:**  
**Global:** G2  
**State:** S2

---

**General Habitat:**  
MARSHES AND SWAMPS (FRESHWATER), VERNAL POOLS.

---

**Micro Habitat:**  
CLAY SOILS; USUALLY IN VERNAL POOLS, SOMETIMES ON LAKE MARGINS. 10-2375 M.

---

**Last Date Observed:** 1991-05-13  
**Last Survey Date:** 1991-05-13  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Fair  
**Trend:** Unknown

---

**Location:**  
0.75 MILE NW OF INTERSECTION OF BOND AND WATERMAN ROADS.

---

**Detailed Location:**  
ASSOCIATED WITH ERYNGIUM VASEYI, ELEOCHARIS MACROSTACHYA, DOWNINGIA ORNATISSIMA. MOST PLANTS IN NEARLY BARREN PORTIONS OF POOL. ANOTHER RARE PLANT ALSO HERE: LEGENERE LIMOSA.

---

**Threats:**  
DEVELOPMENT, GRAZING.

---

**General:**  
20 PLANTS IN 1991. SITE OWNED BY CAMRAY DEVELOPMENT.

---

**PLSS:** T07N, R06E, Sec. 30 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

---

**UTM:** Zone-10 N4254999 E642933  
**Latitude/Longitude:** 38.43183 / -121.36241  
**Elevation (feet):** 45

---

**County Summary:**  
Sacramento  
Elk Grove (3812143)

---

**Sources:**  
DAI91F0002  
DAINS, V. - FIELD SURVEY FORM FOR GRATIOLA HETEROSEPALA 1991-05-13
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<tr>
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**Scientific Name:** *Gratiola heterosepala*  
**Common Name:** Boggs Lake hedge-hyssop

**Listing Status:**  
- **Federal:** None  
- **State:** Endangered

**CNDDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
MARSHES AND SWAMPS (FRESHWATER), VERNAL POOLS.

**Micro Habitat:**  
CLAY SOILS; USUALLY IN VERNAL POOLS, SOMETIMES ON LAKE MARGINS. 10-2375 M.

**Last Date Observed:** 1991-05-09  
**Last Survey Date:** 1991-05-09  
**Owner/Manager:** PVT  
**Presence:** Presumed Extant

**Location:**  
0.35 MILE N OF INTERSECTION OF CALVINE AND WATERMAN ROADS.

**Detailed Location:**

**Ecological:**

LARGE VERNAL POOL COMPLEX; GROWING IN SPARSELY VEGETATED DEEPER AREAS OF POOLS. ASSOCIATED WITH *ELEOCHARIS MACROSTACHYA*, *ERYNGIUM VASEYI*, *G. EBRACTEA*, *ISOETES NUTTALLII*, *PLAGIOBOTHRYS BRACTEATUS*, *LASTHENIA GLABBERIMA*, & *ELATINE CA*.

**Threats:**  
ADJACENT AREAS SLATED FOR DEVELOPMENT, COULD IMPACT POOLS. TWO-THIRDS OF THE POOL COMPLEX HAS BEEN DISKED.

**General:**  
APPROXIMATELY 200 PLANTS IN 1991.

**PLSS:** T07N, R06E, Sec. 17 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4257912 E643671  
**Latitude/Longitude:** 38.45796 / -121.35336  
**Elevation (feet):** 75

**County Summary:**  
Sacramento

**Quad Summary:**  
Elk Grove (3812143)

**Sources:**

WITHAM, C. - FIELD SURVEY FORM FOR GRATIOLA HETEROSEPALA 1991-05-09
# Occurrence Report
**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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| General Habitat:      | MARSHES AND SWAMPS (FRESHWATER), VERNAL POOLS. |
|                       | Micro Habitat: CLAY SOILS; USUALLY IN VERNAL POOLS, SOMETIMES ON LAKE MARGINS. 10-2375 M. |

| Last Date Observed:   | 2002-04-28 |
| Last Survey Date:     | 2002-04-28 |
| Owner/Manager:        | PVT        |
| Presence:             | Presumed Extant |

| Location:             | ELLIOTT CONSERVANCY, 0.7 MILE EAST OF THE INTERSECTION OF BEACON CREEK AND ELK GROVE-FLORIN RD. |
| Detailed Location:    | MAPPED IN THE NW 1/4 OF THE SE 1/4 OF SECTION 7. |

| Ecological:           | LOW, BARREN AREAS OF LARGE VERNAL POOL. ASSOCIATED WITH CRASSULA AQUATICA, PSILOCARPHUS BREVISSIMUS, DOWNINGIA BICORNUTA, GRATIOLA EBRACETATA, LASTHENIA GLABERRIMA, AND PLAGIOBOTHRYS STIPITATUS MICRANTHA. |

| Threats:              | General: 50 PLANTS OBSERVED IN 2002. 1986 AND 1989 OBSERVATIONS MENTIONED PLANTS OBSERVED IN THREE VERNAL POOLS BUT GAVE VAGUE LOCATION INFO FOR THE POOLS. OTHER POOLS IN THIS AREA MAY CONTAIN G. HETEROSEPALA. |

| PLSS: | T07N, R06E, Sec. 07 (M) |
| UTM: | Zone-10 N4259757 E643095 |
| Accuracy: | 80 meters |
| Latitude/Longitude: | 38.47467 / -121.35958 |
| Elevation (feet): | 50 |

| County Summary: | Sacramento Elk Grove (3812143) |

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**Commercial Version -- Dated September, 1 2015 -- Biogeographic Data Branch**

**Information Expires 3/1/2016**
# Occurrence Report

**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** *Gratiola heterosepala*  
**Common Name:** Boggs Lake hedge-hyssop

**Listing Status:**  
**Federal:** None  
**State:** Endangered

**CNDDB Element Ranks:**  
**Global:** G2  
**State:** S2

**General Habitat:** Marshes and swamps (freshwater), vernal pools.

**Micro Habitat:** Clay soils; usually in vernal pools, sometimes on lake margins. 10-2375 m.

**Last Date Observed:** 1998-06-05  
**Last Survey Date:** 2002-08-30  
**Owner/Manager:** PVT  
**Presence:** Extirpated

**Location:**  
On east side of Exselsior Road, west of Dierks Road. About 0.7-1.0 mi north of Calvino Road. Dierks Ranch.

**Detailed Location:** NW1/4 of NW1/4 of Section 14.

**Ecological:** In a vernal pool with Gratiola ebracteata.

**Threats:** Previously disked and partially levelled. Development planned for this site.

**General:** Only 4 plants in 1998, 1 in flower, 3 in fruit. Site developed permit 2081, soil transplanted to Laguna Creek mitigation bank.

**PLSS:** T07N, R06E, Sec. 14 (M)  
**UTM:** Zone-10 N4258771 E648763  
**Accuracy:** Nonspecific area  
**Area (acres):** 62  
**Latitude/Longitude:** 38.46486 / -121.29484  
**Elevation (feet):** 100

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
BAR02F0001 BARTLETT, T. - FIELD SURVEY FORM FOR GRATIOLA HETEROSEPALA 2002-08-30  
ROB98F0001 ROBISON, R. - FIELD SURVEY FORM FOR GRATIOLA HETEROSEPALA 1998-06-05
**Map Index Number:** 43542
**EO Index:** 43542
**Key Quad:** Carmichael (3812153)
**Occurrence Number:** 84
**Occurrence Code:** PDSCR0R060
**Occurrence Last Updated:** 2013-05-23

**Scientific Name:** *Gratiola heterosepala*
**Common Name:** Boggs Lake hedge-hyssop

**Listing Status:**
- **Federal:** None
- **State:** Endangered

**CNDDB Element Ranks:**
- **Global:** G2
- **State:** S2

**General Habitat:** MARSHES AND SWAMPS (FRESHWATER), VERNAL POOLS.
**Micro Habitat:** CLAY SOILS; USUALLY IN VERNAL POOLS, SOMETIMES ON LAKE MARGINS. 10-2375 M.

**Last Date Observed:** 2001-05-20
**Occurrence Type:** Natural/Native occurrence
**Occurrence Rank:** Excellent
**Presence:** Presumed Extant

**Location:**
MATHER FIELD, WEST OF EAGLES NEST ROAD ABOUT 1.8 MILES SOUTH OF JUNCTION WITH DOUGLAS BLVD, SOUTH OF RANCHO CORDOVA.

**Detailed Location:**
PLANTS FOUND IN VERNAL POOLS ABOUT 0.2 MILE WEST OF EAGLES NEST ROAD, ACROSS FROM THE MODEL AIRPLANE FLYERS CLUB. MAPPED WITHIN THE SE 1/4 OF THE NE 1/4 OF SECTION 24.

**Ecological:**
GROWING IN DEEP VERNAL POOLS, IN THE WATER AND AT THE WATER'S EDGE WITH ISOETES ORCUTTII. POOLS DOMINATED BY ELEOCHARIS MACROSTACHYA, PLAGIOBOTHrys STIPITATUS VAR. MICRANTHUS, AND LASTHENIA GLABERRIMA.

**Threats:**
SITE HAS BEEN PROPOSED FOR AN AGGREGATE MINE.

**General:**
THOUSANDS OF PLANTS OBSERVED IN 2000. UNKNOWN NUMBER OF PLANTS OBSERVED IN 2001. THE RARE JUNCUS LEIOSPERMUS VAR. AHARTII OCCURS IN NEARBY POOLS AND SWALES.

**PLSS:** T08N, R06E, Sec. 24 (M)  **Accuracy:** specific area  **Area (acres):** 2
**UTM:** Zone-10 N4266458 E651215 **Latitude/Longitude:** 38.53369 / -121.26508  **Elevation (feet):** 135

**County Summary:**
Sacramento  Carmichael (3812153)

**Sources:**
- GRE01U0007  GREENHOUSE, J. - OBSERVATION RECORD FOR GRATIOLA HETEROSEPALA, CALFLORA ID: JGR20091 2001-05-20
- WIT00F0004  WITHAM, C. - FIELD SURVEY FORM FOR GRATIOLA HETEROSEPALA 2000-05-17
### Occurrence Report

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**California Natural Diversity Database**

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**Scientific Name:** *Sagittaria sanfordii*

**Common Name:** Sanford's arrowhead

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S3

**General Habitat:**
Marshes and swamps.

**Micro Habitat:**
In standing or slow-moving freshwater ponds, marshes, and ditches. 0-650 M.

**Last Date Observed:** 2004-07-08

**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2004-07-08

**Occurrence Rank:** Fair

**Owner/Manager:** PVT, ELK GROVE SCHOOL DIST

**Presence:** Presumed Extant

**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:**

**Threats:**
Creek realignment, herbicide spraying, adjacent residential development, trash dumping, and proposed water pipeline.

**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.

**PLSS:** T07N, R05E, Sec. 11 (M)

**Accuracy:** Specific area

**Area (acres):** 20

**UTM:** Zone-10 N4260111 E639789

**Latitude/Longitude:** 38.47838 / -121.39739

**Elevation (feet):** 35

**County Summary:** Sacramento

**Quad Summary:** Florin (3812144)

**Sources:**
- NOR92U0001 NORTON, K. - PERSONAL COMMUNICATION BETWEEN TIM NOSAL AND KATHY NORTON ABOUT SOME POPS OF SAGITTARIA SANFORDII. 1992-10-21
- NOR93M0001 NORTON, K. - MAPS OF SAGITTARIA SANFORDII IN THE SACRAMENTO AREA. 1993-11-07
- PRE04F0014 PRESTON, R. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2004-07-08
- PRE04F0015 PRESTON, R. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2004-07-08
- PRE04F0016 PRESTON, R. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2004-06-30
- WIT92F0008 WITHAM, C. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1992-07-11
- WYM92F0003 WYMER, N. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1992-06-18
- WYM92F0004 WYMER, N. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1992-05-18
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 24539

**EO Index:** 17243

**Key Quad:** Florin (3812144)

**Occurrence Number:** 18

**Occurrence Last Updated:** 2009-02-17

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**Scientific Name:** Sagittaria sanfordii

**Common Name:** Sanford's arrowhead

**Listing Status:**
- **Federal:** None
- **State:** None

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive

**CNNDDB Element Ranks:**
- **Global:** G3
- **State:** S3

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**General Habitat:**
MARSHES AND SWAMPS.

**Micro Habitat:**
IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

---

**Last Date Observed:** 1996-08-XX

**Last Survey Date:** 1996-08-XX

**Owner/Manager:** SAC COUNTY-PUBLIC WORKS, PVT

**Presence:** Presumed Extant

**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.

**Threats:**
MUCH OF THIS EO HAS BEEN EXTIRPATED BY DEVELOPMENT AND VEG CLEARING ACTIVITIES. UNKNOWN HOW MUCH OF POP IS STILL EXTANT.

**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.

**PLSS:**
- **T07N, R05E, Sec. 24 (M)**
- **Zone-10 N4257154 E640611**

**Accuracy:** specific area

**Area (acres):** 148

**Latitude/Longitude:** 38.45161 / -121.38856

**Elevation (feet):** 40

**County Summary:**
Sacramento

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**Sources:**

DAI91F0005  DAINS, V. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1991-05-22

HRU93S0003  HRUSA, G.F. - HRUSA #10919 CDA #14261 1993-05-10

LSA97R0002  LSA ASSOCIATES, INC. - FOURTH ANNUAL MONITORING REPORT FOR STRAWBERRY CREEK REALIGNMENT MITIGATION PROJECT (CORPS NO. 190110079) 1997-09-09

MIL91U0001  MILLER, S. & R. LOPEZ - REPORT OF CONTACT BY EPP REGARDING SAGITTARIA SANFORDII. 1991-11-04

NOR03U0001  NORTON, K. - EMAIL WITH CNDDDB STAFF REGARDING MANY POPULATIONS OF SAGITTARIA SANFORDII 2003-04-02

NOR92U0001  NORTON, K. - PERSONAL COMMUNICATION BETWEEN TIM NOSAL AND KATHY NORTON ABOUT SOME POPS OF SAGITTARIA SANFORDII. 1992-10-21

NOR93M0001  NORTON, K. - MAPS OF SAGITTARIA SANFORDII IN THE SACRAMENTO AREA. 1993-11-07

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Report Printed on Tuesday, September 15, 2015

Information Expires 3/1/2016
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| Rare Plant Rank: | 1B.2 |
| Other Lists:     | BLM_S-Sensitive |

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### 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.

### Threats:

SEVERAL HUNDRED PLANTS OBSERVED IN 1992.

**PLSS:** T07N, R05E, Sec. 15 (M)  
**Area (acres):** 0

**Accuracy:** 80 meters  
**Lat/Lon:** 38.45765 / -121.41798  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
BEG92F0001  
BEGLEY, E. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1992-08-20
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California Department of Fish and Wildlife
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| Micro Habitat: | In standing or slow-moving freshwater ponds, marshes, and ditches. 0-650 m. |

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| 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. |

| Threats: | Herbicide application. |

| 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. |

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| **Rare Plant Rank:**  | 1B.2 |
| **State:**            | None |
| **CNDDB Element Ranks:** | Global: G3  
 State: S3 |
| **General Habitat:**  | Marshes and swamps. |
| **Micro Habitat:**    | In standing or slow-moving freshwater ponds, marshes, and ditches. 0-650 m. |
| **Last Date Observed:** | 1993-07-31 |
| **Last Survey Date:** | 1993-07-31 |
| **Owner/Manager:**    | UNKNOWN |
| **Presence:**         | Presumed Extant |
| **Location:**         | Drainage on the E side of the Folsom South Canal, 1.5 km (1 mi) South of Sunrise Blvd at White Rock Rd, East of Mather. |
| **Detailed Location:**| Ecological: growing in standing water of drainage channel within a field of annual weeds. Associates in channel include Typha, Polygonum persicaria, and Sagittaria montevidensis ssp. calycina. |
| **Threats:**          | General: solid stand of plants approx. 10' x 100' in area observed in 1993. Site is bordered to the west by canal levee and to the north, south, and east by auto wrecking yards. |
| **PLSS:**             | T08N, R06E, Sec. 01 (M) |
| **Accuracy:**         | 80 meters |
| **Area (acres):**     | 0 |
| **UTM:**              | Zone-10 N4271175 E651233 |
| **Latitude/Longitude:** | 38.57618 / -121.26386 |
| **Elevation (feet):** | 130 |
| **County Summary:**   | Sacramento |
| **Quad Summary:**     | Carmichael (3812153) |

Sources:
- NOS93F0002  NOSAL, T. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1993-07-31
Map Index Number: 24527
EO Index: 4864
Key Quad: Carmichael (3812153)
Occurrence Number: 24
Occurrence Last Updated: 1997-12-23

Scientific Name: *Sagittaria sanfordii*
Common Name: Sanford's arrowhead

Listing Status:
- Federal: None
- State: None

Rare Plant Rank: 1B.2
Other Lists: BLM_S-Sensitive

CNDDB Element Ranks:
- Global: G3
- State: S3

General Habitat: MARSHES AND SWAMPS.
Micro Habitat: IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

Last Date Observed: 1997-06-17
Last Survey Date: 1997-06-17
Ownership/Manager: SAC COUNTY-PUBLIC WORKS
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Fair
Trend: Unknown

Presence: Presumed Extant

Location:
CHANNELS NEAR BRADSHAW ROAD & LINCOLN VILLAGE ROAD, SACRAMENTO.

Detailed Location:
TWO COLONIES; ONE IS IN CHANNEL SOUTH OF LINCOLN VILLAGE ROAD AND EAST OF BRADSHAW ROAD ALONG EITHER SIDE OF DRACO DRIVE; THE OTHER IS EAST OF BRADSHAW ABOUT 0.1 MILE NORTH OF LINCOLN VILLAGE ROAD.

Ecological:
SOUTHERN COLONY IN SLOW MOVING WATER OF CEMENT LINED CHANNEL. ASSOCIATES INCLUDE CYPERUS DIFFORMIS, C. ERAGROSTIS, ECHINOCHLOA CRUSGALLI, ERAGROSTIS DIFFUSA, POLYGONUM LAPATHIFOLIUM, P. PERSICARIA, PASPALUM DILATATUM, & SORGHAM HALAPENSE.

Threats:
HERBICIDE APPLICATION & VEGETATION CLEARING IN CHANNELIZED AREA.

General:
POPULATION CONSISTS OF SCATTERED PLANTS ALONG THE CHANNEL IN AREAS WHERE SOIL HAS ACCUMULATED. 100'S SEEN IN 1997, MANY SEEDLINGS. MORE INFO NEEDED ON NORTHERN COLONY.

PLSS: T08N, R06E, Sec. 09 (M)  Accuracy: specific area  Area (acres): 29
UTM: Zone-10 N4269346 E645325  Latitude/Longitude: 38.56069 / -121.33203  Elevation (feet): 60

County Summary: Sacramento  Quad Summary: Carmichael (3812153)

Sources:
- NOR93M0001 NORTON, K. - MAPS OF SAGITTARIA SANFORDII IN THE SACRAMENTO AREA. 1993-11-07
- NOS97F0021 NOSAL, T. & J. PISCIOTTO - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1997-06-17
- WYM92F0005 WYMER, N. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1992-07-02
**Map Index Number:** 24526  
**EO Index:** 16889

**Key Quad:** Carmichael (3812153)  
**Element Code:** PMALI040Q0

**Occurrence Number:** 25  
**Occurrence Last Updated:** 1996-02-14

---

**Scientific Name:** *Sagittaria sanfordii*  
**Common Name:** Sanford's arrowhead

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S3

---

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

---

**Last Date Observed:** 1993-08-19  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1993-08-19  
**Occurrence Rank:** Good

**Owner/Manager:** CORDOVA RECREATION & PARKS  
**Trend:** Unknown

**Presence:** Presumed Extant  
**Location:** CORDOVA GOLF COURSE, SACRAMENTO.

**Detailed Location:** TWO PONDS ON GOLF COURSE TO THE NORTH OF JACKSON ROAD (HWY 16) AND WEST OF BRADSHAW ROAD.

**Ecological:** GOLF COURSE PONDS; ONE IS 100% COVERED WITH SAGITTARIA, THE SMALLER IS 70% COVERED.

**Threats:** THE PLANT IS VIEWED AS A NUISANCE BY GOLF COURSE MANAGEMENT.

**General:** TOTAL COVERAGE OF PLANT IS APPROX 0.4 ACRES. PLANTS WERE APPARENTLY FIRST OBSERVED AT THIS SITE IN 1989.

**PLSS:** T08N, R06E, Sec. 20 (M)  
**Accuracy:** nonspecific area  
**Area (acres):** 80

**UTM:** Zone-10 N4266586 E644023  
**Latitude/Longitude:** 38.53604 / -121.34754  
**Elevation (feet):** 60

---

**County Summary:** Sacramento  
**Quad Summary:** Carmichael (3812153)

---

**Sources:**  
CLA93F0004 CLARK, G. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1993-04-25  
CLA93F0005 CLARK, G. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1993-08-19
### California Department of Fish and Wildlife

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**Scientific Name:** Sagittaria sanfordii  
**Common Name:** Sanford's arrowhead

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S3

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 1993-07-22  
**Occurrence Type:** Natural/Native occurrence

**Owner/Manager:** SAC COUNTY-PARKS & REC  
**Occurrence Rank:** Excellent

**Presence:** Presumed Extant

**Trend:** Unknown

**Location:** SLOUGH ALONG NORTH SIDE OF THE AMERICAN RIVER, BETWEEN SOUTHERN PACIFIC RR TRACKS AND THE PUMPING STATION, SACRAMENTO.

**Detailed Location:** NEXT TO AMERICAN RIVER BIKE TRAIL, FROM SPRR TRACKS WEST APPROX. 1 KM (0.7 MI).

**Ecological:** SLOUGHS WITH MUDDY SHORES. ASSOCIATES INCLUDE PASPALUM, SETARIA, SALIX, AND TYPHA. MOSTLY GROWING OFFSHORE IN APPROX. 6" OF WATER WITH NO SURROUNDING VEGETATION.

**Threats:**  
**General:** 50+ COLONIES OBSERVED IN SEVERAL DISCONTINUOUS SLOUGHS. SITE IS WITHIN THE AMERICAN RIVER PARKWAY COUNTY PARK, COUNTY SHOULD BE MADE AWARE OF THE PLANT'S PRESENCE.

**PLSS:** T09N, R05E, Sec. 32 (M)  
**Accuracy:** specific area  
**Area (acres):** 47

**UTM:** Zone-10 N4272969 E634390  
**Latitude/Longitude:** 38.59505 / -121.45680  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:**  
NOS93F0003  NOSAL, T. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1993-07-22
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Sagittaria sanfordii  
**Common Name:** Sanford's arrowhead

**Listing Status:**  
- Federal: None  
- State: None

**CNNDDB Element Ranks:**  
- Global: G3  
- State: S3

**Last Date Observed:** 2005-07-02  
**Last Survey Date:** 2005-07-02  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Fair  
**Trend:** Unknown  
**Presence:** Presumed Extant

**Location:**  
SMALL CHANNEL JUST SOUTH OF CSU, SACRAMENTO FOOTBALL FIELD.

**Detailed Location:**  
SOUTH OF STADIUM, BETWEEN ROAD AND PARKING LOT APPROXIMATELY 100’ EAST OF CULVERT.

**Ecological:**  
GRASSY DRAINAGE CHANNEL DOMINATED BY ECHINOCHLOA CRUS-GALLI WITH CYPERUS AND POLYGONUM.

**Threats:**  
SITE IS SUBJECT TO OCCASIONAL MOWING AND POSSIBLE HERBICIDE APPLICATION.

**General:**  
SMALL APPROXIMATELY 1 SQ FT COLONY. COMPETITION WITH GRASSES ETC. MAY BE IMPACTING POPULATION. MORE THAN 100 PLANTS SEEN IN 2005; POPULATION APPEARS TO HAVE EXPANDED IN THIS AREA.

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<td>Sacramento East (3812154)</td>
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**Sources:**
- HUD05F0007  
  HUDDLESTON, R. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2005-07-02
- NOR93M0001  
  NORTON, K. - MAPS OF SAGITTARIA SANFORDII IN THE SACRAMENTO AREA. 1993-11-07
- NOS93F0004  
  NOSAL, T. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1993-10-22
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 24522  
**EO Index:** 12962  
**Key Quad:** Sacramento East (3812154)  
**Occurrence Number:** 28  
**Occurrence Last Updated:** 2009-02-11

**Scientific Name:** *Sagittaria sanfordii*  
**Common Name:** Sanford's arrowhead

**Listing Status:**  
- **Federal:** None  
- **State:** None

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S3

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:**  
IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 1993-10-23  
**Last Survey Date:** 2005-06-04

**Owner/Manager:** SAC COUNTY-PARKS & REC

**Presence:** Possibly Extirpated

**Location:**  
DEPRESSION ALONG THE SOUTH SIDE OF THE AMERICAN RIVER, APPROXIMATELY 400 M WEST OF HOWE AVE, SACRAMENTO.

**Detailed Location:**  
BETWEEN THE RIVER AND LEVEE, BEHIND AN APARTMENT COMPLEX AND NEAR THE WATER TREATMENT PLANT.

**Ecological:**  
GROWING IN A LOW, PERENNIAL WET, DEPRESSION. LUDWIGIA PEPLOIDES IS MAJOR ASSOCIATE.

**Threats:**  
SITE IS ADJACENT TO AMERICAN RIVER BIKE TRAIL & MAY BE SUBJECT TO TRAMPLING.

**General:**  
1 COLONY OBSERVED IN 1992. SITE IS WITHIN THE AMERICAN RIVER PARKWAY. HUDDLESTON DID NOT OBSERVE PLANTS IN 2005. DENSE SHRUB GROWTH PRESENT THROUGHOUT THE AREA. MAY BE EXTIRPATED.

**PLSS:** T08N, R05E, Sec. 10 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4268959 E638185  
**Latitude/Longitude:** 38.55834 / -121.41403  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

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**Sources:**

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<td>HUD05F0004</td>
<td>HUDDLESTON, R. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2005-06-04</td>
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<td>NOS92F0005</td>
<td>NOSAL, T. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1992-10-23</td>
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**Occurrence Report**
California Department of Fish and Wildlife
California Natural Diversity Database

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<td>General Habitat:</td>
<td>Marshes and swamps.</td>
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<td>Micro Habitat:</td>
<td>In standing or slow-moving freshwater ponds, marshes, and ditches. 0-650 m.</td>
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<td>Last Date Observed:</td>
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<tr>
<td>Owner/Manager:</td>
<td>SAC COUNTY-PARKS &amp; REC</td>
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<tr>
<td>Presence:</td>
<td>Presumed Extant</td>
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<tr>
<td>Location:</td>
<td>American River Parkway, South of River between levee and river, ~0.6 mile west of Watt Ave.</td>
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<tr>
<td>Detailed Location:</td>
<td>West of powerlines in drainage channel.</td>
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<tr>
<td>Ecological:</td>
<td>Along silty-clayey bank of perennially wet drainage channel. Associates include Ludwigia peploides, Polygonum persicaria, Cyperus. Sagittaria appears to be growing without much competition from its associates.</td>
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<tr>
<td>Threats:</td>
<td>Proximity to bike trail may result in occasional trampling.</td>
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<tr>
<td>General:</td>
<td>1 colony observed in 1992. A 1975 Rubtzoff collection and a 1979 Turner collection are also attributed to this occurrence.</td>
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**PLSS:**
T08N, R05E, Sec. 11 (M)

**UTM:**
Zone-10 N4269490 E640006

**Latitude/Longitude:**
38.56284 / -121.39303

**Elevation (feet):**
20

**Accuracy:**
80 meters

**Area (acres):**
0

**County Summary:**
Sacramento

**Quad Summary:**
Sacramento East (3812154)

**Sources:**
- HOW80U0003  HOWARD, A. - COLLECTION INFORMATION REGARDING SAGITTARIA SANFORDII 1980-08-04
- NOS92F0004  NOSAL, T. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1992-10-23
- RUB75S0004  RUBTZOFF, P. - RUBTZOFF #8364 CAS #871564 1975-09-07
- TUR79S0001  TURNER, C. - TURNER #546 UC (CITED IN HOW80U0003) 1979-08-25
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**Scientific Name:** Sagittaria sanfordii  
**Common Name:** Sanford's arrowhead

**Listing Status:**  
**Federal:** None  
**State:** None

**CNDDB Element Ranks:**  
**Global:** G3  
**State:** S3

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 1993-XX-XX  
**Last Survey Date:** 1993-XX-XX

**Owner/Manager:** UNKNOWN  
**Presence:** Presumed Extant

**Location:** MORRISON CREEK AT FLORIN ROAD, SACRAMENTO.

**Detailed Location:** ALONG EITHER SIDE OF FLORIN ROAD, ABOUT 0.4 MILE EAST OF FRANKLIN BLVD.

**Ecological:**

**Threats:**

**General:** ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED.

**PLSS:** T08N, R05E, Sec. 32 (M)  
**Accuracy:** specific area  
**Area (acres):** 11

**UTM:** Zone-10 N4262007 E635025  
**Latitude/Longitude:** 38.49620 / -121.45163  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
NOR93M0001 NORTON, K. - MAPS OF SAGITTARIA SANFORDII IN THE SACRAMENTO AREA. 1993-11-07
Map Index Number: 30131
EO Index: 4953
Key Quad: Florin (3812144)
Element Code: PMALI040Q0
Occurrence Number: 41
Occurrence Last Updated: 2005-10-03

Scientific Name: Sagittaria sanfordii
Common Name: Sanford's arrowhead

Listing Status:
Federal: None
State: None

Rare Plant Rank: 1B.2
Other Lists: BLM_S-Sensitive

CNDDDB Element Ranks:
Global: G3
State: S3

General Habitat:
Marshes and swamps.

Micro Habitat:
In standing or slow-moving freshwater ponds, marshes, and ditches. 0-650 m.

Last Date Observed: 1993-XX-XX
Occurrence Type: Natural/Native occurrence

Last Survey Date: 2005-07-02
Occurrence Rank: None

Owner/Manager: CITY OF SACRAMENTO
Trend: Unknown

Presence: Possibly Extirpated

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.

Threats:
CHANNEL MAINTENANCE? SITE SURROUNDED BY URBAN SPRAWL.

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.

PLSS: T07N, R05E, Sec. 08 (M)
Accuracy: specific area
Area (acres): 12

UTM: Zone-10 N4259781 E635099
Latitude/Longitude: 38.47613 / -121.45121
Elevation (feet): 20

County Summary: Sacramento
Quad Summary: Florin (3812144)

Sources:
HUD05F0006 HUDDLESTON, R. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2005-07-02
NOR93M0001 NORTON, K. - MAPS OF SAGITTARIA SANFORDII IN THE SACRAMENTO AREA. 1993-11-07
NOS95F0008 NOSAL, T. & J. NOSAL - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1995-05-16

Report Printed on Tuesday, September 15, 2015
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California Department of Fish and Wildlife  
California Natural Diversity Database

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**Scientific Name:** Sagittaria sanfordii  
**Common Name:** Sanford's arrowhead

**Listing Status:**  
Federal: None  
State: None

**CNNDDB Element Ranks:**  
Global: G3  
State: S3

**General Habitat:**  
MARSHES AND SWAMPS.

**Micro Habitat:**  
IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 1993-XX-XX  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 1993-XX-XX  
**Occurrence Rank:** Unknown

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant

**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:**

**Threats:**

**General:**

ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED.

**PLSS:** T07N, R05E, Sec. 10 (M)  
**Accuracy:** specific area  
**Area (acres):** 17

**UTM:** Zone-10 N4259225 E637993  
**Latitude/Longitude:** 38.47068 / -121.41815  
**Elevation (feet):** 20

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
NOR93M0001  
NORTON, K. - MAPS OF SAGITTARIA SANFORDII IN THE SACRAMENTO AREA. 1993-11-07
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**Scientific Name:** Sagittaria sanfordii  
**Common Name:** Sanford's arrowhead

| Listing Status: |  
|------------------|-------|
| Federal:        | None |
| State:          | None |

| CNNDB Element Ranks: |  
|----------------------|-------|
| Global:              | G3    |
| State:               | S3    |

**General Habitat:** Marshes and swamps.

**Micro Habitat:** In standing or slow-moving freshwater ponds, marshes, and ditches. 0-650 m.

**Last Date Observed:** 2011-05-06  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2011-05-06  
**Occurrence Rank:** Excellent

**Owner/Manager:** COSUMNES CSD  
**Trend:** Unknown

**Presence:** Presumed Extant

**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 CNNDDB 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.

**Threats:** Disturbed by garbage and debris. Threatened by invasive species including water primrose.

**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.

**PLSS:** T07N, R05E, Sec. 36 (M)  
**Accuracy:** Specific area  
**Area (acres):** 9

**UTM:** Zone-10 N4252803 E640712  
**Latitude/Longitude:** 38.41240 / -121.38828  
**Elevation (feet):** 36

**Counties Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:**  
CAL11F0004  CALDERARO, A. (PMC) - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2011-05-06  
NOR03U0001  NORTON, K. - EMAIL WITH CNNDDB STAFF REGARDING MANY POPULATIONS OF SAGITTARIA SANFORDII 2003-04-02  
NOR93M0001  NORTON, K. - MAPS OF SAGITTARIA SANFORDII IN THE SACRAMENTO AREA. 1993-11-07
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<th>EO Index:</th>
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<th>Sagittaria sandfordii</th>
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<th>Sanford's arrowhead</th>
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<tr>
<th>General Habitat:</th>
<th>Marshes and swamps.</th>
<th>Micro Habitat:</th>
<th>In standing or slow-moving freshwater ponds, marshes, and ditches. 0-650 m.</th>
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<td>Owner/Manager:</td>
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| Location: | American River at the Guy West Bridge, CSUS side of the River, Sacramento. |
| Detailed Location: | |
| Ecological: | |
| Threats: | Levee Maintenance. |
| General: | Only source of information for this site is map detail; ecological and threat info needed. Site is within the Lower American River Parkway County Park. Huddleston visited site in 2005 and did not observe plants. |

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<td>HUD05F0005</td>
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<td>NOR93M0001</td>
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**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Sagittaria sanfordii*  
**Common Name:** Sanford’s arrowhead

**Listing Status:**  
- **Federal:** None  
- **State:** None

**Rare Plant Rank:** 1B.2  
**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:**  
- **Global:** G3  
- **State:** S3

**General Habitat:**  
MARSHES AND SWAMPS.

**Micro Habitat:**  
IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 1994-05-29  
**Last Survey Date:** 1994-05-29

**Owner/Manager:** SAC COUNTY-PARKS & REC  
**Presence:** Presumed Extant

**Location:**  
AMERICAN RIVER UPSTREAM FROM WATT AVE, NORTH SIDE OF THE RIVER, SACRAMENTO.

**Detailed Location:**  
LOCATED ABOUT 0.3 MILE EAST OF WATT AVE, AT RIVER MILE 9.7. SITE IS DOWNSTREAM FROM WHERE STORM BASIN DRAINS INTO RIVER (BASIN IS JUST EAST OF THE TEICHERT COMPLEX).

**Ecological:**  
BARE, SANDY SHORE OF RIVER IN LESS THAN 6" OF WATER. NO OTHER VEGETATION NEARBY. BANK VEGETATION CONSISTS OF SALIX, RUBUS, ET AL.

**Threats:**  
PLANTS APPEAR TO HAVE BEEN GRAZED/BROWSED (MUSKRAT/BEAVER/DEER/?), MAY BE TRampled BY RECREATIONAL USERS.

**General:**  
10 PLANTS OBSERVED IN 1994. SITE IS WITHIN THE LOWER AMERICAN RIVER PARKWAY COUNTY PARK.

**PLSS:** T08N, R05E, Sec. 01 (M)  
**Accuracy:** 80 meters

**UTM:** Zone-10 N4270112 E641420  
**Latitude/Longitude:** 38.56822 / -121.37668  
**Elevation (feet):** 15

**County Summary:**  
Sacramento  
Carmichael (3812153), Sacramento East (3812154)

**Sources:**  
NOS94F0001 NOSAL, T. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1994-05-29
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<td>General Habitat:</td>
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<tr>
<td>Location:</td>
<td>EAST SIDE OF ROSEVILLE ROAD ABOUT 0.9 MILE FROM ANTELOPE ROAD, ANTELOPE.</td>
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<tr>
<td>Detailed Location:</td>
<td>TWO COLONIES MAPPED BY NORTON IN 1993 IN DRAINAGES BETWEEN ROSEVILLE ROAD AND VILLAVIEW DRIVE AND NORTH OF OUTLOOK DRIVE. ONLY THE SOUTH COLONY REMAINING IN 1997.</td>
</tr>
<tr>
<td>Ecological:</td>
<td>UNLINED +/- NATURAL CHANNEL WITH SALIX AND TYPHA. SAGITTARIA DOMINATES MUCH OF THIS SHORT WATERCOURSE.</td>
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<tr>
<td>Threats:</td>
<td>SITE SURROUNDED BY NEW DEVELOPMENT. NORTH COLONY OBLITERATED BY EARTHMOVING EQUIPMENT.</td>
</tr>
<tr>
<td>General:</td>
<td>1000's OF PLANTS OBSERVED IN 1997. THIS SMALL SECTION OF HABITAT APPEARS TO BE SET ASIDE BY THE CURRENT DEVELOPERS. CHANNEL IS MARKED AND EQUIPMENT APPEARS TO AVOID IMPACTING AREA.</td>
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<td>PLSS:</td>
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<td>Sources:</td>
<td>NOR93M0001: NORTON, K. - MAPS OF SAGITTARIA SANFORDII IN THE SACRAMENTO AREA. 1993-11-07</td>
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<td></td>
<td>NOS97F0023: NOSAL, T. ET AL. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1997-06-18</td>
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</table>
Sagittaria sanfordii

**Scientific Name:** Sagittaria sanfordii

**Common Name:** Sanford's arrowhead

**Listing Status:** Federal: None

**State:** None

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 1997-06-17

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Poor

**Owner/Manager:** SAC COUNTY-PUBLIC WORKS

**Presence:** Presumed Extant

**Location:** RANCHO CORDOVA; CHANNEL ALONG EITHER SIDE OF DAWES AVENUE, NORTH OF DOLECETTO ROAD.

**Detailed Location:** MAPPED FROM 0.25 MILE WEST OF DAWES AVE TO JUST EAST OF COLOMA ROAD. POPULATION MAY EXTEND FURTHER IN BOTH DIRECTIONS.

**Ecological:** TYPICALLY GROWING IN JOINTS AND BROKEN SEGMENTS OF CONCRETE LINED FLOOD CHANNEL. FEW OTHER PLANTS, MAINLY ECHINOCHLOA AND OTHER NON-NATIVE GRASSES.

**Threats:** CHANNEL MAINTENANCE AND REPAIR.

**General:** PLANTS MOST VIGOROUS IN OLD BROKEN SECTIONS OF CHANNEL. THESE SECTIONS ARE SCHEDULED FOR REPAIR/REPLACEMENT IN 1997.

**PLSS:** T09N, R06E, Sec. 34 (M)

**Accuracy:** specific area

**Area (acres):** 50

**UTM:** Zone-10 N4273126 E647317

**Latitude/Longitude:** 38.59441 / -121.30838

**Elevation (feet):** 75

**County Summary:** Sacramento

**Quad Summary:** Carmichael (3812153)

**Sources:**

- NOS95F0009 NOSAL, T. & J. NOSAL - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1995-05-22

- NOS97F0020 NOSAL, T. & J. PISCIOTTO - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1997-06-17
**Scientific Name:** Sagittaria sanfordii

**Common Name:** Sanford's arrowhead

**Listing Status:**
- **Federal:** None
- **State:** None

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive

**General Habitat:**
MARSHES AND SWAMPS.

**Micro Habitat:**
IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 1997-06-18

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Good

**Trend:** Unknown

**Presence:** Presumed Extant

**Location:**
ROSEVILLE ROAD AT WHYTE AVE, JUST SOUTH OF SAC/PLA COUNTY LINE, ANTELOPE.

**Detailed Location:**
WEST OF ROSEVILLE ROAD IN CHANNEL BETWEEN ROAD AND RR TRACKS. NEAR CENTER OF SECTION.

**Ecological:**
FRESHWATER MARSH WITH TYPHA.

**Threats:**
ABOUT 1000 PLANTS OBSERVED IN 1997. MOST PLANTS OCCUR WITHIN TWO 10X10 OPENINGS WITHIN THICK TYPHA STAND. SITE APPEARS TO BE UNMAINTAINED CHANNEL, FEW VISITORS. NO OBVIOUS THREATS.

**PLSS:** T10N, R06E, Sec. 15 (M)

**Accuracy:** 80 meters

**Area (acres):** 0

**UTM:** Zone-10 N4287283 E646850

**Latitude/Longitude:** 38.72201 / -121.31075

**Elevation (feet):** 150

**County Summary:**
Placer, Sacramento

**Quad Summary:**
Citrus Heights (3812163)

**Sources:**
NOS97F0022 NOSAL, T. ET AL. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1997-06-18
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### Scientific Name: Sagittaria sanfordii

**Listing Status:**
- Federal: None
- State: None

**CNDDB Element Ranks:**
- Global: G3
- State: S3

### General Habitat:
MARSHES AND SWAMPS.

### Micro Habitat:
IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

### Last Date Observed: 1994-07-21
### Occurrence Type: Natural/Native occurrence
### Occurrence Rank: Excellent
### Trend: Unknown
### Presence: Presumed Extant

### Location:
CITRUS HEIGHTS; ALONG CREEK JUST EAST OF FAIR OAKS BLVD BETWEEN OAK BLVD AND OLD AUBURN ROAD.

### Detailed Location:
MAPPED BETWEEN VILLA OAKS AND OLD AUBURN ROAD ALONG SUNRISE CREEK.

### Ecological:
DRAINAGE CHANNEL WITH SLOW-MOVING WATER. ASSOCIATED WITH ECHINOCHLOA CRUS-GALLI, POLYGONUM LAPATHIFOLIUM, PASPALUM DILATATUM, CYPERUS ERAGROSTIS, AND SORGHUM HALAPENSE.

### Threats:
HERBICIDE SPRAYING AND CHANNEL MAINTENANCE.

### General:
NUMEROUS PLANTS SEEN IN JUNE 1994; CHANNEL CLEARED IN EARLY JULY 1994; PLANTS RECOLONIZED/NUMEROUS IN LATE JULY 1994.

### PLSS:
T10N, R07E, Sec. 19 (M)

### Accuracy:
Specific area

### Area (acres):
22

### UTM:
Zone-10 N4285706 E651112

### Latitude/Longitude:
38.70709 / -121.26209

### Elevation (feet):
180

### PLSS:
T10N, R07E, Sec. 19 (M)

### County Summary:
Sacramento

### Quad Summary:
Citrus Heights (3812163)

### Sources:
- WYM94F0002  WYMER, N. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1994-06-30
- WYM94F0003  WYMER, N. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1994-07-07
- WYM94F0004  WYMER, N. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1994-07-21
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 50831

**EO Index:** 50831

**Key Quad:** Elk Grove (3812143)

**Occurrence Number:** 56

**Occurrence Code:** PMALI040Q0

**Occurrence Last Updated:** 2003-05-23

**Scientific Name:** *Sagittaria sanfordii*

**Common Name:** Sanford's arrowhead

**Listing Status:**
- **Federal:** None
- **State:** None

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive

**CNNDDB Element Ranks:**
- **Global:** G3
- **State:** S3

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 1996-05-24

**Last Survey Date:** 1996-05-24

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:** SOUTH OF CALVINE ROAD, WEST OF CENTRAL CALIFORNIA TRACTION RAILROAD.

**Detailed Location:** EXACT LOCATION UNKNOWN. MAPPED AS PROVIDED, IN THE NW 1/4 OF THE SE 1/4 OF SECTION 16.

**Ecological:** STOCK POND IN IRRIGATED PASTURE. NAVARRETIA EROCEPHALA IN PROPERTY TO NORTHWEST.

**Threats:** SITE PROPOSED FOR RESIDENTIAL DEVELOPMENT.

**General:** APPROXIMATELY 15 INDIVIDUALS OBSERVED IN 1996.

**PLSS:** T07N, R06E, Sec. 16 (M)

**Accuracy:** nonspecific area

**Area (acres):** 43

**UTM:** Zone-10 N4257961 E646315

**Latitude/Longitude:** 38.45797 / -121.32306

**Elevation (feet):** 65

**County Summary:** Sacramento

**Quad Summary:** Elk Grove (3812143)

**Sources:**

MAR96F0016 MARTIN, D. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 1996-05-24
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

---

**Map Index Number:** 50850  
**Key Quad:** Sloughhouse (3812142)  
**Occurrence Number:** 57  
**EO Index:** 50850  
**Element Code:** PMALI040Q0  
**Occurrence Last Updated:** 2003-04-03

**Scientific Name:** *Sagittaria sanfordii*  
**Common Name:** Sanford’s arrowhead

**Listing Status:**  
- Federal: None  
- State: None

**CNDDB Element Ranks:**  
- Global: G3  
- State: S3

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 199X-XX-XX  
**Last Survey Date:** 199X-XX-XX  
**Owner/Manager:** UNKNOWN  
**Presence:** Possibly Extirpated

**Location:**  
ALONG GRANT LINE ROAD, SOUTH OF JCT OF GRANT LINE ROAD & SUNRISE BLVD.

**Detailed Location:**  
EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS ALONG GRANT LINE ROAD SOUTH OF INTERSECTION.

**Ecological:**  
IN DITCH ALONG ROADSIDE.

**Threats:**  
ROADSIDE OCCURRENCE.

**General:**  

**PLSS:** T07N, R07E, Sec. 07 (M)  
**UTM:** Zone-10 N4260421 E652828  
**County Summary:**  
Sacramento  
Sloughhouse (3812142), Elk Grove (3812143)

**Accuracy:** nonspecific area  
**Latitude/Longitude:** 38.47903 / -121.24791  
**Area (acres):** 73  
**Elevation (feet):**

**Sources:**  
NOR03U0001  
NORTON, K. - EMAIL WITH CNDDB STAFF REGARDING MANY POPULATIONS OF SAGITTARIA SANFORDII 2003-04-02
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** *Sagittaria sanfordii*

**Common Name:** Sanford's arrowhead

**Listing Status:**
- **Federal:** None
- **State:** None

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S3

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 2002-08-05

**Last Survey Date:** 2002-08-05

**Owner/Manager:** PVT

**Presence:** Presumed Extant

**Location:**

UPPER LAGUNA CREEK, ABOUT 0.3 MILES SSE OF INTERSECTION OF SHELDON ROAD AND WATERMAN ROAD.

**Detailed Location:**

IN SHALLOW BENDS OF UPPER LAGUNA CREEK. MAPPED IN THE SW 1/4 OF THE NW 1/4 OF SECTION 29.

**Ecological:**

SHALLOW BENDS OF CREEK, GROWING EMERGENT IN STANDING WATER.

**Threats:**

POSSIBLE DEVELOPMENT PLANNED FOR THIS PARCEL AS OF 2002.

**General:**

500 PLANTS IN THREE PATCHES OBSERVED IN 2002.

**PLSS:** T07N, R06E, Sec. 29 (M)

**Accuracy:** specific area

**Area (acres):** 1

**UTM:** Zone-10 N4255265 E643975

**Latitude/Longitude:** 38.43406 / -121.35041

**Elevation (feet):** 50

**County Summary:** Elk Grove (3812143)

**Sources:**

ROB02F0005 ROBISON, R. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2002-08-05

ROB02R0001 ROBISON, R. - SHELDON LAKES RARE PLANT SURVEY REPORT 2002-08-07
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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<td>Occurrence Last Updated:</td>
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| Scientific Name:     | Sagittaria sanfordii |
| Common Name:         | Sanford's arrowhead |
| Listing Status:      | Federal: None |
|                       | State: None |
| CNNDB Element Ranks: | Global: G3 |
|                       | State: S3 |

| General Habitat: | MARSHES AND SWAMPS. |
| Micro Habitat:   | IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M. |

| Last Date Observed: | 2004-07-08 |
| Last Survey Date:   | 2004-07-08 |
| Owner/Manager:      | UNKNOWN |
| Presence:           | Presumed Extant |
| Location:           | STRAWBERRY CREEK, ABOUT 0.3 MILES 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. |
| PLSS:               | T07N, R05E, Sec. 14 (M) |
| UTM:                | Zone-10 N4257745 E639009 |
| Accuracy:           | 80 meters |
| Latitude/Longitude: | 38.45719 / -121.40680 |
| Area (acres):       | 0 |
| Elevation (feet):   | 25 |
| County Summary:     | Sacramento |
| Quad Summary:       | Florin (3812144) |

<p>| Sources:            | PRE04F0013  PRESTON, R. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2004-07-08 |</p>
<table>
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<td><strong>Occurrence Number:</strong> 61</td>
<td><strong>Occurrence Last Updated:</strong> 2005-10-04</td>
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**Scientific Name:** Sagittaria sanfordii  
**Common Name:** Sanford's arrowhead

**Listing Status:**  
**Federal:** None  
**State:** None

**Rare Plant Rank:** 1B.2  
**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:**  
**Global:** G3  
**State:** S3

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 2005-06-27  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2005-06-27  
**Occurrence Rank:** Fair

**Owner/Manager:** SRCSD-BUFFERLANDS  
**Trend:** Unknown

**Presence:** Presumed Extant

**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.

**Threats:** NONE IN 2005.

**General:** 5 PLANTS OBSERVED IN 2005.

**PLSS:** T07N, R04E, Sec. 24 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4256889 E631957  
**Latitude/Longitude:** 38.45055 / -121.48776  
**Elevation (feet):** 5

**County Summary:** Sacramento  
**Quad Summary:** Florin (3812144)

**Sources:** PET05F0001 PETRASH, S. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2005-06-27
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 70036
Key Quad: Elk Grove (3812143)
Occurrence Number: 62

EO Index: 70877
Element Code: PMALI040Q0
Occurrence Last Updated: 2011-07-12

Scientific Name: Sagittaria sanfordii
Common Name: Sanford's arrowhead

Listing Status:
Federal: None
State: None

Rare Plant Rank: 1B.2
Other Lists: BLM_S-Sensitive

CNDDDB Element Ranks:
Global: G3
State: S3

General Habitat:
Marshes and swamps.

Micro Habitat:
In standing or slow-moving freshwater ponds, marshes, and ditches. 0-650 M.

Last Date Observed: 2011-05-06
Last Survey Date: 2011-05-06
Owner/Manager: CITY OF ELK GROVE
Presence: Presumed Extant

Location:
GRANT LINE CHANNEL, SOUTH SIDE OF GRANT LINE RD, ABOUT 0.29 MILE NE OF SR99 INTERCHANGE, ELK GROVE.

Detailed Location:
FROM EDGE OF GRANT LINE ROAD SOUTH ABOUT 400 FT, ADJACENT TO ARCO GAS STATION.

Ecological:

Threats:
Small portion of north edge of population may be damaged during road widening. Garbage and debris present in channel.

General:
1,000-10,000 PLANTS OBSERVED IN 2006. 2011: ABOUT 800 PLANTS OBSERVED IN A DENSE HOMOGENOUS STAND IN AN AREA OF 750 SQUARE FEET.

PLSS:
T06N, R06E, Sec. 18 (M)
Accuracy: specific area
Area (acres): 3

UTM:
Zone-10 N4249088 E643486
Latitude/longitude: 38.37849 / -121.35727
Elevation (feet): 45

County Summary:
Sacramento
Elk Grove (3812143)

Sources:
CAL11F0003 CALDERARO, A. (PMC) - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2011-05-06
COS05S0001 COSTELLA, T. - COSTELLA SN DAV #46598 2005-06-16
NOS06F0001 NOSAL, T. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2006-07-07
### Scientific Name: Sagittaria sanfordii

**Common Name:** Sanford's arrowhead

#### Listing Status:
- **Federal:** None
- **State:** None

#### Rare Plant Rank: 1B.2

#### Other Lists: BLM_S-Sensitive

#### CNDDB Element Ranks:
- **Global:** G3
- **State:** S3

### General Habitat:
MARSHES AND SWAMPS.

### Micro Habitat:
IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

### Last Date Observed: 2008-08-XX

### Last Survey Date: 2008-08-XX

### Occurrence Type: Natural/Native occurrence

### Presence: Possibly Extirpated

### Owner/Manager: PVT?

### Trend: Unknown

### Location:
DITCH ADJACENT TO HOUSING DEVELOPMENT, 0.6 AIR MILE SOUTH OF MEADOWVIEW ROAD, JUST EAST OF I-5, SACRAMENTO.

### Detailed Location:
FRESHWATER MARSH.

### Threats:
OVER 300 PLANTS OBSERVED IN 2005. SITE GRADED IN 2008; ALL HABITAT WAS LIKELY DESTROYED.

### PLSS: T07N, R04E, Sec. 12 (M)

### Accuracy: 1/10 mile

### Area (acres): 0

### UTM: Zone-10 N4259148 E631115

### Latitude/Longitude: 38.47102 / -121.49698

### Elevation (feet): 15

### County Summary: Sacramento

### Quad Summary: Florin (3812144)

### Sources:
- WAR05F0006  WARD, M. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2005-07-10
- WAR08U0001  WARD, M. (CALIFORNIA ENERGY COMMISSION) - EMAIL TO R. BITTMAN REGARDING GRADING AT SITE OF SAGITTARIA SANFORDII OCCURRENCE #63 2008-08-11
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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<td>Occurrence Last Updated:</td>
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**Scientific Name:** *Sagittaria sanfordii*

**Common Name:** Sanford’s arrowhead

**Listing Status:**
- Federal: None
- State: None

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 2005-07-10

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Fair

**Trend:** Unknown

**Owner/Manager:** SACRAMENTO EXECUTIVE AIRPORT

**Presence:** Presumed Extant

**Location:** ROADSIDE DITCH ON EAST SIDE OF FREEPORT BLVD, NW CORNER OF SACRAMENTO EXECUTIVE AIRPORT.

**Detailed Location:** ADJACENT TO AIRPORT PARKING LOT AND ROAD.

**Ecological:** FRESHWATER MARSH. ALISMA PLANTAGO-AQUATICUM COMMON.

**Threats:** DITCH CLEARING/MAINTENANCE AND PESTICIDE RUNOFF FROM ADJACENT LAWN ARE POTENTIAL THREATS.

**General:** APPROXIMATELY 40 PLANTS OBSERVED IN 2005.

**PLSS:** T08N, R04E, Sec. 25 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4264572 E630996  
**Latitude/Longitude:** 38.51991 / -121.49733  
**Elevation (feet):** 18

**County Summary:** Sacramento  
**Quad Summary:** Sacramento East (3812154)

**Sources:** WAR05F0007  WARD, M. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2005-07-10
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<th>Source:</th>
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<th>PRESTON, R. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2001-05-10</th>
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**Map Index Number:** 73343  
**EO Index:** 74310  
**Element Code:** PMALI040Q0  
**Occurrence Number:** 72  
**Occurrence Last Updated:** 2009-02-11

**Scientific Name:** Sagittaria sandfordii  
**Common Name:** Sanford’s arrowhead

**Listing Status:**  
- Federal: None  
- State: None

**Rare Plant Rank:** 1B.2  
**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:**  
- Global: G3  
- State: S3

**General Habitat:** Marshes and swamps.

**Micro Habitat:** In standing or slow-moving freshwater ponds, marshes, and ditches. 0-650 M.

**Last Date Observed:** 2001-05-10  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2001-05-10  
**Occurrence Rank:** Good

**Owner/Manager:** SAC COUNTY, PVT  
**Trend:** Unknown

**Presence:** Presumed Extant

**Location:** In unnamed stream north of U st between 28th st and the old sewage disposal site, North Highlands.

**Detailed Location:** Mapped by CNDDDB in the East 1/2 of section 23 according to a 2001 Preston map.

**Ecological:** Slow moving stream with Veronica catenata, Alisma lanceolata, Polygogon interruptus, Sagittaria sp.

**Threats:** Urban runoff.

**General:** 1,000s of plants seen in 2001.

**PLSS:** T10N, R05E, Sec. 23 (M)  
**Accuracy:** Specific area  
**Area (acres):** 41

**UTM:** Zone-10 N4285633 E639370  
**Latitude/Longitude:** 38.70836 / -121.39709  
**Elevation (feet):** 70

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)
**Occurrence Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**

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**Scientific Name:** Sagittaria sandfordii  
**Common Name:** Sanford’s arrowhead

**Listing Status:**  
- Federal: None  
- State: None

**Rare Plant Rank:** 1B.2  
**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:**  
- Global: G3  
- State: S3

**General Habitat:** MARSHES AND SWAMPS.  
**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 2006-07-23  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2008-07-01  
**Occurrence Rank:** None  
**Trend:** Unknown

**Owner/Manager:** SAC Area Flood Control Agency

**Presence:** Possibly Extirpated

**Location:** HANSEN RANCH; SOUTH OF ASCOT AVE, EAST OF STEELHEAD CREEK & NORTH OF DRY CREEK, SOUTH OF RIO LINDA.

**Detailed Location:** MAPPED BY CNDDB AROUND THE VERNAL POOL THAT CONTAINS SAGITTARIA SANFORDII IN THE NE1/4 OF SECTION 6 ACCORDING TO A 2006 KIMBALL NEELY ASSOCIATES, LLC MAP.

**Ecological:** LARGE VERNAL POOL THAT IS DAMMED AT THE WEST FENCE LINE BY A BERM LOCATED ON THE ADJACENT PROPERTY. DOMINANT PLANTS IN THIS POOL INCLUDE ELEOCHARIS MACROSTACHYA, LOLIUM MULTIFLORUM, & RANUNCULUS BONARIENSIS VAR. TRISEPALUS.

**Threats:**  
**General:** UNKNOWN NUMBER OF PLANTS SEEN IN 2006. NOT SEEN IN 2008.

**PLSS:**  
- T09N, R05E, Sec. 06 (M)

**Accuracy:** specific area  
**Area (acres):** 2

**UTM:**  
- Zone-10 N4281150 E632670

**Latitude/Longitude:** 38.66900 / -121.47498  
**Elevation (feet):** 30

**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**

1. KIM06R0001  
   KIMBALL NEELY ASSOCIATES, LLC - HANSEN RANCH PRESERVE, FIFTH ANNUAL MONITORING REPORT; PREPARED FOR SACRAMENTO AREA FLOOD CONTROL AGENCY 2006-12-XX

2. KIM08R0001  
   KIMBALL NEELY ASSOCIATES, LLC - HANSEN RANCH PRESERVE, SEVENTH ANNUAL MONITORING REPORT; PREPARED FOR SACRAMENTO AREA FLOOD CONTROL AGENCY 2008-12-XX
Map Index Number: 73347
EO Index: 74314
Key Quad: Elk Grove (3812143)
Element Code: PMALI040Q0
Occurrence Number: 74
Occurrence Last Updated: 2009-01-06

Scientific Name: Sagittaria sanfordii
Common Name: Sanford’s arrowhead
Listing Status: Federal: None
State: None
Rare Plant Rank: 1B.2
Other Lists: BLM_S-Sensitive

CNDDB Element Ranks:
Global: G3
State: S3

General Habitat: MARSHES AND SWAMPS.
Micro Habitat: IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

Last Date Observed: 1993-05-11
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1993-05-11
Occurrence Rank: Unknown
Owner/Manager: UNKNOWN
Trend: Unknown
Presence: Presumed Extant

Location:
ELK GROVE CREEK WHERE SP TRACKS CROSS CREEK, ~0.5 MILE NORTH OF GRANT LINE AND WATERMAN ROAD.

Detailed Location:
MAPPED BY CNDDB WHERE THE RR TRACKS CROSS ELK GROVE CREEK; THIS IS ~1 MILE NORTH OF THE INTERSECTION OF GRANT LINE ROAD AND WATERMAN ROAD (NOT 0.5 MILE NORTH AS STATED ON SPECIMEN LABEL). IN THE SE1/4 OF SECTION 6.

Ecological:
CREEKBED. CREEK CHANNELIZED EAST OF TRACKS, NATURAL TO THE WEST.

Threats:

General:
LARGE COLONY OF 1000+ PLANTS SEEN IN 1993.

PLSS: T06N, R06E, Sec. 06 (M)
Accuracy: 1/10 mile
Area (acres): 0

UTM: Zone-10 N4251120 E643221
Latitude/Longitude: 38.39684 / -121.35990
Elevation (feet): 0

County Summary:
Sacramento
Elk Grove (3812143)

Sources:
HRU93S0004
HRUSA, G.F. - HRUSA #10933 CDA #14260 1993-05-11
**Occurrence Report**

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Scientific Name:** Sagittaria sanfordii  
**Common Name:** Sanford's arrowhead

**Listing Status:**  
**Federal:** None  
**State:** None

**Rare Plant Rank:** 1B.2  
**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:**  
**Global:** G3  
**State:** S3

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 2009-06-22  
**Occurrence Type:** Natural/Native occurrence

**Last Survey Date:** 2009-06-22  
**Occurrence Rank:** Fair

**Owner/Manager:** UNKNOWN  
**Trend:** Unknown

**Presence:** Presumed Extant

**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.

**Threats:** THREATENED BY CATTLE ACTIVITY.

**General:**  
2009 POPULATION NUMBERS FOR COLONIES FROM NORTH TO SOUTH: 4, 12, 150, AND 5.

**PLSS:** T06N, R04E, Sec. 13 (M)  
**Accuracy:** specific area  
**Area (acres):** 3

**UTM:** Zone-10 N4248743 E631906  
**Latitude/Longitude:** 38.37716 / -121.48987  
**Elevation (feet):** 5

**County Summary:** Sacramento  
**Quad Summary:** Bruceville (3812134), Florin (3812144)

**Sources:** DWR10D0001  CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
**Occurrence Report**

California Department of Fish and Wildlife
California Natural Diversity Database

**Map Index Number:** 89324  
**EO Index:** 90318

**Key Quad:** Florin (3812144)  
**Element Code:** PMALI040Q0

**Occurrence Number:** 96  
**Occurrence Last Updated:** 2013-06-06

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<th>Common Name</th>
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<td>Sanford’s arrowhead</td>
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**Listing Status:**
- **Federal:** None
- **State:** None

**Rare Plant Rank:** 1B.2

**Other Lists:** BLM_S-Sensitive

**CNDDB Element Ranks:**
- **Global:** G3
- **State:** S3

**General Habitat:** MARSHES AND SWAMPS.

**Micro Habitat:** IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

**Last Date Observed:** 2012-05-21

**Last Survey Date:** 2012-05-21

**Occurrence Type:** Natural/Native occurrence

**Occurrence Rank:** Fair

**Owner/Manager:** UNKNOWN

**Trend:** Unknown

**Presence:** Presumed Extant

**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.

**Threats:** THREATENED BY CHANNEL MAINTENANCE AND HIGH FLOWS FROM SUMP OUTFALL.

**General:** 5 PLANTS OBSERVED IN 2012.

**PLSS:** T07N, R05E, Sec. 09 (M)  
**Accuracy:** 80 meters  
**Area (acres):** 0

**UTM:** Zone-10 N4259737 E636229  
**Latitude/Longitude:** 38.47556 / -121.43826  
**Elevation (feet):** 15

**County Summary:** Sacramento

**Quad Summary:** Florin (3812144)

**Sources:**
ORS12F0001 ORSOLINI, J. - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2012-05-21
### Scientific Name: Sagittaria sanfordii

### Common Name: Sanford's arrowhead

### Listing Status: Federal: None  State: None

### Rare Plant Rank: 1B.2

### Other Lists: BLM_S-Sensitive

### General Habitat:
- MARSHES AND SWAMPS.

### Micro Habitat:
- IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-650 M.

### Last Date Observed: 2011-10-19

### Occurrence Type: Natural/Native occurrence

### Last Survey Date: 2011-10-19

### Occurrence Rank: Good

### Presence: Presumed Extant

### Location:
- ARCADE CREEK AND SHALLOW DITCH TO THE SOUTHEAST, JUST EAST OF THE NATOMAS EAST MAIN DRAINAGE CANAL, SACRAMENTO.

### Detailed Location:
- 2 POPULATIONS: ARCADE CRK POPULATION RUNS FROM THE NORWOOD AVE BRIDGE WEST TO THE RAILROAD CROSSING AT THE DRAINAGE CANAL, SECOND POPULATION IN A SHALLOW DITCH LOCATED ON VACANT PARCEL SW OF THE INTERSECTION OF NORWOOD AVE AND LINDLEY AVE.

### Ecological:
- NW POLYGON: SHALLOW EDGES OF CREEK, ASSOCIATED WITH LUDWIGIA SP., SCIRPUS SP., AND TYPHA SP. SE POLYGON: WITHIN A SHALLOW DITCH, NO OTHER PLANTS OBSERVED IN DITCH.

### Threats:
- DISTURBED BY 2011 BRIDGE REPLACEMENT. THREATENED BY NON-NATIVE PLANTS, POSSIBLE DITCH MAINTENANCE, OR DEVELOPMENT.

### General:
- 2000+ PLANTS OBSERVED IN NORTHWEST POLYGON AND 3000+ PLANTS OBSERVED IN SOUTHEAST POLYGON IN 2011. PLANTS LOCATED UNDER NORWOOD AVE BRIDGE WERE TRANSPLANTED ~375 FEET DOWNSTREAM DUE TO BRIDGE REPLACEMENT.

### PLSS: T09N, R05E, Sec. 20 (M)

### UTM: Zone-10 N4276093 E634001

### Accuracy: specific area

### Area (acres): 19

### Latitude/Longitude: 38.62325 / -121.46066

### Elevation (feet): 20

### County Summary: Sacramento

### Quad Summary: Sacramento East (3812154)

### Sources:
- ORS11F0001 ORSOLINI, J. (SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.) - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2011-07-12
- ORS11F0002 ORSOLINI, J. (SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.) - FIELD SURVEY FORM FOR SAGITTARIA SANFORDII 2011-07-12
### Scientific Name: Carex comosa

**Common Name:** bristly sedge

#### Listing Status:
- **Federal:** None
- **State:** None

#### CNDDDB Element Ranks:
- **Global:** G5
- **State:** S2

#### General Habitat:
marshes and swamps.

#### Micro Habitat:
Lake margins, wet places; site below sea level is on a Delta Island. -5-1005M.

#### Last Date Observed:
2009-06-22

#### Last Survey Date:
2009-06-22

#### Owner/Manager:
UNKNOWN

#### Presence:
Presumed Extant

#### 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.

#### Threats:
Blackberry and water hyacinth are threats.

#### General:
In 2009, southernmost polygon had 50 plants, the central polygon had 3 plants, and the northern polygon had 1 plant.

#### PLSS:
- **T06N, R04E, Sec. 14 (M)**

#### UTM:
- **Zone-10 N4248114 E630189**

#### County Summary:
Sacramento

#### Quad Summary:
Courtland (3812135), Clarksburg (3812145)

#### Sources:
DWR10D0001 CALIFORNIA DEPARTMENT OF WATER RESOURCES - BAY DELTA CONSERVATION PLAN SURVEY DATA 2010-01-29
### Occurrence Report

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

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**Map Index Number:** 43633  
**EO Index:** 43633  
**Key Quad:** Carmichael (3812153)  
**Occurrence Number:** 8  
**Occurrence Last Updated:** 2010-05-11

---

**Scientific Name:** *Juncus leiospermus var. ahartii*  
**Common Name:** Ahart's dwarf rush  
**Listing Status:** Federal: None  
**Rare Plant Rank:** 1B.2  
**State:** None  
**Other Lists:**

---

**CNDDB Element Ranks:**  
**Global:** G2T1  
**State:** S1

---

**General Habitat:**  
VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND.

---

**Micro Habitat:**  
RESTRICTED TO THE EDGES OF VERNAL POOLS. 30-229 M.

---

**Last Date Observed:** 2006-05-15  
**Occurrence Type:** Natural/Native occurrence  
**Last Survey Date:** 2006-05-15  
**Occurrence Rank:** Fair  
**Owner/Manager:** SAC COUNTY  
**Trend:** Decreasing  
**Presence:** Presumed Extant

---

**Location:**  
MATHER FIELD, WEST OF EAGLES NEST ROAD ABOUT 1.8 MILES SOUTH OF JCT WITH DOUGLAS BLVD, SOUTH OF RANCHO CORDOVA.

---

**Detailed Location:**  
PLANTS ARE IN VERNAL POOLS ABOUT 0.15 MILES WEST OF EAGLES NEST ROAD, ACROSS FROM THE MODEL AIRPLANE FLYERS CLUB. MAPPED WITHIN THE SE 1/4 OF THE NE 1/4 OF SECTION 24.

---

**Ecological:**  
SHALLOW VERNAL POOLS GENERALLY DOMINATED BY NAVARRETIA LEUCOCEPHALA. PLANTS FOUND IN BARE AREAS WITHIN POOLS (USUALLY ON MARGINS) AND ALONG VERNAL SWALES. WITH JUNCUS UNCIALIS, GRATIOLA EBRACUTEATA, PILULARIA AMERICANA, & CRASSULA AQUATICA.

---

**Threats:**  
SITE HAS BEEN PROPOSED FOR AN AGGREGATE MINE.

---

**General:**  
300 PLANTS OBSERVED IN 2000. 9 PLANTS OBSERVED IN 2006. THE RARE GRATIOLA HETEROSEPALA IS FOUND IN NEARBY POOLS.

---

**PLSS:**  
T08N, R06E, Sec. 24 (M)  
**Accuracy:** specific area  
**Area (acres):** 1

---

**UTM:**  
Zone-10 N4266501 E651258  
**Latitude/Longitude:** 38.53407 / -121.26458  
**Elevation (feet):** 135

---

**County Summary:**  
Sacramento  
**Quad Summary:**  
Carmichael (3812153)

---

**Sources:**

- WIT00F0005  
  WITHAM, C. - FIELD SURVEY FORM FOR JUNCUS LEIOSPERMUS VAR. AHARTII 2000-05-01
- WIT00S0002  
  WITHAM, C. - WITHAM #847 JEPS #97510 2000-05-01
- WIT06R0001  
  WITHAM, C. - REPORT: 2006 FOCUSED FIELD SURVEY FOR AHART’S DWARF RUSH 2006-09-21
Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

Map Index Number: 20979  EO Index: 9238
Key Quad: Rio Linda (3812164)  Element Code: PMLIL0V010
Occurrence Number: 9  Occurrence Last Updated: 2008-08-04

Scientific Name: Fritillaria agrestis  Common Name: stinkbells
Listing Status: Federal: None  Rare Plant Rank: 4.2
State: None  Other Lists:

CNDDDB Element Ranks:
Global: G3
State: S3

General Habitat:
CISMONTANE WOODLAND, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND.

Micro Habitat:
SOMETIMES ON SERPENTINE; MOSTLY FOUND IN NONNATIVE GRASSLAND OR IN GRASSY OPENINGS IN CLAY SOIL. 10-1555 M.

Last Date Observed: 1994-03-16  Occurrence Type: Natural/Native occurrence
Last Survey Date: 1997-06-18  Occurrence Rank: None
Owner/Manager: PVT?  Trend: Unknown

Presence: Possibly Extirpated
Location:
SW CORNER OF DRY CREEK ROAD AND ROOD ROAD. ABOUT 1.6 MI S OF RIO LINDA.

Detailed Location:
Ecological:
IN VACANT LOT IN BROMUS DOMINATED NONNATIVE GRASSLAND.

Threats:
HIGH POTENTIAL FOR DEVELOPMENT.

General:
45 PLANTS SEEN IN 1991 IN AN AREA NO LARGER THAN 1 ACRE, 200 PLANTS IN 1994. SITE WAS DISKED IN 1997; PLANTS POSSIBLY EXTIRPATED.

PLSS: T09N, R05E, Sec. 10 (M)  Accuracy: 80 meters  Area (acres): 0
UTM: Zone-10 N4280579 E635831  Latitude/Longitude: 38.66338 / -121.43877  Elevation (feet): 40

County Summary: Sacramento  Quad Summary: Rio Linda (3812164)

Sources:
NOS97F0014  NOSAL, T. ET AL. - FIELD SURVEY FORM FOR Fritchillaria agrestis 1997-06-18
PRE94F0001  PRESTON, R. - FIELD SURVEY FORM FOR Fritchillaria agrestis 1994-03-16
WIT91F0002  WITHAM, C. - FIELD SURVEY FORM FOR Fritchillaria agrestis 1991-03-18
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<th>Map Index Number:</th>
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<tr>
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<td>10</td>
<td>Occurrence Last Updated:</td>
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**Scientific Name:** *Fritillaria agrestis*  
**Common Name:** stinkbells

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**CNDDB Element Ranks:**  
**Global:** G3  
**State:** S3

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<th>General Habitat:</th>
<th>CISMONTANE WOODLAND, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND.</th>
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<tr>
<td>Micro Habitat:</td>
<td>SOMETIMES ON SERPENTINE; MOSTLY FOUND IN NONNATIVE GRASSLAND OR IN GRASSY OPENINGS IN CLAY SOIL. 10-1555 M.</td>
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**Last Date Observed:** 1991-03-18  
**Last Survey Date:** 1997-06-18

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<th>Occurrence Type:</th>
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<td>Occurrence Rank:</td>
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<tr>
<th>Presence:</th>
<th>Presumed Extant</th>
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<tr>
<td>Location:</td>
<td>E OF ROSE ST, N OF ROOD RD. ABOUT 0.25 MI N OF ROBLA SCHOOL.</td>
</tr>
<tr>
<td>Detailed Location:</td>
<td>IN A FIELD AT THE END OF GRAVEL ROAD.</td>
</tr>
<tr>
<td>Ecological:</td>
<td>IN DISKED FIELD ON UPLANDS IN NONNATIVE ANNUAL GRASSLAND, VERNAL POOLS ON SITE; HARDPAN IS ABOUT 12-18 INCHES BELOW SOIL SURFACE EVEN IN HIGHER TOPOGRAPHY.</td>
</tr>
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</table>

**Threats:** PORTION OF SITE SLATED FOR HOUSING DEVELOPMENT. PART DISKED IN 1997.

**General:**  
175 PLANTS SEEN IN 1991. HABITAT APPEARED INTACT IN 1997 EXCEPT FOR A PORTION NEAR THE ROAD WHICH HAD BEEN DISKED. NO PLANTS FOUND (TOO LATE).

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<td>Elevation (feet):</td>
<td>40</td>
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**County Summary:** Sacramento  
**Quad Summary:** Rio Linda (3812164)

**Sources:**  
NOS97F0015 NOSAL, T. ET AL. - FIELD SURVEY FORM FOR Fritillaria Agrestis 1997-06-18  
WIT91F0003 WITHAM, C. - FIELD SURVEY FORM FOR Fritillaria Agrestis 1991-04-01
### Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database

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<th><strong>Map Index Number:</strong></th>
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<td><strong>Occurrence Number:</strong></td>
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<td><strong>Occurrence Last Updated:</strong></td>
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<tr>
<th><strong>Scientific Name:</strong></th>
<th>Fritillaria agrestis</th>
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<tr>
<td><strong>Common Name:</strong></td>
<td>stinkbells</td>
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<tr>
<th><strong>Listing Status:</strong></th>
<th>Federal: None</th>
<th>State: None</th>
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<tbody>
<tr>
<td><strong>Rare Plant Rank:</strong></td>
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| **CNDB Element Ranks:** | Global: G3 | State: S3 |

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<tr>
<th><strong>General Habitat:</strong></th>
<th>CISMONTANE WOODLAND, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND.</th>
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</thead>
<tbody>
<tr>
<td><strong>Micro Habitat:</strong></td>
<td>SOMETIME ON SERPENTINE: MOSTLY FOUND IN NONNATIVE GRASSLAND OR IN GRASSY OPENINGS IN CLAY SOIL. 10-1555 M.</td>
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<td><strong>Occurrence Type:</strong></td>
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<td><strong>Trend:</strong></td>
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<th><strong>Owner/Manager:</strong></th>
<th>PVT?</th>
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<td><strong>Presence:</strong></td>
<td>Presumed Extant</td>
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<table>
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<tr>
<th><strong>Location:</strong></th>
<th>CARMICHAEL; AT NE CORNER OF WINDING WAY AND HACKBERRY STREET.</th>
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<tbody>
<tr>
<td><strong>Detailed Location:</strong></td>
<td>IN AREA SURROUNDING PRODUCE STAND.</td>
</tr>
<tr>
<td><strong>Ecological:</strong></td>
<td>UNPLOWED ROLLING GRASSLAND WITH ERODIUM, ANNUAL GRASSES, ETC.</td>
</tr>
<tr>
<td><strong>Threats:</strong></td>
<td>PARTIALLY A PARKING AREA FOR THE PRODUCE STAND.</td>
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<tr>
<td><strong>General:</strong></td>
<td>150-200 PLANTS SEEN IN 1990.</td>
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<td><strong>Latitude/Longitude:</strong></td>
<td>38.64940 / -121.33113</td>
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<tr>
<th><strong>County Summary:</strong></th>
<th>Sacramento</th>
</tr>
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<tbody>
<tr>
<td><strong>Quad Summary:</strong></td>
<td>Citrus Heights (3812163)</td>
</tr>
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</table>

**Sources:**
CLA90F0001 CLARK, G. - FIELD SURVEY FORM FOR FRITILLARIA AGRESTIS 1990-03-25
### Scientific Name: **Fritillaria agrestis**

### Occurrence Number: 12

#### Scientific Name: **Fritillaria agrestis**

### Common Name: **stinkbells**

#### Listing Status:
- Federal: None
- State: None

#### CNNDDB Element Ranks:
- Global: G3
- State: S3

### General Habitat:
CISMONTANE WOODLAND, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND.

### Micro Habitat:
SOMETIMES ON SERPENTINE; MOSTLY FOUND IN NONNATIVE GRASSLAND OR IN GRASSY OPENINGS IN CLAY SOIL. 10-1555 M.

### Last Date Observed: 1979-03-22

### Last Survey Date: 1997-06-18

### Presence: Possibly Extirpated

### Location:
W SIDE OF NORTH ANTELOPE RD, 28 YARDS N OF PLACER/SACRAMENTO COUNTY LINE.

### Detailed Location:
COMMERCIAL BUSINESS ACROSS THE ROAD.

### Ecological:
AT TOP OF CUT SLOPE IN PASTURE.

### Threats:
DEVELOPMENT, DISKING.

### General:
2 PLANTS SEEN IN 1979. NOT FOUND IN 1994; ADJACENT PASTURE DISKED IN THE PAST YEAR. THIS SITE WAS DISKED WHEN VISITED IN 1997; PLANTS MAY BE EXTIRPATED AT THIS SITE.

### PLSS:
T10N, R06E, Sec. 16 (M)

### Accuracy:
80 meters

### Area (acres):
0

### UTM:
Zone-10 N4287519 E645354

### Latitude/Longitude:
38.72439 / -121.32790

### Elevation (feet):
130

### County Summary:
Placer, Sacramento

### Quad Summary:
Citrus Heights (3812163)

### Sources:
- NOS97F0016 NOSAL, T. ET AL. - FIELD SURVEY FORM FOR FRITILLARIA AGRESTIS 1997-06-18
- PRE94F0002 PRESTON, R. - FIELD SURVEY FORM FOR FRITILLARIA AGRESTIS 1994-03-16
- SMI79F0001 SMITH, E. & C. SMITH - FIELD SURVEY FORM FOR FRITILLARIA AGRESTIS 1979-03-22
### Orcuttia tenuis

**Scientific Name:** Orcuttia tenuis  
**Common Name:** slender Orcutt grass  
**Listing Status:**  
- **Federal:** Threatened  
- **State:** Endangered  
**Rare Plant Rank:** 1B.1

**CNDDB Element Ranks:**  
- **Global:** G2  
- **State:** S2

**General Habitat:**  
VERNAL POOLS.  
**Micro Habitat:**  
OFTEN IN GRAVELLY POOLS. 35-1760 M.

**Location:**  
WEST SIDE OF LAGUNA CREEK, 0.2 MILE EAST OF EXCELSIOR ROAD, 0.7 MILE NORTH OF DIERKS ROAD, SE OF SACRAMENTO.

**Detailed Location:**  
CNDDB PREVIOUSLY HAD AN ADDITIONAL POLYGON MAPPED JUST NORTH OF THIS SITE WHICH HAS SINCE BEEN DETERMINED TO BE ERRONEOUS.

**Ecological:**  
ELONGATE, NARROW VERNAL POOL SURROUNDED BY ANNUAL GRASSLAND. ASSOCIATED WITH ELEOCHARIS MACROSTACHYA, ALLOCARYA STIPITATA, DOWNINGIA BICORNUTA, NAVARRETIA LEUCOCEPHALA, PSILOCARPHUS BREVISSIMUS, ERYNGIUM VASEYI, ETC.

**Threats:**  
ENCROACHING DEVELOPMENT, THATCH BUILD-UP, INVASIVES, HYDROLOGICAL CHANGES, HERBICIDE RESIDUES, HUMAN DISTURBANCE.

**General:**  

**PLSS:** T07N, R06E, Sec. 11 (M)  
**Accuracy:** specific area  
**Area (acres):** 2

**UTM:** Zone-10 N4260202 E648964  
**Latitude/Longitude:** 38.47771 / -121.29223  
**Elevation (feet):** 90

**Presence:** Presumed Extant  
**Owner/Manager:** PVT  
**Occurrence Type:** Natural/Native occurrence  
**Occurrence Rank:** Good  
**Trend:** Unknown
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<th>Sources:</th>
<th></th>
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<tbody>
<tr>
<td>BIO88R0001</td>
<td>BIOSYSTEMS ANALYSIS, INC. - STATUS SURVEY OF THE GRASS TRIBE ORCUTTIEAE AND CHAMAESYCE HOOVERI IN THE CENTRAL VALLEY OF CALIFORNIA 1988-09-XX</td>
</tr>
<tr>
<td>COCHRANE, S. - PERSONAL COMMUNICATION REGARDING OCCURRENCES OF ORCUTTIA TENUIS 1984-03-26</td>
<td></td>
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<tr>
<td>ECO05R0011</td>
<td>ECORP CONSULTING, INC. - OPERATIONS AND MANAGEMENT PLAN FOR THE KLOTZ PROPERTY OPEN SPACE PRESERVE, SACRAMENTO COUNTY, CA. 2005-08-09</td>
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<tr>
<td>GRIGGS, T. - MAP FOR SPINK CORP. OF ORCUTTIA VISCIDA (THIS WAS MIS-IDENTIFIED AND SHOULD ACTUALLY BE O. TENUIS): 1980-XX-XX</td>
<td></td>
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<tr>
<td>GRIGGS, T. - GRIGGS SN DAV #88276 1980-09-29</td>
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<tr>
<td>GRIGGS, T. - INFORMATION ON ORCUTTIA TENUIS 1980-12-09</td>
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<td>GRIGGS, T. - TABLE (FROM 1983 ELEMENT PRESERVATION PLAN PROJECT) WITH INFO ON SEVERAL SITES OF ORCUTTIA TENUIS 1983-12-XX</td>
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<tr>
<td>HOLLAND, R. - FIELD SURVEY FORM FOR ORCUTTIA TENUIS 1983-07-17</td>
<td></td>
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<tr>
<td>JOKERST, J. - JOKERST #3982 CHSC #66973 UCSB #63834 1993-06-03</td>
<td></td>
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<tr>
<td>OKAMURA, S. - EMAIL REGARDING ORCUTTIA VISCIDA MISIDENTIFICATION 2006-08-16</td>
<td></td>
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<tr>
<td>SACRAMENTO CO. PLANNING &amp; DEVELOPMENT DEPT. - KLOTZ SUBDIVISION ENVIRONMENTAL IMPACT REPORT 1981-03-11</td>
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<td>STONE, R. - STONE #731 JEPS #83913 1986-06-18</td>
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<td>STONE - STONE #816 JEPS #84151 1987-05-19</td>
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<tr>
<td>WITHAM, C. - STATUS SURVEYS FOR SEVEN FEDERALLY LISTED VERNAL POOL GRASSES AND CHAMAESYCE HOOVERI IN THE SACRAMENTO AND SAN JOAQUIN VALLEYS (GREAT VALLEY), CALIFORNIA, USA 2013-03-25</td>
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**Scientific Name:** Orcuttia tenuis  
**Common Name:** slender Orcutt grass

**Listing Status:**  
Federal: Threatened  
State: Endangered

**CNDDB Element Ranks:**  
Global: G2  
State: S2

**General Habitat:** VERNAL POOLS.  
**Micro Habitat:** OFTEN IN GRAVELLY POOLS. 35-1760 M.

**Last Date Observed:** 2010-08-30  
**Occurrence Type:** Natural/Native occurrence

**Presence:** Presumed Extant  
**Trend:** Unknown

**Location:**  
0.3 AIR MILE NE OF THE INTERSECTION OF EXCELSIOR ROAD AND DIERKS ROAD, SOUTH OF LAGUNA CREEK, SE OF SACRAMENTO.

**Detailed Location:** SITE KNOWN AS THE "WERRE POOL."

**Ecological:**  
DEEP VERNAL POOL WITHIN VERNAL POOL - SWALE - GRASSLAND COMPLEX. ASSOCIATED WITH GLYCERIA DECLINATA, LASTHENIA GLABERRIMA, RANUNCULUS ALVEOLATUS, ELEOCHARIS MACROSTACHYA, ERYNGIUM VASEYI, PSILOCARPHUS BREVISIMUS, AND LEPIDURUS PACKARDII.

**Threats:**  
CURRENT AND PAST CATTLE GRAZING. RESIDENTIAL DEVELOPMENT NEARBY, BUT NOT ON THIS PARCEL.

**General:**  
500-1000 PLANTS OBSERVED IN 2004. GREATER THAN 5000 PLANTS OBSERVED IN 2010.

**PLSS:** T07N, R06E, Sec. 11 (M)  
**UTM:** Zone-10 N4259436 E648851  
**Accuracy:** specific area  
**Latitude/Longitude:** 38.47083 / -121.29369  
**Elevation (feet):** 85  
**Area (acres):** 1

**County Summary:** Sacramento  
**Quad Summary:** Elk Grove (3812143)

**Sources:**  
HOLLAND, R. - HOLLAND #3258 DAV #88277 2004-06-09  
SKORDAL, D. - FIELD SURVEY FORM FOR ORCUTTIA TENUIS 2004-06-07  
WITHAM, C. - STATUS SURVEYS FOR SEVEN FEDERALLY LISTED VERNAL POOL GRASSES AND CHAMAESYCE HOOVERI IN THE SACRAMENTO AND SAN JOAQUIN VALLEYS (GREAT VALLEY), CALIFORNIA, USA 2013-03-25
Orcuttia viscida

Sacramento Orcutt grass

Endangered

1B.1

G1

S1

VERNAL POOLS

30-100 M.

1998-07-30

Natural/Native occurrence

EXTIRPATED

ON THE NORTH SIDE OF FLORIN RD, APPROXIMATELY 0.25 MILE EAST OF EXCELSIOR AVE.

ARROYO SECO MITIGATION BANK. MAPPED AS BEST GUESS BY CNDDB BASED ON A 1998 HRUSA LOCATION DESCRIPTION.

IN MUDFLOW VERNAL POOLS WITH ROCKY BOTTOMS.

POOL IS NOW PERMANENT MARSH DUE TO RUNOFF FROM NURSERY ACROSS FLORIN ROAD.

ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1998 HRUSA COLLECTION. HRUSA VERIFIED WHICH POOL THE COLLECTION WAS MADE FROM AND IT IS NOW PERMANANT MARSH; ENTIRE ARROYO SECO PRESERVE SURVEYED IN 2010 AND 2011, NO PLANTS OBSERVED.

T08N, R06E, Sec. 35 (M)

1/5 mile

38.49808 / -121.29492

0

50

Sacramento

Elk Grove (3812143), Carmichael (3812153)

HRUSA, G.F. - HRUSA #14764 UCR #115049, CDA #107716, RSA #670135 1998-07-30

WITHAM, C. - STATUS SURVEYS FOR SEVEN FEDERALLY LISTED VERNAL POOL GRASSES AND CHAMAESYCE HOOVERI IN THE SACRAMENTO AND SAN JOAQUIN VALLEYS (GREAT VALLEY), CALIFORNIA, USA 2013-03-25
Appendix D

Cultural Resource Assessment
Phase I Cultural Resources Assessment
Sacramento Senior Living Project
City of Sacramento, Sacramento County, California

Sacramento East, California, USGS 7.5-minute Topographic Quadrangle Map
Township 9N, Range 5E, Section 29
5-Acre Study Area

Prepared for:
Columbia Pacific Advisors, LLC
1910 Fairview Avenue E, Suite 200
Seattle, WA 98102
Contact: Mr. Bill Hardt,

Prepared by:
HELIX Environmental Planning, Inc.
11 Natoma Street, Suite 155
Folsom CA 95630

Fieldwork Conducted By: Carrie D. Wills, MA, RPA
Fieldwork Conducted On: July 17, 2015
Building Evaluations Conducted By: Kathleen Crawford, MA
Report Date: September 23, 2015
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  1.3 - Assessment Team ............................................................................................................................... 3  

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MANAGEMENT SUMMARY

At the request of Columbia Pacific Advisors, LLC, HELIX Environmental Planning (HELIX) conducted a Phase I Cultural Resource Assessment at the proposed project area located within the City of Sacramento, California (Exhibit 1). Totaling approximately five acres, the proposed project consists of demolition of four buildings within the larger Red Lion Hotel complex (originally named the Lakewood Inn). In addition to the original assessment, a second building evaluation was conducted for buildings that were subsequently slated for demolition.

The purpose of this assessment is to identify the presence or absence of potentially significant cultural resources within the project area, and, if impacted by the proposed development, propose recommendations for mitigation. Completion of this investigation fulfills the requirements associated with the California Environmental Quality Act (CEQA). This report follows the California Office of Historic Preservation (OHP) procedures for cultural resource surveys and the OHP’s format for archaeological reports.

On July 17, 2015, HELIX Senior Archaeologist conducted a record search at the North Central Information Center (file number SAC-15-123). The results indicate that the project area has not been subject to a systematic survey for cultural resources, and no prehistoric or historic period resources have been recorded within or adjacent to the project area. Results from the search indicate that the project area has not been subject to a systematic survey for cultural resources, and no prehistoric or historic period resources have been recorded within or adjacent to the project area.

A letter was sent to the Native American Heritage Commission (NAHC) on July 24, 2015 requesting a search of the Sacred Lands files. A follow up email was sent on August 18, to inquire about the status of the search but as of this date, no response has been received.

A field survey of the project area was conducted by HELIX Senior Archaeologist Carrie D. Wills, on July 17, 2015. Because the project area is completely covered with buildings, access drives, and parking lots, there was no ground surface visibility. The survey focused on recording and photographing the four extant buildings. The four buildings were evaluated by HELIX Architectural Historian, Kathleen Crawford. In addition, three other buildings, collectively named Building F, were photographed on November 27th and evaluated for historic significance by Ms. Crawford on December 1st, 2015.

No historic or prehistoric artifacts, features, resources, or sites were discovered during the course of the field survey. In addition, none of the four original buildings nor the additional Building F buildings within the project area are considered historically or architecturally significant at the local, state or federal levels. Therefore, HELIX does not recommend additional compliance work for this project.
SECTION 1: INTRODUCTION

1.1 - Project Location

Located in the City of Sacramento California, the Sacramento Senior Living Project is located in an urbanized portion of the City with commercial, light industrial, and residential uses in the general vicinity (Exhibit 1).

The project area is depicted on the Sacramento East California, United States Geological Survey (USGS) 7.5-minute topographic quadrangle map, in T9N, R5E and Section 29 (Exhibit 2). The property south of I-160, west of Exposition Boulevard, east of Canterbury Road and north of Expo Parkway (Exhibit 3).

1.2 - Project Description

The project area consists of demolition of seven hotel buildings within the Red Lion Inn hotel complex.

1.3 - Assessment Team

HELIX Professional Archaeologist Carrie D. Wills conducted the pedestrian survey and authored this report. HELIX Architectural Historian, Kathleen Crawford conducted the building evaluations.
Regional Location Map

SACRAMENTO SENIOR LIVING PROJECT

Figure 1
Legend

- Area of Potential Effects
- 0.5-Mile Records Search Radius

USGS Base Map: SACRAMENTO EAST, CA
7.5 Minute Topographic Quadrangle
Section: 29, Township: 9N, Range: 5E

Local Vicinity Map, Topographic Base

SACRAMENTO SENIOR LIVING PROJECT

Exhibit 2
Local Vicinity Map, Aerial Base

SACRAMENTO SENIOR LIVING PROJECT

Figure 3
SECTION 2: CULTURAL SETTING

Following is a brief overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the general project area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview.

Further details can be found in ethnographic studies, mission records, and major published sources, including Beardsley (1948), Bennyhoff (1950), Fredrickson (1973 and 1974), Kroeber (1925), Chartkoff and Chartkoff (1984), and Moratto (1984).

2.1 - Prehistoric Background

Early archaeological investigations in central California were conducted at sites located in the Sacramento-San Joaquin Delta region. The first published account documents investigations in the Lodi and Stockton area (Schenck and Dawson 1929). The initial archaeological reports typically contained descriptive narratives, with more systematic approaches sponsored by Sacramento Junior College in the 1930s. At the same time, University of California at Berkeley excavated several sites in the lower Sacramento Valley and Delta region, which resulted in recognizing archaeological site patterns based on variations of inter-site assemblages. Research during the 1930s identified temporal periods in central California prehistory and provided an initial chronological sequence (Lillard and Purves 1936; Lillard, et al. 1939). In 1939, Lillard noted that each cultural period led directly to the next and that influences spread from the Delta region to other regions in central California (Lillard, et al. 1939). In the late 1940s and early 1950s, Beardsley documented similarities in artifacts among sites in the San Francisco Bay region and the Delta and refined his findings into a cultural model that ultimately became known as the Central California Taxonomic System (CCTS). This system proposed a uniform, linear sequence of cultural succession (Beardsley 1948 and 1954). The CCTS system was challenged by Gerow, whose work looked at radiocarbon dating to show that Early and Middle Horizon sites were not subsequent developments but, at least partially, contemporaneous (1954; 1974; Gerow with Force 1968).

To address some of the flaws in the CCTS system, Fredrickson (1973) introduced a revision that incorporated a system of spatial and cultural integrative units. Fredrickson separated cultural, temporal, and spatial units from each other and assigned them to six chronological periods: Paleo-Indian (10000 to 6000 B.C.); Lower, Middle and Upper Archaic (6000 B.C. to A.D. 500), and Emergent (Upper and Lower, A.D. 500 to 1800). The suggested temporal ranges are similar to earlier horizons, which are broad cultural units that can be arranged in a temporal sequence (Moratto 1984). In addition, Fredrickson defined several patterns—a general way of life shared within a specific geographical region. These patterns include:

- Windmiller Pattern or Early Horizon (3000 to 1000 B.C.)
- Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500)
- Augustine Pattern or Late Horizon (A.D. 500 to historic period)
Brief descriptions of these temporal ranges and their unique characteristics follow.

2.1.1 - Windmiller Pattern or Early Horizon (3000 to 1000 B.C.)

Characterized by the Windmiller Pattern, the Early Horizon was centered in the Cosumnes district of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of numerous types of terrestrial and aquatic species (Bennyhoff 1950; Ragir 1972). Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicates an extensive trade network that may represent the arrival of Utian populations into central California. Also indicative of this period are rectangular Haliotis and Olivella shell beads, and charmstones that usually were perforated.

2.1.2 - Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500)

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson (1973) suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. As noted by Lillard, the practice of spreading ground ochre over the burial was common at this time (Lillard, et al. 1939). Grave goods during this period are generally sparse and typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual (Hughes 1994). During this period, larger populations are suggested by the number and depth of sites compared with the Windmiller Pattern. According to Fredrickson (1973), the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.

2.1.3 - Augustine Pattern or Late Horizon (A.D. 500 to Historic Period)

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns became the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of *Haliotis*
ornaments of many elaborate shapes and forms. Burial patterns retained the use of flexed burials with variable orientation, but there was a reduction in the use of ochre and widespread evidence of cremation (Moratto 1984). Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions. Johnson (1976) suggests that the Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Berkeley Pattern.

Central California research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of prehistoric populations (Dickel et al. 1984). Although debate continues over a single model or sequence for central California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

### 2.2 - Native American Background

At the time of European contact, the project vicinity was occupied by the Eastern (Plains) Miwok tribe of California Native Americans. The Plains Miwok occupied the area bounded by both banks of the Sacramento River from Rio Vista to the west to Sacramento to the north, the lower reaches of the Calaveras and Mokelume river drainages to the south, and the foothills of the Sierra Nevada to the east. Plains Miwok territory extended approximately 60 miles east to west and 35 miles north to south. Based primarily on linguistic variation, the Eastern Miwok are part of the Miwokan subgroup of the Utian language family. The Eastern Miwok are further divided into five distinct linguistic and cultural groups: Bay Miwok, Plains Miwok, Northern Sierra Miwok, Central Sierra Miwok, and the Southern Sierra Miwok (Levy 1978).

Plains Miwok political organization was centered around the tribelet. Each Plains Miwok tribelet was an independent political entity and functioned primarily within their recognized geographical boundaries. Large, multilinear villages were concentrated on rises along watercourses, and all but the smallest villages were occupied permanently, except during the fall acorn harvest (Bennyhoff 1977). The Plains Miwok constructed houses made of conically-arranged wood poles covered with a thatch of grass, brush, or tules, and richer men built semi-subterranean earth-covered dwellings. Assembly houses were also constructed in villages, and served as the gathering point for ritual and social activities. These structures were semi-subterranean, and consisted of a three to four-foot deep pit measuring 40-50 feet in diameter, which was covered with layers of plant materials and then covered with earth, all supported by a conical roof on four wooden center posts. Other communal buildings constructed in villages would have been: a sweat house used for curing diseases and purification before hunting expeditions; a circular assembly house; and a conical structure built over a bedrock mortar so that acorn and seed grinding could take place in wet weather (Levy 1978).
The Plains Miwok subsistence base varied and included gathering seasonal plant resources, hunting, and fishing. The Plains Miwok didn’t depend on one staple, as their territory provided year-round sources of different food. Acorns were an important food resource and were stored in granaries, in addition to buckeye and pine nuts (digger and sugar pine), and to a lesser extent laurel nuts and hazelnuts. A large variety of seeds and roots, as well as various types of greens and mushrooms, also contributed to their diet. The Plains Miwok conducted an annual burning of the land (in August) to promote the growth of forage for deer, antelope, and tule elk, which they hunted communally and individually. Meat from a hunted animal was divided among tribelet members according to culturally defined rules. Ethnographic reports indicate that the Plains Miwok also caught blacktailed jackrabbits and cottontails with nets in the summer during communal hunting activities, as well as beaver, gray squirrels, ground squirrels, and wood rats, which were caught with snares and traps. Birds were hunted for food, and waterfowl were an important resource. In addition, band-tailed pigeons, red-shafted flickers, jays, and woodpeckers, were also hunted and used for their feathers and skins to decorate clothing and regalia. Fishing was also important for the Plains Miwok, and salmon provided the dominant food resource, with sturgeon and lampreys being caught as well. In the rivers, mussels and freshwater clams were collected (Bennyhoff 1977; Levy 1978). Archaeological investigations at sites on South Stone Lake (CA-SAC-65 and CA-SAC-145) indicate a considerable reliance on fishing for subsistence among the prehistoric populations (Schulz and Simons 1973, Schulz et al. 1979). In addition to gathering resources, the Plains Miwok obtained wild tobacco in addition to planting tobacco seeds and cultivating the plants (Bennyhoff 1977; Levy 1978).

The first contact between the Plains Miwok and Euro-Americans came during Spanish military and religious expeditions. The Franciscan order of the Roman Catholic Church in Spain established Mission San Jose, the fourteenth in the Alta California system, on June 11, 1797 (Bennyhoff 1977, Hoover et al. 1990). Alverez Gabriel Moraga led an overland expedition from this San Francisco Bay area mission to the Sacramento region in 1808. On May 13, 1817, Father Narciso Duran and Luis Arguello left the beach at the Presidio of San Francisco and sailed up the Sacramento River. They reached a point midway between Clarksburg and Freeport before they turned back and went around Brannan Island (Beck and Haase 1977).

2.3 - Historic Background

Early Spanish explorers and the Franciscan and Jesuit missionaries who followed them were the first Europeans to reach northern California. The interior of the Sacramento Valley, away from the easily defended and more accessible chain of coastal missions and pueblos, was left largely untouched by the Spanish and “ Californios” (Hoover et al. 1990). Settlement of the Sacramento area did not begin until the late 1830s and early 1840s, when entrepreneurs such as John Sutter and Jared Sheldon obtained land grants from the Mexican government, typically in exchange for an agreement to protect Mexican interest in these remote regions (Beck and Haase 1977). In 1839, John Sutter built the earliest Euro-American settlement within Sacramento County. Named Sutter’s Fort, it was well known outpost that brought with it an increase in Euro-American trappers, hunters, and settlers to the Sacramento area. As a result of the Mexican War (1847-1848), California became part of the territory of the United States. In 1848, gold was discovered at Sutter’s Mill in Coloma which resulted in a torrent of gold seekers.
flooding into the Sacramento region. As the population soared and the gold decreased, many of the settlers who decided to stay turned to alternative vocations, particularly agriculture. Many found that the local land was relatively cheap and provided good crops. Raising grain, livestock, and produce to sell to the thousands of miners heading to the gold fields proved a profitable venture. These combined events hastened the settlement of the area and the development of Sacramento as an economic and transportation center. The designation of Sacramento as the state capital, in 1854, also resulted in the area’s increase in socio-political importance.

2.3.1 - City of Sacramento

In 1848, the history of the City and County of Sacramento began with the founding of the City by Samuel Brannan and John Augustus Sutter, Jr. at an embarcadero constructed by John Sutter, Sr. The City was named after the Sacramento River which forms its western border.

California’s history changed dramatically in 1848 when gold was discovered at a sawmill, operated by James Marshall for Sutter, one of his many business operations. The mill was located in Coloma and soon the California Gold Rush was exploding. Thousands of miners came in droves from all over the world, arriving in any way that they could, hoping to strike it rich in the rivers of California. At this same time, the United States was involved in the Mexican War with Mexico. Various political and economic factors were at play and in February 1848, when the Treaty of Guadalupe Hidalgo was signed, giving the United States vast areas of Mexico’s northern empire. By 1850, California’s population had risen to over 100,000 due to the presence of the miners and the people who followed them to provide goods and services to the mining communities scattered across northern California.

Sutter’s various business operations and settlements were in the middle of the gold rush frenzy. The trade around the wharf established by Sutter at the junction of the two rivers became a central trading point and Sutter planned to build a city at this location. Sutter put his son, John Jr., in charge of the newly formed Sacramento City. Things did not go smoothly for the newly developing city and, due to its proximity to the two rivers, the City periodically filled with water. A devastating flood took place in January 1850, causing extensive destruction. Fires periodically swept through the City, causing more destruction.

Harrdin Bigelow led the efforts to create a system of dikes and levees to protect the City. As a result of his efforts to protect the City, he was elected the City’s first mayor. To resolve the problems, the City worked to raise the sidewalks and buildings and began to replace the original wood buildings with new brick and stone structures. Due to the origins of the City, it did not contain the gambling houses and saloons popular in many of the gold rush communities. Churches and synagogues were founded early on in the City’s history, creating a stable foundation for new residents. Edward Kemble moved north from San Francisco and founded the City’s first newspaper, The Placer Times. The newspaper folded a few months later as Kemble became ill. Soon a theater company was formed and the Eagle Theater became one of the early cultural centers of the City. The first elementary schoolhouse was built in 1853 and the first high school was constructed in 1856.
A cholera epidemic devastated the City in 1850, causing approximately a thousand deaths. Eight percent of the City’s residents fled to escape the epidemic.

The State of California and the City were in a state of flux, various forces were shifting within the State as the area attempted to create new government systems. Changes continued to reshape the City and eventually the City evolved into a stable government. The City was selected as the state capitol in 1854 where it remains today. During the 1850s, the City continued to grow and expand, surviving fires and floods and a tumultuous political climate to become a major trading center. As the agricultural potential of California began to develop, crops began to move through Sacramento to other parts of the United States. The Sacramento Valley Railroad and the Pony Express came to Sacramento, creating more connections across the country. By 1861, the telegraph had been brought to Sacramento, rendering the Pony Express obsolete.

Another major flood occurred in the early 1860s, forcing major changes in the levee system and resulting in a major rebuilding of the City’s homes and businesses. Many buildings now had basements as the first floor was lower than the newly raised streets. The second floor now became the main floor. These basements that still remain in some of the buildings are known as Sacramento’s Underground. New streets were laid out on filled land and the City expanded significantly.

The construction of the transcontinental railroad brought the east and west coasts of the country together with its completion in 1862. In January 1863, ground was broken in Sacramento for the Central Pacific Railroad and its connections the larger national network of rail lines. Railroad “wars” took place over the next decades as lines were absorbed by competitors and the State sought to create a unified, comprehensive rail system. As the railroad system became more organized and stable, the changing technology of the era created refrigerated railroad cars, capable of shipping fruit and produce across country without spoiling. This major advance had profound impacts on the City’s and County’s economy. Wheat prices dropped, formerly a major crop, and fruit products took precedence. By the 1880s, the original wheat ranches had broken up, the original owners had died, and their heirs sold land to newcomers interested in starting orchards. The resulting “land boom” brought new residents and spurred the economy significantly. A wide range of immigrants from Europe and Asia came to the Sacramento area to start farms and wineries and add their talents to the local economy. The population began to skyrocket, and soon the school district moved the one high school in 1887 to a new permanent location and opened twelve new elementary schools. Starting in 1894, the school system began to integrate its schools, which was due to the diverse ethnicities in the City and surrounding areas.

The 20th century brought war to the world and the rise of the automobile. By the early 1900s, 27 families owned cars, which was a rarity. Soon ownership expanded in great numbers; horse and buggies and other early forms of transportation became obsolete. Railroads and steamboats became increasingly important in moving goods across the region and the State. The nationwide Progressive movement brought more political changes to the State and the County. Reform movements swept the country, attempting to alleviate the problems of the poor, under educated and lower levels of the population. A referendum was passed that reformed the City’s government charter to equalize the
political power of the wards. As the City began to expand with the working class, political dominance was shifting. Women’s suffrage was causing major shifts in the political system nationwide (Sacramento women received the vote in 1911, 20 years before the rest of the country), the railroad monopolies were broken up, and the County was dealing with the realities of World War I. As the nation armed for war, Mather Air Force Base was built in the southern Sacramento area, resulting in a significant economic impact. Eventually, over 4,000 men from Sacramento served in World War I, and approximately 100 died in the war. The nation’s growing fascination with air travel led to air shows, and the use of bi-planes to perform crop seeding and boost the growing agricultural base of the economy.

Old Mexican land grants were broken up and sold, and soon new communities such as Citrus Heights, Orangevale, Fair Oaks, and Carmichael emerged. Small surrounding communities were gradually annexed into the City, thereby creating a larger tax base, boosting the economy, and providing more business opportunities. The changes of the Roaring Twenties and Prohibition brought a decline in the wine industry that provided an additional economic base for the City. Major wineries closed because of the ban on alcohol and the economy shifted as the Great Depression of the 1930s commenced. By 1932, over 15,000 Sacramento residents were unemployed, on a par with the rest of the State and country. The canning industry was deeply affected as the demand for canned goods dropped sharply, resulting a ripple effect on the local agricultural industry. A major freeze in 1932 destroyed half the year’s citrus crop. “Hoovervilles” sprang up across the region as struggling people who were out of work lost their homes. Government-funded relief programs sought to alleviate the worst of the situation, but the City was hard hit by the nation’s economic problems. Mobs stormed the welfare offices in 1933 demanding assistance, a symptom of the deepening depression. Franklin Roosevelt’s New Deal programs provided some relief for the nation’s economy. The Tower Bridge over the Sacramento River was built in 1935 with New Deal funds, providing jobs for local residents. In addition, the Works Progress Administration programs built forty-six new buildings in Sacramento, new roads and new runways at local airports.

The worsening global crises were bringing the world to the second great war of the 20th century. Preparation for war brought new industries to northern California and new military bases were under development. The creation of factories to build planes and ships helped to spur the economy in the late 1930s. Additional economic boost was provided by the construction of McClellan Air Force Base, which began in 1936 and was completed in 1939. Mather Air Force Base was also reopened in 1936. The Sacramento Army Depot was opened in 1942 and became a major communication equipment repair base.

The surprise attack on Pearl Harbor in December 1941 led the nation to war and each city was required to prepare security and emergency plans. Rationing and conservation of resources were major concerns of city officials. Victory gardens sprang up as people grew food to spare resources for the war effort. Executive Order 9066 was enacted in February 1942, requiring the internment of Japanese residents of California and other western states, who were deemed a potential threat to America; several internment camps were set up in the State. Residents of California, many of whom were American citizens, were required to report for transport to the camps where they remained for the duration of the war. Japanese-owned businesses were liquidated, farms were sold, and families lost
their homes. Financial assets were frozen and the nation prepared for war. By this Executive Order, Sacramento was placed in a military zone.

During the 20th century, the need for higher education institutions led to the construction of the California State University and University of California systems. The University of California, Sacramento was founded in 1947. The civil rights movements of the 1950s brought increased awareness to Sacramento. In 1966, Mexican labor leader, Cesar Chavez, brought his United Farm Workers march to Sacramento as part of his plan to reorganize the farmworkers.

As the 21st century began, despite recent economic woes, Sacramento continued to grow, and it maintains its position as one of the most economically viable cities in California. As the capitol city of California, Sacramento retains its unique position as the political center of the State.
SECTION 3: RESULTS

3.1 - Record Search

3.1.1 - Information Center Search

On July 17, 2015, HELIX Senior Archaeologist conducted a record search at the North Central Information Center (NCIC) of the California Historical Resources Information Center (NCIC file number SAC-15-123) for the project area and a 0.50-mile radius beyond the project boundaries. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NR), the California Register of Historic Resources (CR), the California Historical Landmarks (CHL) list, the California Points of Historical Interest (CPHI) list, and the California State Historic Resources Inventory (HRI) were reviewed to determine the existence of previously documented local historical resources.

The results indicate that the project area has not been subject to a systematic survey for cultural resources, and no prehistoric or historic period resources have been recorded within or adjacent to the project area. However, the North Sacramento Freeway which is approximately 400 feet north of the project area has been previously recorded.

3.1.2 - Native American Heritage Commission Record Search

A letter was sent to the Native American Heritage Commission (NAHC) on July 24, 2015 requesting a search of the Sacred Lands files. A follow up email was sent on August 18, to inquire about the status of the search but as of this date, no response has been received. Once a response has been received that includes a list of Native American representatives, information request letters will be sent to each of the representatives requesting any additional information they may have about the project area. Information detailing the date the letters were sent and any responses received, will be submitted as an addendum to this report.

3.2 - Pedestrian Survey and Building Evaluations

A field survey of the project area was conducted by HELIX Senior Archaeologist Carrie D. Wills, on July 17, 2015. Because the project area is completely covered with asphalt and buildings, there was no ground surface visibility. The survey focused on recording and photographing the four extant buildings. Due to project changes, an additional field survey was conducted on November 27, 2015 to photo document three buildings also slated for demolition.

In addition to the photo documentation, all of the buildings were evaluated for historic significance by HELIX Architectural Historian, Kathleen Crawford as follows.

No pre-contact Native American resources or sites were discovered during the course of the field survey.
3.2.1 - BUILDING EVALUATIONS

The subject property contains multiple buildings that are part of the larger Red Lion Hotel complex (originally named the Lakewood Inn). The first buildings on the property were constructed in the late 1950s and the four buildings that will be demolished during project development were constructed in the early 1960s as part of the hotel’s expansion process. These four buildings under consideration are located at the far west end of the property and include three, one-story, rectangular shaped, Modern Spanish style buildings, and one, two-story, irregular shaped, Modern Spanish style building. The three one-story buildings were constructed in rows, running east to west with hotel rooms along the north and south elevations of each building, with parking lots in between each structure. The two-story building was placed at the far end of the property and extends along the sides of the three one-story buildings and runs north to south with hotel rooms along the east elevation. All four buildings are used as hotel rooms for guests.

The three single-story buildings are named “Willow,” (the southernmost building), “Spruce,” (the center building),” and “Cypress,” (the northernmost building). The two-story building is simply designated as the “700 Building.”

The three one-story buildings are similar in style and have concrete foundations, stucco exteriors and flat roofs. The front of the buildings on the east elevation contain an arched section that rises above the roofline. This section contains the name of the specific building. The area under the roof sections have a flat roof with faux vigas (a rough-hewn roof timber or rafter, especially on an adobe building). Square columns with square capitals support the roof sections. The space between the columns and wall is infilled with small bushes. The west elevation of each building is basically blank with column detailing. The buildings contain multiple hotel rooms placed in a single row along the north and south facades. Each unit has a single wood door flanked by metal framed, double hung sash style and fixed pane, rectangular shaped windows. The walkways along the elevations contain shed roofs which are supported by square columns with small square capitals. The parking spaces are located immediately outside the door of each unit for ease of parking. Small landscaped areas bracket the parking areas and the ends of the buildings. Additional trees are located along the parking areas for shade and greenery purposes.

The two-story building has a concrete foundation, stucco exterior, and a flat roof. The front of the building, the south elevation, contains a large arched parapet section which extends to the east, culminating in a two-story wing wall with a tall, arched opening. The section provides a screen for the metal staircase behind it. The section has a flat roof and a back wall with arched openings, as well as a screened portion on the east elevation. The section is supported by the same square columns as seen on the other buildings. The rooms extend along the east elevation of the building and include the same details as seen on the smaller buildings. The individual rooms have single wood door entrances which are flanked by metal framed, fixed pane and double hung sash style windows for each unit. The second floor units are accessed by the staircase at the south end of the building and a balcony with a metal
railing extends along the length of the building. The roof extends out over the balcony area and is supported by square columns. Landscaping is present around the sides of the building.

The subject property was examined for potential historical and architectural significance for the local City of Sacramento historic register, State of California Historic Resources Register, and the National Register of Historic Places. The building complex is not considered to meet any of the established criteria for significance. The hotel complex is one of many chain hotels in the Sacramento area and has played no significant role in the development of the city of Sacramento or the State of California. No persons of any level of historic significance are associated with the design or development of the property. None of the four buildings are considered to be architecturally significant as they are standard examples of Modern motel architecture with no innovative or unusual characteristics. The buildings are not good examples of a type, style, or method of construction of Modern architecture. The buildings do not have the ability to convey any important information regarding their design, use, or development of the subject property. Therefore, none of the buildings on the subject property are considered to be historically or architecturally significant at the local, state or federal levels.

Additional Building Evaluations

The three additional buildings slated for demolition are collectively labeled Building F. The buildings are part of the larger Red Lion Hotel complex (originally named the Lakewood Inn). The first buildings on the hotel property were constructed in the late 1950s and the three buildings, collectively known as Buildings F, were constructed in the early 1960s as part of the hotel’s expansion process.

Building F consists of three one-story story, Modern Spanish style, commercial hotel buildings which are placed in an L-shaped configuration in the central portion of the hotel property. The buildings vary in size but are basically rectangular shaped. The three buildings have concrete foundations, stucco exteriors, and flat roofs. The asymmetrical design, rectangular shaped buildings lack any significant exterior detail or ornamentation. The buildings have large blocks of blank wall space broken by delivery entrances or guest entrances. Vertical columns divide open bays along the side of the buildings. Windows are fixed pane, rectangular shaped windows. The buildings are in fair condition with no major alterations noted. The buildings are surrounded by access roads and drives, small parking areas, with small areas of minimal landscaping consisting of small bushes and trees.

The three additional buildings were assessed for potential historical and architectural significance for the local City of Sacramento historic register, State of California Register of Historical Resources, and the National Register of Historic Places. The building complex is not considered to meet any of the established criteria for historic significance. The hotel complex is one of many chain hotels in the Sacramento area and has played no significant role in the development of the city of Sacramento or the State of California. No persons of any level of historic significance are associated with the design or development of the property. None of the buildings are considered architecturally significant as they are standard examples of Modern motel architecture with no innovative or unusual characteristics. The buildings are not good examples of a type, style, or method of construction of Modern architecture. The buildings do not have the ability to convey any important information regarding their design, use, or
development of the subject property. Therefore, none of the buildings on the subject property are considered to be historically or architecturally significant at the local, state or federal levels.

A Department of Parks and Recreation (DPR) Primary form for the buildings is provided below.
SECTION 4: SUMMARY AND RECOMMENDATIONS

4.1 - Summary

In accordance with CEQA regulations, HELIX assessed the effects of development for the project area. Results from the NCIC indicate that no prehistoric or historic period resources have been recorded within or adjacent to the project area. A letter was sent to the NAHC on July 24, 2015 and a follow up email was sent on August 18, requesting a search of the Sacred Lands files. As of this date, no response has been received.

Two field surveys and building evaluations were conducted for this project. The first survey was conducted in July and the second in November 2015. No pre-contact Native American sites or resources were found during the course of the surveys.

Because of the lack of ground surface visibility, the surveys focused on recording and photographing the seven buildings slated for demolition. All seven of the buildings were evaluated by HELIX Architectural Historian, Kathleen Crawford. Her evaluations concluded that none of the buildings are considered historically or architecturally significant at the local, state or federal levels.

4.2 - Recommendations

4.2.1 - Cultural Resources Recommendations

The project area consists of a hotel complex with seven buildings slated for demolition. There was no ground surface visibility as the area is covered by buildings, asphalt parking lots with sparse landscape elements. No prehistoric resources were discovered during the course of the pedestrian survey. In addition, the seven extant buildings were evaluated and are considered not to be historically or architecturally significant at the local, state or federal levels.

Based on the results of the record searches, pedestrian survey, and building evaluations, HELIX considers the project area to have low sensitivity for historical resources, and archaeological monitoring and/or other mitigation measures are not recommended. However, procedures for inadvertent discoveries of human remains and cultural resources are provided below.

4.3 - Inadvertent Discovery Procedures

4.3.1 - Accidental Discovery of Human Remains

There is always the possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains. Should this occur, Section 7050.5 of the California Health and Safety Code applies, and the following procedures shall be followed.
In the event of an accidental discovery or recognition of any human remains, Public Resource Code (PRC) Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98, or

2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project area in a location not subject to further subsurface disturbance:
   • The NAHC is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 48 hours after being notified by the commission;
   • The descendent identified fails to make a recommendation; or
   • The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

**4.3.2 - Accidental Discovery of Cultural Resources**

It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist and shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead
Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources.
SECTION 5: REFERENCES


Four buildings located in the western most portion of the Red Lion Inn property.

The first buildings on the Red Lion property (previously the Woodlake Inn) were constructed in the late 1950s and the four buildings being recorded here were constructed in the 1960s as part of the hotel’s expansion process. The three one-story buildings (Willow, Spruce, and Cypress) were constructed in rows, running east to west with hotel rooms along the north and south elevations of each building, and parking lots in between each structure. The two-story building (700 Building) was placed at the far end of the property and extends along the sides of the three one-story buildings and runs north to south with hotel rooms along the east elevation. All four buildings are used as hotel rooms for guests.

The three one-story buildings are similar in style and have concrete foundations, stucco exteriors and flat roofs. The front of the buildings on the east elevation contain an arched section that rises above the roofline. This section contains the name of the specific building. The area under the roof sections have a flat roof with faux vigas (a rough-hewn roof timber or rafter, especially on an adobe building). Square columns with square capitals support the roof sections. The space between the columns and wall is infilled with small bushes. The west elevation of each building is basically blank with column detailing. The buildings contain multiple hotel rooms placed in a single row along the north and south facades. Each unit has a single wood door flanked by metal framed, double hung sash style and fixed pane, rectangular shaped windows. The walkways along the elevations contain shed roofs which are supported by square columns with small square capitals. The parking spaces are located immediately outside the door of each unit for ease of parking. Small landscaped areas bracket the parking areas and the ends of the buildings. Additional trees are located along the parking areas for shade and greenery purposes.

The two-story building has a concrete foundation, stucco exterior, and a flat roof. The front of the building, the south elevation, contains a large arched parapet section which extends to the east, culminating in a two-story wing wall with a tall, arched opening. The section provides a screen for the metal staircase behind it. The section has a flat roof and a back wall with arched openings, as well as a screened portion on the east elevation. The section is supported by the same square columns as seen on the other buildings. The rooms extend along the east elevation of the building and include the same details as seen on the smaller buildings. The individual rooms have single wood door entrances which are flanked by metal framed, fixed pane and double hung sash style windows for each unit. The second floor units are accessed by the staircase at the south end of the building and a balcony with a metal railing extends along the length of the building. The roof extends out over the balcony area and is supported by square columns. Landscaping is present around the sides of the building.

The buildings appear to be in good condition with no major exterior alterations noted. However, the buildings are vernacular in style and do not appear to meet any of the criteria for listing on the National Register of Historic Places (NR), the California Register of Historical Resources (CR), or any local listings as there were not part of the original hotel complex.

**P3b. Resource Attributes:** (List attributes and codes) HP4 and HP5

**P4. Resources Present:** ✗Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)
P5a. Photo or Drawing: (Photo required for buildings, structures, and objects.)

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

Overview of Willow, Spruce, and Cypress Buildings; facing north. July 17, 2015. Building 700 photo on following page

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

Ca. 1960

P7. Owner and Address:

Unknown

P8. Recorded by: (Name, affiliation, and address)

Carrie D. Wills and Kathleen Crawford
HELIX Environmental, 11 Natoma Street, Folsom CA 95630

P9. Date Recorded: July 17, 2015

P10. Survey Type: (Describe)

Reconnaissance

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

*Attachments: □ NONE  □ Location Map □ Sketch Map □ Continuation Sheet □ Building, Structure, and Object Record □ Archaeological Record □ District Record □ Linear Feature Record □ Milling Station Record □ Rock Art Record □ Artifact Record □ Photograph Record □ Other (List):
Building 700; facing northwest. July 17, 2015
P1. Other Identifier:

*P2. Location: □ Not for Publication   ☑ Unrestricted

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*P2a. County: Sacramento

*P2b. USGS 7.5’ Quad: Sacramento East

Date: T 9N; R 5E; of Sec 29; M.D.B.M.

*P2c. Address: 500 Leisure Lane      City: Sacramento

Zip: 95815

*P2d. UTM: Zone: 10 ;   mE/   mN (G.P.S.)

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

Five buildings located in the central portion of the Red Lion Inn property.

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

Three buildings within the Red Lion Hotel complex that are slated for demolition are labeled Building F. The buildings are part of the larger Red Lion Hotel complex (originally named the Lakewood Inn). The first buildings on the property were constructed in the late 1950s and Building F buildings, were constructed in the early 1960s as part of the hotel’s expansion process. These three buildings are located at the central portion of the property and include five, one- and two-story story, rectangular shaped, Modern Spanish style, buildings.

**Building F**

Building F consists of three one-story story, Modern Spanish style, commercial hotel buildings which are placed in an L-shaped configuration in the central portion of the hotel property. The buildings vary in size but are basically rectangular shaped. The three buildings have concrete foundations, stucco exteriors, and flat roofs. The asymmetrical design, rectangular shaped buildings lack any significant exterior detail or ornamentation. The buildings have large blocks of blank wall space broken by delivery entrances or guest entrances. Vertical columns divide open bays along the side of the buildings. Windows are fixed pane, rectangular shaped windows. The buildings are in fair condition with no major alterations noted. The buildings are surrounded by access roads and drives, small parking areas, with small areas of minimal landscaping consisting of small bushes and trees.

The three buildings were assessed for potential historical and architectural significance for the local City of Sacramento historic register, State of California Register of Historical Resources, and the National Register of Historic Places. The building complex is not considered to meet any of the established criteria for significance. The hotel complex is one of many chain hotels in the Sacramento area and has played no significant role in the development of the city of Sacramento or the State of California. No persons of any level of historic significance are associated with the design or development of the property. None of the three buildings are considered architecturally significant as they are standard examples of Modern motel architecture with no innovative or unusual characteristics. The buildings are not good examples of a type, style, or method of construction of Modern architecture. The buildings do not have the ability to convey any important information regarding their design, use, or development of the subject property. Therefore, none of the buildings on the subject property are considered to be historically or architecturally significant at the local, state or federal levels.

*P3b. Resource Attributes: (List attributes and codes) HP4 and HP5

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

Ca. 1960

Unknown

Carrie D. Wills and Kathleen Crawford
HELIX Environmental, 11 Natoma Street, Folsom CA 95630

Reconnaissance

*P6. Date Constructed/Age and Sources:  ✓Historic

☐Prehistoric  ☐Both

*P7. Owner and Address:

*P8. Recorded by:  (Name, affiliation, and address)

*P9. Date Recorded:  July 17, 2015

*P10. Survey Type:  (Describe)

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

Phase I Cultural Resources Assessment
Woodlake Assisted Living and Memory Care Project
City of Sacramento, Sacramento County, California

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

Traffic Impact Study
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INTRODUCTION

Purpose
This report documents the results of a traffic assessment completed for the proposed Sacramento Self Storage development project (the “proposed project” or “project”), south of Leisure Lane in Sacramento, California.

The purpose of this study is to prepare a focused traffic access and queuing assessment of the proposed project on the adjacent transportation system, limited to consideration of Existing plus Proposed Project Conditions. More specifically, this study has been requested to assess project impacts to the adjacent intersections, and to assess project site access and circulation for the proposed mix of uses. This study was performed in accordance with the City of Sacramento’s Traffic Impact Guidelines\(^1\) and the 2035 General Plan policies.

Project Description
As detailed in the project description provided by the applicant\(^2\), the project proposes to subdivide the 14.47-acre project site, previously the location of the Red Lion Hotel, into four separate parcels. On one of these parcels, the applicant proposes to construct a 139,482-square foot (sf) self-storage facility on the sub-divided parcel located just west of the Exposition Boulevard intersection with Leisure Lane in Sacramento. As specified by the City, the entire project site is zoned as C-2-LI (General Commercial Labor-Intensive Overlay). Although a range of uses is permitted in C-2-LI zone, the project applicant envisions a mix of retail, residential, and/or hotel uses on the remaining parcels, including up to 170 units of Senior Apartments, a four to five story Hotel with up to 120 rooms, and approximately 50,000-sf of single story retail. The project location is shown in Figure 1. Access to the project site will be provided by two existing full-access driveways and two additional proposed full-access driveways, as depicted in Figure 2. The detailed project description is provided in Appendix A.

Study Area
The following intersections are included in this evaluation:

1. Leisure Lane/Slobe Avenue @ Canterbury Road/Expo Parkway
2. Leisure Lane @ Exposition Boulevard/SR-160 Eastbound Ramps
3. Leisure Lane @ Project Driveway #1 (Existing Plus Project Conditions Only)
4. Leisure Lane @ Project Driveway #2 (Existing Plus Project Conditions Only)
5. Expo Parkway @ Project Driveway #3 (Existing Plus Project Conditions Only)
6. Expo Parkway @ Project Driveway #4 (Existing Plus Project Conditions Only)

This traffic impact analysis was conducted for the above-listed study facilities for the following scenarios:

A. Existing (2018) Conditions
B. Existing (2018) plus Proposed Project Conditions

---

\(^1\) Traffic Impact Guidelines, City of Sacramento, February 1996 (updated with the adopted LOS policies of the Sacramento 2035 General Plan).

\(^2\) Sacramento Self Storage Project Description, provided by the applicant, March 14, 2018.
City of Sacramento, Sacramento Self Storage - Traffic Study

NOT TO SCALE

Project Vicinity Map

LEGEND
- Project Location
- Study Intersection
- Study Intersection (Project Driveway)

Figure 1

Kimley Horn
TENTATIVE PARCEL MAP
PARCEL 2 - BOOK 229 OF PARCEL MAPS - PAGE 10
SACRAMENTO SELF STORAGE
500 LEISURE LANE
SACRAMENTO, CA

PROJECT ADDRESS
500 LEISURE LANE
SACRAMENTO, CA

PROJECT APN
275-0260-070

OWNER
COLUMBIA WOODLAKE, LLC
1910 FAIRVIEW AVENUE, SUITE 200
SEATTLE, WA 98102
ATTN: ALEX WASHBURN

DEVELOPER/APPLICANT
COLUMBIA WOODLAKE, LLC
C/O LENITY ARCHITECTURE
3150 KETTLE CT. SE
SALEM, OR 98102
ATTN: GREG ELMORE

ENGINEER/SURVEYOR
TSD ENGINEERING, INC
785 ORCHARD DRIVE, SUITE 110
FOLSOM, CA 95630
ATTN: CASEY FEICKERT

EXISTING NUMBER OF LOTS
(1) ONE

PROPOSED NUMBER OF LOTS
(4) FOUR

EXISTING USE
GENERAL COMMERCIAL

PROPOSED USE
GENERAL COMMERCIAL

EXISTING ZONING
C-2-LI - GENERAL COMMERCIAL

PROPOSED ZONING
C-2-LI - GENERAL COMMERCIAL

PROJECT INFORMATION
PARK DISTRICT
CITY OF SACRAMENTO
SCHOOL DISTRICT
TWIN RIVERS UNIFIED SCHOOL DISTRICT
WATER
CITY OF SACRAMENTO WATER
SANITARY SEWER
SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT
STORM DRAIN
CITY OF SACRAMENTO UTILITIES
GAS
PG&E
ELECTRIC
SMUD
TELEPHONE
AT&T
CABLE
COMCAST
FIRE
CITY OF SACRAMENTO FIRE DISTRICT

UTILITY PROVIDERS
PARK DISTRICT
CITY OF SACRAMENTO
SCHOOL DISTRICT
TWIN RIVERS UNIFIED SCHOOL DISTRICT
WATER
CITY OF SACRAMENTO WATER
SANITARY SEWER
SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT
STORM DRAIN
CITY OF SACRAMENTO UTILITIES
GAS
PG&E
ELECTRIC
SMUD
TELEPHONE
AT&T
CABLE
COMCAST
FIRE
CITY OF SACRAMENTO FIRE DISTRICT

1. A DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND GRANT OF EASEMENTS GRANTING RECIPROCAL EASEMENTS FOR ACCESS, PARKING, DRAINAGE, SEWER, WATER AND UTILITIES WILL BE RECORDED.

2. TOPOGRAPHY COMPILED FROM FIELD SURVEY DATA ACQUIRED ON AUGUST, 2017.

3. EXACT PARCEL CONFIGURATION MAY VARY SLIGHTLY AT FINAL PARCEL MAP TO ACCOMMODATE REQUIRED BUILDING SETBACKS AND REFINEMENTS REQUIRED AS PART OF BUILDING DEVELOPMENT.

BASIS OF ELEVATION
THE ELEVATIONS SHOWN HEREON ARE BASED UPON CITY OF SACRAMENTO BENCHMARK NO. 294-J1B, HAVING AN ELEVATION OF 41.74 FEET (NGVD29), BEING A HILTI NAIL IN THE NORTHEAST CORNER OF THE BRIDGE ON TRIBUTE ROAD OVER HIGHWAY 160 AT FEE DRIVE.

BASIS OF BEARING
THE BASIS OF BEARINGS FOR THIS SURVEY IS IDENTICAL WITH THE CENTERLINE OF EXPO PARKWAY, AS SHOWN ON THE PLAT OF "WOODLAKE BUSINESS PARK", FILED IN BOOK 245 OF MAPS, MAP NO. 7, SACRAMENTO COUNTY RECORDS, BASED UPON FOUND MONUMENTS SHOWN HEREON.

NOTES
1. DESCRIPTIONS OF PROPERTY COOKED FROM THE SACRAMENTO COUNTY RECORDER'S OFFICE TO SUBDUCE ANY OWNER INTERESTS; THIS SURVEY IS PURPORTED TO SHOW THE TRUE AND ACCURATE LOCATION OF THE PROPERTY ASashi
2. TOPOGRAPHY COMPILED FROM FIELD SURVEY DATA ACQUIRED ON AUGUST, 2017.
3. FLOOD ZONE "X" (AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 0.1% ANNUAL CHANCE OF FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITHIN DRAINAGE AREA LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD) PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, MAP NO. 06067C0177H, DATED AUGUST 16, 2012.

PARCEL 1
198,598 SF / 4.56 AC

PARCEL 2
198,182 SF / 4.55 AC

PARCEL 3
123,773 SF / 2.84 AC

PARCEL 4
109,677 SF / 2.52 AC

18 PARKING STALLS

PARCEL 2 ±4.55 AC (198,182 SF)

PARCEL 1 ±4.56 AC (198,598 SF)

PARCEL 4 ±2.52 AC (109,677 SF)

PARCEL 3 ±2.84 AC (123,773 SF)

LEGEND
○ Project Driveway

City of Sacramento, Sacramento Self Storage - Traffic Study

Figure 2
Project Site Plan
ENVIRONMENTAL SETTING

Project Area Roadways
The following are descriptions of the primary roadways near the project site.

Leisure Lane is an east-west collector roadway bordering the northern edge of the project site. Leisure Lane connects the commercial uses west of the site with SR-160 and Exposition Boulevard. Along the project frontage, Leisure Lane has one lane in each direction, and there are currently no bicycle facilities.

Expo Parkway is an east-west collector roadway bordering the southern edge of the project site. Expo Parkway connects to Exposition Boulevard southeast of the project site. Expo Parkway becomes Canterbury Road after the intersection with Leisure Lane and connects to SR-160 northwest of the project site. Expo Parkway has one lane in each direction along the project frontage. There are currently no bicycle facilities on Expo Parkway. However, sidewalks are present along the proposed project frontage.

Public Transit System
Sacramento Regional Transit District (RT) provides transit service in the greater Sacramento metropolitan area. The project is not directly adjacent to any public transit routes. The nearest transit stop is located on Exposition Boulevard approximately a mile away from the project site. The stop is served by RT Routes 67 and 68. In addition, the peak-hour service provided by Route 29 travels along SR 160, just north of the project site. Figure 3 depicts the transit routes within the project vicinity.

Existing/Planned Bicycle and Pedestrian Facilities
There are currently no on-street bicycle facilities directly adjacent to the project location. There is a connection to the Jedediah Smith Memorial Trail along Expo Parkway, located less than a quarter mile west of the project site. Jedediah Smith Memorial Trail is a Class I bike path, running for 32 miles along the American River. There are Class II Bicycle Lanes located along Exposition Boulevard. In addition, according to the City’s Bicycle Master Plan, shown in Figure 4, on-street bicycle facilities are proposed on Leisure Lane.

There are currently sidewalks and streetlights along the southern edge of the project. According to the site plan, the segment of sidewalk along the northeastern edge of the project will be extended along the northern project frontage. There are crosswalks present at the intersections of Leisure Lane and Exposition Boulevard and Exposition Boulevard and Expo Parkway. Existing and proposed pedestrian facilities are contained in the City’s Pedestrian Master Plan.

Existing Intersection Geometry
Figure 5 illustrates the study facilities, existing traffic control, and existing lane configurations.

---

5 Bicycle Master Plan, City of Sacramento. August 2016.
6 Pedestrian Master Plan, City of Sacramento Department of Transportation, September 2006.
Figure 3
Sacramento RT Transit System Map

LEGEND

- **Project Location**
- **RT Routes**
  - Route 67 & 68
  - Route 29

Figure 5
Study Intersections, Traffic Control, and Lane Geometries
Existing Traffic Volumes

New weekday AM and PM peak-period turning movement traffic counts were conducted on March 21, 2018, at the existing study intersections. These counts were conducted between the hours of 7:00 a.m. and 9:00 a.m. and 4:00 p.m. and 6:00 p.m. In addition, there is an approved nursing home currently under construction immediately to the west of the project site. The number of trips anticipated to be generated by the nursing home were approximated using data included in the *Trip Generation Manual, 10th Edition*, published by the Institute of Transportation Engineers (ITE), shown in Table 1. These trips were added to the existing counts described above to reflect expected conditions in the immediate future. Existing (2018) peak-hour turning movement volumes are presented in Figure 6, and the traffic count data sheets are provided in Appendix B.

<table>
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<tr>
<th>Land Use</th>
<th>Size (KSF)</th>
<th>Daily Trips</th>
<th>AM Peak Hour</th>
<th>PM Peak Hour</th>
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<td></td>
<td></td>
<td>Total Trips</td>
<td>IN Trips</td>
</tr>
<tr>
<td>Approved Project</td>
<td></td>
<td></td>
<td>214</td>
<td>18</td>
</tr>
<tr>
<td>Nursing Home (620)</td>
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<td>214</td>
<td>18</td>
<td>14</td>
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<td>New Project Trips</td>
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<td>18</td>
<td>14</td>
<td>4</td>
</tr>
</tbody>
</table>


REGULATORY SETTING

Methodology

A field review was completed of the immediate project vicinity and study facilities to observe existing operations and lane configurations, vehicle storage lengths, existing traffic control, speed limits, lane utilization, adjacent land uses, and other readily apparently features for the study facilities that were deemed to be relevant to the study. Weekday peak-hour conditions are used as the time period during which to assess the transportation facilities’ operations both existing, and with the addition of project traffic volumes.

Analysis of transportation facility significant environmental impacts is based on the concept of Level of Service (LOS). The LOS of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity.

City of Sacramento

On March 3, 2015, the City of Sacramento City Council adopted the 2035 General Plan. The Mobility Element of the City of Sacramento’s 2035 General Plan outlines goals and policies that coordinate the transportation and circulation system with planned land uses. The following LOS policy is relevant to this study:

*Policy M 1.2.2* The City shall implement a flexible context-sensitive Level of Service (LOS) standard, and will measure traffic operations against the vehicle LOS thresholds established in this policy. The City will measure vehicle LOS based on the methodology contained in the latest version of the Highway Capacity Manual (HCM) published by the Transportation Research Board. The City’s specific vehicle LOS thresholds have been defined based on community values with respect to modal priorities, land use context, economic development, and environmental resources and constraints. As such, the City has established variable LOS thresholds appropriate for the unique characteristics of the City’s diverse neighborhoods and communities. The City will strive to operate the roadway network at LOS D or better for vehicles during typical weekday
conditions including AM and PM peak hour with certain exceptions mapped on Figure M1 (and listed in the General Plan document).

A. Core Area (Central City Community Plan Area) – LOS F allowed
B. Priority Investment Areas – LOS F allowed
C. LOS E Roadways (11 distinct segments listed). LOS E is also allowed on all roadway segments and associated intersections located within ½ mile walking distance of light rail stations.
D. LOS F roadways (24 distinct segments listed)
E. If maintaining the above LOS standards would, in the City’s judgment, be infeasible and/or conflict with the achievement of other goals, LOS E or F conditions may be accepted provided that provisions are made to improve the overall system, promote non-vehicular transportation and/or implement vehicle trip reduction measures as part of a development project or a city-initiated project. Additionally, the City shall not expand the physical capacity of the planned roadway network to accommodate a project beyond that identified in Figure M4 and M4a (2035 General Plan Roadway Classification and Lanes).

In accordance with General Plan Policy M 1.2.2, LOS D is considered acceptable for this study.
Figure 6
Existing (2018) Peak-Hour Traffic Volumes

NOT TO SCALE
Intersection Analysis
Levels of Service for this study were determined using methods defined in the *Highway Capacity Manual, 2010* (HCM) and appropriate traffic analysis software. The HCM includes procedures for analyzing side-street stop controlled (SSSC), all-way stop controlled (AWSC), and signalized intersections. The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement. *Table 2* presents intersection LOS definitions as defined in the HCM.

*Table 2 – Intersection Level of Service Criteria*

<table>
<thead>
<tr>
<th>Level of Service (LOS)</th>
<th>Unsignalized</th>
<th>Signalized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Control Delay (sec/veh)</td>
<td>Control Delay per Vehicle (sec/veh)</td>
</tr>
<tr>
<td>A</td>
<td>≤ 10</td>
<td>≤ 10</td>
</tr>
<tr>
<td>B</td>
<td>&gt; 10 – 15</td>
<td>&gt; 10 – 20</td>
</tr>
<tr>
<td>C</td>
<td>&gt; 15 – 25</td>
<td>&gt; 20 – 35</td>
</tr>
<tr>
<td>D</td>
<td>&gt; 25 – 35</td>
<td>&gt; 35 – 55</td>
</tr>
<tr>
<td>E</td>
<td>&gt; 35 – 50</td>
<td>&gt; 55 – 80</td>
</tr>
<tr>
<td>F</td>
<td>&gt; 50</td>
<td>&gt; 80</td>
</tr>
</tbody>
</table>

*Source: Highway Capacity Manual, 2010*

*Note:* SSSC delay is based on the worst approach movement.

As previously discussed, the purpose of this study is to prepare a focused traffic evaluation of the effect of the proposed project on the surrounding transportation system, limited to consideration of Existing (2018) and Existing (2018) plus Proposed Project Conditions. The cumulative impacts on roadway segments, transit, bicycle facilities, pedestrian circulation, and parking from planned 2035 General Plan development were identified and analyzed in the 2035 General Plan Master EIR. Because the proposed project is consistent with the 2035 General Plan, this study only reviews such issues on a project-specific basis only (no cumulative conditions analyses).

Results of Existing Conditions Analysis
*Table 3* presents the peak-hour intersection operating conditions for this analysis scenario. As indicated in *Table 3*, the intersections of Leisure Lane with Expo Parkway and Exposition Boulevard both operate at LOS C or better during the AM and PM peak-hours. Analysis worksheets for this scenario are provided in Appendix C.

*Table 3 – Existing (2018) Intersection Levels of Service*

<table>
<thead>
<tr>
<th>ID</th>
<th>Intersection</th>
<th>Control</th>
<th>Peak Hour</th>
<th>Existing (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>AM</td>
<td>11.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>14.4</td>
</tr>
<tr>
<td>2</td>
<td>Leisure Lane @ Exposition Boulevard/SR-160 Eastbound Ramps</td>
<td>Signal</td>
<td>AM</td>
<td>17.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>22.4</td>
</tr>
</tbody>
</table>
INTRODUCTION TO ANALYSIS

Project Land Use and Circulation

Land Use
As previously discussed and shown in Figure 2, the project proposes to subdivide the 14.47-acre project site, and construct a 139,482-sf self-storage facility on Parcel 4. The remaining three parcels will feature a mix of retail, residential, and/or hotel uses, including 150 to 170 units of Senior Apartments, a four to five story Hotel with 100-120 rooms, and approximately 50,000-sf of single story retail.

Access
The project site is located west of Exposition Boulevard. Leisure Lane and Expo Parkway are located along the northern and southern project frontages, respectively. Access to the project site is proposed along Leisure Lane via an existing, full-access driveway, and a proposed full-access driveway. Along Expo Parkway, access to the site will be provided by an existing, shared, full-access driveway and a proposed full-access driveway located between Parcel 1 and Parcel 3. The driveway locations are highlighted in Figure 2.

Trip Generation
The number of trips anticipated to be generated by proposed projects were approximated using data included in the *Trip Generation Manual, 10th Edition*, published by the Institute of Transportation Engineers (ITE). ITE Land Use Code 151 (Mini Warehouse) was used to represent the 139,482-sf of self-storage facility. ITE Lane Use Codes 252 (Senior Housing-Attached), 310 (Hotel), and 820 (Shopping Center) were used to represent the senior apartments, hotel, and retail uses, respectively.

Internal capture between senior apartments, hotel, and retail uses was calculated using the National Cooperative Highway Research Program (NCHRP) Report 684, Enhancing Internal Trip Capture Estimation for Mixed-Use Developments, 2011. This is the methodology recommended by the *ITE Trip Generation Handbook, 3rd Edition*, pass-by reductions of 16-percent for Daily and AM peak-hour trips, and 34-percent for PM peak-hour trips, were incorporated to account for the proportion of retail (Shopping Center) trips that are understood to already be on the adjacent roadway network. The trips generated by this mix of uses is presented in Table 4.

As shown in Table 4, the proposed project is estimated to generate 4,546 net new daily trips, with 247 and 297 trips occurring during the AM and PM peak-hours, respectively. As shown in Table 5, the previous use of the site is estimated to have included 3,028 daily trips, with 148 and 203 trips occurring during the AM and PM peak-hours respectively. For the purposes of this analysis, no trip generation credit is given for the previous hotel use.
### Table 4 – Proposed Project Trip Generation

<table>
<thead>
<tr>
<th>Land Use (ITE Code)</th>
<th>Size</th>
<th>Daily Trips</th>
<th>AM Peak Hour</th>
<th>PM Peak Hour</th>
<th>Subtotal Trips</th>
<th>Net New Project Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>% Trips</td>
<td>% Trips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed Project</td>
<td></td>
<td></td>
<td>IN</td>
<td>OUT</td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>Mini Warehouse (151)</td>
<td>139.482 KSF</td>
<td>212</td>
<td>14</td>
<td>60%</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>Senior Housing - Attached (252)</td>
<td>170 Units</td>
<td>660</td>
<td>34</td>
<td>35%</td>
<td>12</td>
<td>65%</td>
</tr>
<tr>
<td>Hotel (310)</td>
<td>120 Rooms</td>
<td>928</td>
<td>55</td>
<td>59%</td>
<td>32</td>
<td>41%</td>
</tr>
<tr>
<td>Shopping Center (820)</td>
<td>50 KSF</td>
<td>3754</td>
<td>177</td>
<td>62%</td>
<td>110</td>
<td>38%</td>
</tr>
</tbody>
</table>

| Subtotal Trips | 5,554     | 280         | 162 | 118 | 456 | 224 | 232 |

**Senior Housing**
- Internal Reduction:
  - AM (Enter 0%, Exit 0%)
  - PM (Enter 46%, Exit 47%)

**Hotel Internal Reduction**
- AM (Enter 0%, Exit 13%)
- PM (Enter 21%, Exit 10%)

**Shopping Center Internal Reduction**
- AM (Enter 3%, Exit 0%)
- PM (Enter 7%, Exit 10%)

**Shopping Center Pass-by Trip Reduction**
- Daily and AM Peak-Hour (16%)
- PM Peak-hour (34%)

**Source:** Trip Generation Manual, 10th Edition, ITE

*Trip Generation Handbook, 3rd Edition, ITE*

### Table 5 – Previous Hotel Use Trip Generation

<table>
<thead>
<tr>
<th>Land Use (ITE Code)</th>
<th>Size</th>
<th>Daily Trips</th>
<th>AM Peak Hour</th>
<th>PM Peak Hour</th>
<th>Net New Project Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>% Trips</td>
<td>% Trips</td>
<td></td>
</tr>
<tr>
<td>Previous Hotel Use</td>
<td></td>
<td></td>
<td>IN</td>
<td>OUT</td>
<td>IN</td>
</tr>
<tr>
<td>Hotel (310)</td>
<td>306 Rooms</td>
<td>3028</td>
<td>148</td>
<td>59%</td>
<td>87</td>
</tr>
</tbody>
</table>

**Source:** Trip Generation Manual, 10th Edition, ITE

### Trip Distribution

Project traffic distribution was developed using knowledge of existing traffic patterns and engineering judgement. The proposed project trip distribution percentages and trip assignment are illustrated Figure 7 and Figure 8, respectively.
Figure 8
Proposed Project Trip Assignment
IMPACTS AND MITIGATION

Method of Analysis
Peak-hour traffic associated with the proposed project was added to the existing traffic volumes. Impacts were determined by comparing traffic operating conditions associated with the project scenario to traffic operating conditions without the project.

Thresholds of Significance
In accordance with CEQA, the effects of a project are evaluated to determine if they will result in significant, adverse impacts on the environment. For purposes of this analysis, an impact is considered significant if implementation of the project would have the effects described below. The standards of significance in this analysis are based upon current practice of the City of Sacramento. Standards defined in the City’s Traffic Impact Analysis Guidelines have been applied.

Intersections
Impacts to the roadway system are considered significant if:
- The traffic generated by the project degrades LOS from acceptable (without the project) to unacceptable (with the project); or
- The LOS (without project) is already (or projected to be) unacceptable and project generated traffic increases the average vehicle delay by 5 seconds or more.

Transit
Impacts to the transit system are considered significant if the proposed project would:
- Adversely affect public transit operations; or,
- Fail to adequately provide access to transit.

Bicycle Facilities
Impacts to bicycle facilities are considered significant if the proposed project would:
- Adversely affect existing or planned bicycle facilities; or,
- Fail to adequately provide for access by bicycle.

Pedestrian Circulation
Impacts to pedestrian circulation are considered significant if the proposed project would:
- Adversely affect existing or planned pedestrian facilities; or,
- Fail to adequately provide for access by pedestrians.

Construction-Related Traffic Impacts
The project would have a temporarily significant impact during construction if it would:
- Degrade an intersection or roadway to an unacceptable level of service;
- Cause inconveniences to motorists due to prolonged road closures; or,
- Result in increased frequency of potential conflicts between vehicles, pedestrians, and bicyclists.

Traffic Volumes & Intersection Geometry
Figure 9 provides the AM and PM peak-hour traffic volumes at the study intersections for the Existing (2018) plus Proposed Project conditions. There are no changes to traffic controls or lane geometry at the study intersections.
Figure 9
Existing (2018) plus Proposed Project Peak-Hour Traffic Volumes

NOT TO SCALE

LEGEND
- Study Intersection
- Study Intersection (Project Driveway)
- Signalized Study Intersection
- Stop Controlled Approach
- AM (PM) Peak-hour
- Turning Movement Volumes

City of Sacramento, Sacramento Self Storage - Traffic Study
Intersection Operations
As indicated in Table 6, the study intersections operate between LOS A and C with the addition of proposed project traffic during the AM and PM peak-hours. Analysis worksheets for this scenario are provided in Appendix D.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leisure Lane/Slobe Avenue @ Canterbury Road/Expo Parkway</td>
<td>AWSC</td>
<td>AM</td>
<td>11.4 B</td>
<td>12.2 B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>14.4 B</td>
<td>14.2 B</td>
</tr>
<tr>
<td>2</td>
<td>Leisure Lane @ Exposition Boulevard/SR-160 Eastbound Ramps</td>
<td>Signal</td>
<td>AM</td>
<td>17.3 B</td>
<td>17.9 B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>22.4 C</td>
<td>23.3 C</td>
</tr>
</tbody>
</table>

Note: SSSC intersections are reported with the overall intersection delay followed by the worst movement's delay. The LOS results are reported with the overall intersection LOS followed by the worst movement's LOS.

Project-Specific Impacts and Mitigation Measures

Impact 1: Intersections
With the addition of the project, all study intersections function at LOS C, or better. Therefore, the project would not result in significant impacts at the study intersections.

Mitigation: No mitigation is required.

Impact 2: Transit System
The project would not adversely affect existing or planned transit operations. The project would not add noticeable transit demand. Any additional demand is anticipated to be adequately accommodated by the existing/planned transit system. The impacts of the project are considered to be less than significant. Accordingly, no mitigation is required.

Mitigation: No mitigation is required.

Impact 3: Bicycle Facilities and Pedestrian Circulation
As previously discussed, there are some existing and planned bicycle facilities in the vicinity of the project site. While the project will not result in removal of any existing or planned pedestrian facility or bikeway/bike lane, the project will add pedestrian and bicycle demand within the project site and nearby vicinity. The project will include pedestrian access to the project site via the Leisure Lane and Expo Parkway frontages. The impacts of the project are considered to be less than significant. Accordingly, no mitigation is required.

Mitigation: No mitigation is required.
Impact 4: Construction-Related Traffic
Construction-related activity may potentially disrupt the existing transportation network in the surrounding project area. Possible temporary lane closures, street closures, sidewalk closures, and bikeway closures may impact pedestrian, bicycle, and transit accessibility. Heavy vehicles will access the site and may need to be staged for construction. As a result of these activities, existing roadway operation conditions may be degraded.

The City Code (City Code 12.20.030) requires that a construction traffic control plan is prepared and approved prior to the beginning of project construction, to the satisfaction of the City Traffic Engineer and subject to review by all affected agencies. All work performed during construction must conform to the conditions and requirements of the approved plan. The plan shall ensure that safe and efficient movement of traffic through the construction work zone(s) is maintained. At a minimum, the plan shall include the following:

- Time and day of street closures
- Proper advance warning and posted signage regarding street closures
- Provision of driveway access plan to ensure safe vehicular, pedestrian, and bicycle movements
- Safe and efficient access routes for emergency vehicles
- Provisions for pedestrian safety
- Use of manual traffic control when necessary
- Number of anticipated truck trips, and time of day of arrival and departure of trucks
- Provision of a truck circulation pattern and staging area with a limitation on the number of trucks that can be waiting and any limitations on the size and type of trucks appropriate for the surrounding transportation network

The plan must be available at the site for inspection by the City representative during all work. With the implementation of the traffic control plan, local roadways and freeway facilities will continue to operate at acceptable operating conditions and the impact of the project would be less than significant.

Mitigation: No mitigation is required.

PROJECT ON-SITE OPERATIONS AND ACCESS EVALUATION

On-Site Operations
Based on the project’s site plan depicted in Figure 2, the proposed self-storage portion of the project has a single drive aisle that extends from project driveway #1. While the single drive aisle is anticipated to serve two-way circulation, the low volume of trips and width of the drive aisle is anticipated to provide adequate on-site circulation. While there is no plan currently for on-site parking and pedestrian access for Parcel 1, Parcel 2, and Parcel 3, they are anticipated to be served by three full-access driveways. The future parking and pedestrian access within these parcels should be installed in a manner consistent with the City of Sacramento standards and the requirements of the California Manual on Uniform Traffic Control Devices (CMUTCD), 2014 Edition (Revision 3, March 9, 2018).

Project Access
The following is a discussion of each of the project’s access driveway intersections. Please note that all signing and striping necessary to accomplish the access conditions described below should be installed in a manner consistent with City of Sacramento standards and the requirements of the California Manual on Uniform Traffic Control Devices (CMUTCD), 2014 Edition (Revision 3, March 9, 2018).
Due to the fact that a detailed site plan for the vacant parcels has not been provided, it is recommended that a minimum throat depth of 50-feet for Driveway #1 (Intersection #3), Driveway #2 (Intersection #4), and Driveway #3 (Intersection #5) until such time that a detailed site plan is provided for the vacant parcels. The minimum required throat depth (MRTD) was calculated for shared driveway (Intersection #6) under Existing (2018) plus Proposed Project conditions. According to the site plan depicted in Figure 2, the future driveway would provide a throat depth of approximately 60-feet. During the PM peak-hour, when the proposed project trips are added to the existing volumes and the expected volumes related to the nursing home the required throat depth is calculated to be 50-feet. The existing throat depth is sufficient under these conditions.

**NON-CEQA EFFECTS**

**Vehicle Miles Traveled (VMT) Analysis**

This discussion of VMT is provided for informational purposes. Using the iteration of the SACOG SACMET TDM provided by the City, this analysis determined that the project is anticipated to result in an average trip length for all new project site trips of 5.31-miles, therefore equating to a total VMT per day of 24,140 (4546 daily trips x 5.31 miles/trip). Because project-level VMT calculations are different from the methodology typically incorporated in region-wide analyses, comparison of these VMT results to regional averages should only be considered in this context.

**Pedestrian Access and Circulation**

There are currently sidewalks present along both sides of Expo Parkway. However, there are no crosswalks west of the REI entrance driveway. Consideration should be given to appropriate crosswalk striping and control to improve pedestrian connections to the off-site amenities. The mid-block pedestrian crossing will need to be evaluated using the City’s Pedestrian Crossing Guidelines\(^7\). The project may be conditioned to construct the crossing, or pay a fair share contribution as deemed appropriate by the City guidelines.

**Vehicle Queuing at Intersections**

Off-site vehicle queuing was considered for the critical movements at the study intersections. The calculated vehicle queues were compared to actual vehicle storage/segment lengths. As presented in Table 7, the calculated vehicle queues are less than the available storage with the exception of the northbound left and westbound left movements at the Leisure Lane intersection with Exposition Boulevard/ SR-160 Eastbound Ramps (Intersection #2). The northbound left-turn and westbound left-turn queues exceed the available storage under Existing (2018) Conditions. The addition of the project increases both the northbound left-turn and westbound left-turn queues by less than one vehicle length. Ninety-five percent of the time during peak-hours, the vehicle queuing will be less than or equal to those reported.

Analysis sheets that include the anticipated vehicle queues are presented in Appendix C and Appendix D.

\(^7\) Pedestrian Crossing Guidelines, City of Sacramento. October 2014.
### Table 7 – Intersection Queuing Evaluation Results

<table>
<thead>
<tr>
<th>Intersection / Analysis Scenario</th>
<th>Movement</th>
<th>AM Peak-Hour</th>
<th>PM Peak-Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Available Storage (ft)</td>
<td>95th % Queue (ft)</td>
</tr>
<tr>
<td>#1 Leisure Lane/Slobe Avenue @ Canterbury Road/Expo Parkway</td>
<td>NBR</td>
<td>[\text{Existing (2018)}] 150</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>SBLTR</td>
<td>[\text{Existing (2018)}] -</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[\text{Existing (2018) plus Project}] 70</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WBTR</td>
<td>[\text{Existing (2018)}] -</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[\text{Existing (2018) plus Project}] 43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WBL</td>
<td>[\text{Existing (2018)}] 85</td>
<td>25</td>
</tr>
<tr>
<td>#2 Leisure Lane @ Exposition Boulevard/SR-160 Eastbound Ramps</td>
<td>NBL</td>
<td>[\text{Existing (2018)}] 210</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>SBLTR</td>
<td>[\text{Existing (2018)}] -</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>WBL</td>
<td>[\text{Existing (2018)}] 190</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>WBTR</td>
<td>[\text{Existing (2018)}] -</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[\text{Existing (2018) plus Project}] 46</td>
<td></td>
</tr>
<tr>
<td>#3 Leisure Lane @ Project Driveway #1</td>
<td>NBLR</td>
<td>[\text{Existing (2018)}] -</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>WBL</td>
<td>[\text{Existing (2018)}] -</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 7 – Intersection Queuing Evaluation Results (Continued)

<table>
<thead>
<tr>
<th>Intersection / Analysis Scenario</th>
<th>Movement</th>
<th>AM Peak-Hour</th>
<th>PM Peak-Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Available Storage (ft)</td>
<td>95th % Queue (ft)</td>
</tr>
<tr>
<td>#4 Leisure Lane @ Project Driveway #2</td>
<td>NBLR</td>
<td>Existing (2018)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Existing (2018) plus Project</td>
<td>25</td>
</tr>
<tr>
<td>#5 Expo Parkway @ Project Driveway #3</td>
<td>SBLR</td>
<td>Existing (2018)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Existing (2018) plus Project</td>
<td>0</td>
</tr>
<tr>
<td>#6 Expo Parkway @ Project Driveway #4</td>
<td>SBLR</td>
<td>Existing (2018)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Existing (2018) plus Project</td>
<td>25</td>
</tr>
</tbody>
</table>

Signal Warrant Analysis
A peak-hour traffic signal warrant evaluation was performed for the Leisure Lane/Slobe Avenue intersection with Canterbury Road/Expo Parkway (Intersection #1) according to the methodologies noted in Section 4C.04 of the CMUTCD. A signal warrant is not satisfied at this intersection during either the AM or the PM peak-hours for Existing (2018) plus Proposed Project Conditions. Analysis worksheets are included in Appendix E.

Deceleration Lanes
The project driveways are located along Leisure Lane and Expo Parkway, with posted speed limits of 20 mph and 30 mph, respectively. These are not arterial roadways and have travel speeds lower than 45 mph. Accordingly, deceleration lanes are not necessary for the project driveways given the traffic volumes and speeds.
SUMMARY OF RECOMMENDATIONS

Intersections
- All intersections operate under acceptable conditions during Existing (2018) plus Proposed Project Conditions.

Pedestrian Access and Circulation
- There are currently sidewalks present along both sides of Expo Parkway. However, there are no crosswalks west of the REI entrance driveway. Consideration should be given to appropriate crosswalk striping and control to improve pedestrian connections to the off-site amenities. The mid-block pedestrian crossing will need to be evaluated using the City’s Pedestrian Crossing Guidelines. The project may be conditioned to construct the crossing, or pay a fair share contribution as deemed appropriate by the City guidelines.

Project Access
- In absence of a more detailed site plan, the recommended throat depth for Project Driveways #1, #2 and #3 is 50-feet. The driveway throat depth will be reevaluated once the project site plans are available for the vacant parcels.
- The intersection of Expo Parkway and Project Driveway #4 has a throat depth of 60-feet and a minimum required throat depth of 50-feet.
- While a single drive aisle is anticipated to serve two-way circulation for the self-storage portion of the proposed project (Parcel 4), the low volume of trips and width of the drive aisle is anticipated to provide adequate on-site circulation. While there is no plan currently for on-site parking and pedestrian access for Parcel 1, Parcel 2, and Parcel 3, they are anticipated to be served by three full-access driveways. The future parking and pedestrian access within these parcels should be installed in a manner consistent with the City of Sacramento standards and the requirements of the California Manual on Uniform Traffic Control Devices (CMUTCD), 2014 Edition (Revision 3, March 9, 2018).
- All signing and striping should be installed in a manner consistent with City of Sacramento standards and the requirements of the California Manual on Uniform Traffic Control Devices (CMUTCD), 2014 Edition (Revision 3, March 9, 2018).

Signal Warrant
- According to the methodologies noted in Section 4C.04 of the CMUTCD, a signal warrant is not satisfied under Existing (2018) plus Project Conditions for the Leisure Lane/Slobe Avenue intersection with Canterbury Road/Expo Parkway (Intersection #1). The signal warrant spreadsheets are provided in Appendix E.
- The project applicant will be required to pay a fair share towards the signalization of the intersection of Leisure Lane and Canterbury Road (Intersection #1), based on the trips generated by the proposed project.
Appendix A

Project Description
Sacramento Self Storage
Project Description
March 14, 2018

Columbia Woodlake, LLC (Applicant) proposes to subdivide a 14.47-acre site southwest of the Leisure Lane/Exposition Boulevard intersection into four parcels and develop a 139,482 square foot (sf) self-storage facility on a 2.52-acre site (Parcel 1).

Project Location

The 14.47-acre site is located south of Highway 160 and Leisure Lane, east and north of Expo Parkway, and west of Exposition Boulevard in the City of Sacramento. The site is southwest of the Leisure Lane/Exposition Boulevard intersection. The site address is 500 Leisure Lane and the site consists of APN 275-0260-070.

Project Site

The project site is a portion of a larger 18-acre site formerly occupied by the Red Lion Hotel Woodlake and Conference Center that included 306 guest rooms and 50,000 square feet of conference facilities that could accommodate up to 2,000 people. In 2015, the Applicant acquired the hotel site and in late 2016 the hotel was closed. In February 2017, buildings on the site were demolished so that vacant buildings would not become a nuisance or public safety concern.

The site is currently vacant with scattered trees along the site perimeter.

Surrounding Land Uses

The site is in close proximity to the Johnston Business Park which includes various industrial and commercial business and Apria Health Care facility and a radiological facility to the southeast. Costco Wholesale store with an adjacent fueling station, REI, Quick Quack car wash and other commercial uses are southeast and east of the project site. A 99,487 square-foot assisted living and memory care facility with 113 resident suites (PL 15-041) is under construction on the 3.76-acre parcel immediately west of the site.
General Plan and Zoning

The site is designated as Suburban Center in the 2035 General Plan. The Suburban Center designation provides for predominantly nonresidential, lower-intensity single-use commercial development or horizontal and vertical mixed-use development that includes retail, service, office and/or residential uses. The density range is 15 to 36 units per acre and the floor area ratio ranges from 0.15 to 2.0.

The site is zoned General Commercial Labor Intensive Overlay (C-2-LI). Development in the Labor Intensive Overlay zone is subject to the requirements of the underlying C-2 zone.

In the Sacramento Zoning Code, the proposed self-storage use meets the definition of “mini-storage” which is described as a facility that offers individually secured units or surface space for the storage of goods, other than hazardous materials, for rental to the public, each of which is accessible only by the renter of the individual unit or space. Regulation of this use varies, depending on distance from a light rail station. In the C-2-LI zone, mini-storage uses are conditionally permitted with a conditional use permit.

Proposed Entitlements

The proposed project includes the following entitlements:

- Conditional Use Permit for the storage use
- Site Plan and Design Review for the storage use
- Tentative Parcel Map to subdivide 14.47 acres into four parcels

Self-Storage Use

The proposed project consists of a 139,482 square foot (sf) self-storage facility in two buildings on a 2.52-acre parcel in the northeast portion of the site. Building 1 would consist of a three-story, 135,690 sf storage building and Building 2 would be a one-story 3,792 sf unconditioned storage building.

<table>
<thead>
<tr>
<th></th>
<th>Building 1</th>
<th>Building 2</th>
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<tbody>
<tr>
<td>Building Size</td>
<td>135,690 sf</td>
<td>3,792 sf</td>
</tr>
<tr>
<td>Stories</td>
<td>3 story</td>
<td>1 story</td>
</tr>
<tr>
<td>Space</td>
<td>Conditioned space</td>
<td>Unconditioned space</td>
</tr>
<tr>
<td>Storage Units</td>
<td>Includes 12 units, accessed externally</td>
<td>Total of 12 units, all accessed externally</td>
</tr>
</tbody>
</table>
Access to the site will be available from a driveway extending from Leisure Lane. The site will be landscaped and include 18 parking spaces. The site is designed so that buildings will relate and connect to uses on adjacent parcels when they are developed. The storage units accessible from the outside of the buildings (drive-up units) are located between the buildings to minimize aesthetic impacts. The height of the three-story building is 41’6” and the lot coverage is 46.7%.

**Development Concept for Overall Site**

A Tentative Parcel Map is proposed to subdivide the 14.47-acre site into four parcels ranging in size from 2.52 to 4.56 acres. The proposed self-storage use is on Parcel 4.

<table>
<thead>
<tr>
<th>Parcel</th>
<th>Acreage</th>
<th>Uses</th>
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<tbody>
<tr>
<td>1</td>
<td>4.56 acres</td>
<td>See description below regarding potential development scenario.</td>
</tr>
<tr>
<td>2</td>
<td>4.55 acres</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2.84 acres</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2.52 acres</td>
<td>139,482 sf self-storage use</td>
</tr>
<tr>
<td></td>
<td>14.47 acres</td>
<td></td>
</tr>
</tbody>
</table>

Although a range of uses is permitted in the C-2LI zone, the Applicant’s vision for the site is to develop the parcels with the following mix of retail, residential and/or hotel uses listed below:

- Senior Apartments (three-story building, approximately 150-170 units)
- Hotel (100-120 room, 4-5 story, 70-80,000+ sf)
- Retail (single-story, 50,000+ sf, 0.4 – 0.5 FAR)
- Self-Storage (139,482 sf) (Parcel 4)

The types of uses envisioned for the site are significantly less intense than the maximum intensity permitted for the site under General Plan and zoning development standards. For instance, under General Plan development standards, a maximum of 257,004 square feet of retail uses could be constructed on Parcels 1, 2 and 3, assuming buildout at the maximum floor area ratio (FAR) of 2.0.

**Development Scenarios for Parcels 1, 2 and 3 (11.75 acres)**

<table>
<thead>
<tr>
<th>Uses</th>
<th>Under General Plan Development Standards</th>
<th>Proposed Development Concept</th>
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</thead>
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<tr>
<td></td>
<td>257,004 sf of Commercial Uses</td>
<td>Senior Apartments (150-170 units), Hotel (120 rooms, 4-5 story, 70-80,000 sf), Retail (single-story, 50,000 sf, 0.4 – 0.5 FAR)</td>
</tr>
<tr>
<td>Floor Area Ratio</td>
<td>2.0 (maximum)</td>
<td>Variable</td>
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</table>
The maximum FAR of 2.0 permitted under the General Plan is unachievable on the project site because vertical mixed use and multi-story retail uses are not proposed. In addition, the land area required to accommodate parking, landscaping, stormwater management and other improvement will further reduce the FAR. The estimated floor area ratio of between 0.4 and 0.5 is a more reasonable assumption for the type of retail uses envisioned.

Access for the parcels would be provided from existing and proposed driveways to Leisure Lane and Expo Parkway and would be shared among uses on the site, as shown in Figure 1.

It is anticipated that the environmental analysis, including the traffic analysis, will evaluate the land uses proposed above. If, in the future, uses other than those described above are proposed, additional environmental or traffic analyses may be required.

Neighborhood Outreach

A neighborhood meeting was held on August 24, 2017, to present information regarding the proposed project to neighbors and interested parties. Neighbors from the Woodlake Neighborhood Association, Woodlake Neighbors Transparency, and Del Paso Boulevard Partnership were invited and less than 10 people attended the meeting.
Figure 1
Conceptual Driveway Locations
Appendix B

Traffic Count Data Sheets
# Intersection Turning Movement Count

**Location:** Canterbury Road/Expo Parkway & Leisure Lane/Slobe Ave  
**City:** Sacramento  
**Control:** 4-Way Stop  
**Project ID:** 18-07098-001  
**Date:** 3/21/2018

## AM

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<tr>
<td>29.03% 62.90% 8.06% 0.00%</td>
<td>39.11% 19.93% 40.97% 0.00%</td>
<td>31.93% 60.24% 7.83% 0.00%</td>
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**PEAK HR:**  
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**PEAK VR:**  
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## PM

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**TOTAL VOLUMES:**  
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**APPROACH %:**  
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<th>WESTBOUND</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>4.08% 80.95% 14.97% 0.00%</td>
<td>48.88% 33.71% 17.42% 0.00%</td>
<td>27.99% 64.96% 6.84% 0.21%</td>
<td>10.78% 20.08% 69.13% 0.00%</td>
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**PEAK HR VOL:**  
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<th>TOTAL</th>
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<td>103 67 31 0</td>
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<td>22 43 213 0</td>
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**PEAK HR FACTOR:**  
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<tbody>
<tr>
<td>0.500 0.872 0.875 0.000</td>
<td>0.920 0.798 0.705 0.000</td>
<td>0.683 0.629 0.600 0.250</td>
<td>0.917 0.768 0.761 0.000</td>
<td>0.885</td>
</tr>
</tbody>
</table>
# Intersection Turning Movement Count

**Location:** Exposition Boulevard/CR-160 Eastbound Ramps & Leisure Lane  
**City:** Sacramento  
**Control:** Signalized  
**Project ID:** 18-07098-002  
**Date:** 3/21/2018

## National Data & Surveying Services

### AM

| Time  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 7:00 AM | 33 | 1 | 1 | 53 | 0 | 6 | 33 | 0 | 0 | 2 | 1 | 30 | 0 | 20 | 1 | 2 | 181 |
| 7:15 AM | 35 | 1 | 1 | 49 | 0 | 8 | 52 | 0 | 0 | 1 | 1 | 21 | 0 | 41 | 1 | 5 | 223 |
| 7:30 AM | 24 | 2 | 1 | 74 | 0 | 13 | 57 | 0 | 0 | 0 | 0 | 36 | 0 | 30 | 0 | 7 | 243 |
| 7:45 AM | 36 | 1 | 1 | 85 | 0 | 17 | 55 | 0 | 0 | 0 | 1 | 41 | 0 | 51 | 1 | 1 | 306 |

### PM

| Time  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 4:00 PM | 36 | 1 | 1 | 93 | 0 | 9 | 84 | 0 | 0 | 0 | 4 | 46 | 0 | 51 | 0 | 23 | 367 |
| 4:15 PM | 20 | 1 | 1 | 97 | 0 | 8 | 77 | 0 | 0 | 0 | 3 | 33 | 0 | 48 | 1 | 11 | 342 |
| 4:30 PM | 31 | 1 | 1 | 90 | 0 | 13 | 81 | 1 | 0 | 0 | 0 | 4 | 41 | 0 | 47 | 1 | 18 | 351 |
| 4:45 PM | 40 | 1 | 1 | 96 | 0 | 14 | 82 | 0 | 0 | 2 | 0 | 30 | 0 | 64 | 1 | 16 | 365 |

## Total

### AM

| Time  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 07:30 AM - 08:30 AM | 279 | 39 | 527 | 0 | 88 | 408 | 1 | 0 | 1 | 10 | 246 | 0 | 291 | 4 | 46 | 1940 |

### PM

| Time  | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 04:45 PM - 05:45 PM | 360 | 164 | 823 | 0 | 92 | 657 | 2 | 0 | 7 | 23 | 303 | 0 | 430 | 6 | 113 | 2980 |

## Approach %s

### AM

For Northbound:
- Total Volumes: 279
- Approach %s: 33.02%, 4.62%, 62.37%, 0.00%, 17.71%, 82.09%, 0.20%, 0.00%, 0.39%, 3.89%, 95.72%, 0.00%

For Southbound:
- Total Volumes: 293
- Approach %s: 26.73%, 12.18%, 61.10%, 0.00%, 12.25%, 87.48%, 0.27%, 0.00%, 2.10%, 6.91%, 90.99%, 0.00%

### PM

For Northbound:
- Total Volumes: 360
- Approach %s: 26.73%, 12.18%, 61.10%, 0.00%, 12.25%, 87.48%, 0.27%, 0.00%, 2.10%, 6.91%, 90.99%, 0.00%

For Southbound:
- Total Volumes: 164
- Approach %s: 26.73%, 12.18%, 61.10%, 0.00%, 12.25%, 87.48%, 0.27%, 0.00%, 2.10%, 6.91%, 90.99%, 0.00%

## Peak HR

### AM

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<td>286</td>
<td>295</td>
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## Peak HR Factors

### AM

- 07:30 AM: 0.820, 0.924, 0.834
- 07:45 AM: 0.713, 0.583, 0.853

### PM

- 04:45 PM: 0.820, 0.872, 0.903
- 05:00 PM: 0.824, 0.782, 0.862
Appendix C

Analysis Worksheets for Existing (2018) Conditions
### Intersection Delay

**Intersection Delay, s/veh**: 11.4

**Intersection LOS**: B

#### Movement

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#### Lane

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<th>EBLn2</th>
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<th>WBLn2</th>
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<td>Yes</td>
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### Lane Group Flow (vph)

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<th>NBT</th>
<th>NBR</th>
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### v/c Ratio

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### Control Delay

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### Queue Delay

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### Total Delay

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### Queue Length 50th (ft)

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### Queue Length 95th (ft)

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<tr>
<td>Queue Length 95th</td>
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### Internal Link Dist (ft)

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### Turn Bay Length (ft)

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### Base Capacity (vph)

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### Starvation Cap Reductn

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### Spillback Cap Reductn

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### Storage Cap Reductn

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### Reduced v/c Ratio

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**Intersection Summary**

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**Intersection Summary**

HCM 2010 Ctrl Delay | 17.3

HCM 2010 LOS | B

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HCM 2010 Signalized Intersection Summary

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Sacramento Self Storage

Existing Conditions

2: Exposition Boulevard & Leisure Lane

AM Peak-hour

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**Synchro 9 Report**

Page 3
### Intersection Delay, s/veh

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### Queue Lengths

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### Queue Lengths

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<th>NBR</th>
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<td>240</td>
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<td>87</td>
<td>474</td>
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<tr>
<td>Future Volume (veh/h)</td>
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<td>9</td>
<td>154</td>
<td>240</td>
<td>3</td>
<td>55</td>
<td>223</td>
<td>87</td>
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### Intersection Summary

- **HCM 2010 Ctrl Delay**: 22.4
- **HCM 2010 LOS**: C
Appendix D

Analysis Worksheets for Existing (2018) plus Proposed Project Conditions
### Intersection

<table>
<thead>
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<th>NBR</th>
<th>SBL</th>
<th>SBT</th>
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<td>Traffic Vol, veh/h</td>
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<td>5</td>
<td>42</td>
<td>123</td>
<td>94</td>
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<td>118</td>
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<td>110</td>
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<td>Future Vol, veh/h</td>
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<td>5</td>
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<td>94</td>
<td>19</td>
<td>58</td>
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### Approach

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### Lane

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<th>EBLn2</th>
<th>WBLn1</th>
<th>WBLn2</th>
<th>SBLn1</th>
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<td>90%</td>
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<td>57%</td>
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<td>10%</td>
<td>0%</td>
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<td>Stop</td>
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### Lane Group Flow (vph)

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### v/c Ratio

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### Total Delay

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### Queue Length 50th (ft)

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### Internal Link Dist (ft)

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### Turn Bay Length (ft)

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### Base Capacity (vph)

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<td>838</td>
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### Starvation Cap Reductn

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### Storage Cap Reductn

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### Reduced v/c Ratio

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<td>195</td>
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<td>195</td>
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<td>28</td>
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<td>633</td>
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<td>C</td>
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**Intersection Summary**

- HCM 2010 Ctrl Delay: 17.9
- HCM 2010 LOS: B
## Intersection

| Int Delay, s/veh | 2 |

## Movement

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<td>Future Vol, veh/h</td>
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<td>4</td>
<td>50</td>
<td>147</td>
<td>12</td>
<td>27</td>
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## Minor Lane/Major Mvmt

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| HCM Lane VIC Ratio | 0.057 | - | 0.039 | - |
| HCM Control Delay (s) | 10.1 | - | 7.7 | 0 |
| HCM Lane LOS | B | - | A | A |
| HCM 95th %tile Q(veh) | 0.2 | - | 0.1 | - |
### Intersection

| Int Delay, s/veh | 1.4 |

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# Sacramento Self Storage: Existing Plus Proposed Project

## 5: Expo Parkway & Driveway #3

### AM Peak-hour Synchro 9 Report

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HCM 2010 TWSC

Synchro 9 Report

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### Intersection

**Intersection Delay, s/veh**: 14.2

**Intersection LOS**: B

### Movement Lane Configurations

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### Intersection Summary

| HCM 2010 Ctrl Delay | 23.3 |
| HCM 2010 LOS | C |
### Intersection

| Int Delay, s/veh | 2.3 |

### Movement

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### Major/Minor

| Conflicting Flow All | 0 | 0 | 209 | 0 | 590 | 206 |
| Stage 1 | - | - | - | - | 206 | - |
| Stage 2 | - | - | - | - | 384 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1362 | - | 470 | 835 |
| Stage 1 | - | - | - | - | 829 | - |
| Stage 2 | - | - | - | - | 688 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1362 | - | 443 | 835 |
| Mov Cap-2 Maneuver | - | - | - | - | 443 | - |
| Stage 1 | - | - | - | - | 829 | - |
| Stage 2 | - | - | - | - | 649 | - |

### Approach

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### Minor Lane/Major Mvmt

<p>| Capacity (veh/h) | 658 | - | - | 1362 | - |
| HCM Lane VIC Ratio | 0.114 | - | - | 0.049 | - |
| HCM Control Delay (s) | 11.2 | - | - | 7.8 | 0 |
| HCM Lane LOS | B | - | A | A | |
| HCM 95th %tile Q(veh) | 0.4 | - | - | 0.2 | - |</p>
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| Int Delay, s/veh | 0.6 |

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## Major/Minor

| Conflicting Flow All | 193 | 0   | 0   | 335 | 190 |
| Stage 1              | -   | -   | -   | 190 | -   |
| Stage 2              | -   | -   | -   | 145 | -   |
| Critical Hdwy        | 4.12| -   | -   | 6.42| 6.22|
| Critical Hdwy Stg 1  | -   | -   | -   | 5.42| -   |
| Critical Hdwy Stg 2  | -   | -   | -   | 5.42| -   |
| Follow-up Hdwy       | 2.218| -   | -   | 3.518| 3.318|
| Pot Cap-1 Maneuver   | 1380| -   | -   | 660 | 852 |
| Stage 1              | -   | -   | -   | 842 | -   |
| Stage 2              | -   | -   | -   | 882 | -   |
| Platoon blocked, %   | -   | -   | -   | -   | -   |
| Mov Cap-1 Maneuver   | 1380| -   | -   | 656 | 852 |
| Mov Cap-2 Maneuver   | -   | -   | -   | 656 | -   |
| Stage 1              | -   | -   | -   | 842 | -   |
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<tr>
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## Minor Lane/Major Mvmt

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<tr>
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<td>-</td>
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### Intersection

Int Delay, s/veh 2.1

### Movement

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<tr>
<th>Lane Configurations</th>
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<th>EBT</th>
<th>EBR</th>
<th>WBL</th>
<th>WBT</th>
<th>WBR</th>
<th>NBL</th>
<th>NBT</th>
<th>NBR</th>
<th>SBL</th>
<th>SBT</th>
<th>SBR</th>
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<tr>
<td>Traffic Vol, veh/h</td>
<td>16</td>
<td>111</td>
<td>0</td>
<td>0</td>
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<td>Future Vol, veh/h</td>
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<td>44</td>
<td>0</td>
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<td>Conflicting Peds, #/hr</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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### Sign Control

- Free
- None
- Free
- None
- Stop
- Stop
- Stop
- Stop
- Stop
- Stop

### Storage Length

- -
- -
- -
- -
- -

### Veh in Median Storage, #

- 0
- 0
- 0
- 0
- 0
- 0

### Grade, %

- 0
- 0
- 0
- 0
- 0
- 0

### Peak Hour Factor

92 92 92 92 92 92 92 92 92 92 92 92

### Heavy Vehicles, %

2 2 2 2 2 2 2 2 2 2 2 2

### Mvmt Flow

17 121 0 0 168 46 0 0 0 48 0 18

### Major/Minor

#### Major1

<table>
<thead>
<tr>
<th>Conflicting Flow All</th>
<th>Major1</th>
<th>Major2</th>
<th>Minor1</th>
<th>Minor2</th>
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<td>Stage 2</td>
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<tr>
<td>Critical Hdwy</td>
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<td>Critical Hdwy Stg 2</td>
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<td>2.218</td>
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<td>1467</td>
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<td>Stage 1</td>
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<tr>
<td>Stage 2</td>
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<td>Platoon blocked, %</td>
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<td>Stage 2</td>
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#### Minor1

<table>
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<th>NB</th>
<th>SB</th>
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<td>HCM Control Delay, s</td>
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<td>0</td>
<td>0</td>
<td>11.1</td>
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<tr>
<td>HCM LOS</td>
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<td>B</td>
<td>A</td>
<td>B</td>
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### Capacity (veh/h)

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<tr>
<th>Minor Lane/Major Mvmt</th>
<th>NBLn1</th>
<th>EBL</th>
<th>EBT</th>
<th>EBR</th>
<th>WBL</th>
<th>WBT</th>
<th>WBR</th>
<th>SBLn1</th>
</tr>
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<tbody>
<tr>
<td>Capacity (veh/h)</td>
<td>-</td>
<td>1356</td>
<td>-</td>
<td>-</td>
<td>1467</td>
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<td>-</td>
<td>655</td>
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<td>HCM Lane VIC Ratio</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.101</td>
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<tr>
<td>HCM Control Delay (s)</td>
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<td>-</td>
<td>0</td>
<td>-</td>
<td>11.1</td>
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<tr>
<td>HCM Lane LOS</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>-</td>
<td>A</td>
<td>-</td>
<td>-</td>
<td>B</td>
</tr>
<tr>
<td>HCM 95th %tile Q(veh)</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Appendix E

Analysis Worksheets for Signal Warrants
Figure 4C-3. Warrant 3, Peak Hour

Legend:
- AM Volumes
- PM Volumes

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.
Appendix F

Mitigation Monitoring and Reporting Program
MITIGATION MONITORING AND REPORTING PROGRAM
SACRAMENTO STORAGE

Purpose of Mitigation Monitoring and Reporting Program: The California Environmental Quality Act (CEQA), Public Resources Code Section 21081.6, requires that a Mitigation Monitoring and Reporting Program (MMRP) be established upon completing findings. CEQA stipulates that “the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.”

This MMRP has been prepared in compliance with Section 21081.6 of CEQA to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during the construction and operation of the project, as required. A table (attached) has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation measures, monitoring/mitigation timing, the responsible person/agency for implementing the measure, and space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the Initial Study and Mitigated Negative Declaration.

The City of Sacramento is the lead agency for the project under CEQA and shall administer and implement the MMRP. The City is responsible for review of all monitoring reports, enforcement actions, and document disposition. The City shall rely on information provided by the project site observers/monitors (e.g., construction manager, project manager, biologist, archaeologist, etc.) as accurate and up-to-date and shall provide personnel to field check mitigation measure status, as required.
This page intentionally left blank.
<table>
<thead>
<tr>
<th>BIOLOGICAL RESOURCES</th>
<th>Monitoring / Mitigation Timing</th>
<th>Reporting / Responsible Party</th>
<th>Verification of Compliance</th>
</tr>
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<tr>
<td>BBIO-01: Avoid and minimize impacts to Swainson’s Hawk.</td>
<td>Prior to construction – this mitigation measure shall be included in all project conditions of approval and implemented 30 days prior to the start of construction activities.</td>
<td>City of Sacramento; Construction Contractor</td>
<td></td>
</tr>
</tbody>
</table>

If construction activities occur during the breeding season (between February 16 and August 31), the construction contractor shall retain a qualified biologist to conduct preconstruction surveys for Swainson’s hawk, nesting reptiles and migratory birds and to identify active nests on and within 0.25 mile of the demolition and construction site. The surveys shall be conducted no more than 30 days before the beginning of construction activities that could remove trees or otherwise disturb nesting reptiles. To the extent feasible, guidelines provided in Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in the Central Valley (Swainson’s Hawk Technical Advisory Committee 2000) will be followed. Preconstruction surveys for Swainson’s hawk, nesting raptor, and migratory birds are not required if construction activities occur outside of the breeding season (September 1 through February 15).

If active nests are found, the construction contractor shall establish appropriate buffers around the nests. The qualified biologist will determine an adequate buffer for the species and nest. No project activity shall commence within the buffer area until a qualified biologist confirms that any young have fledged and the nest is no longer active. Monitoring of the nest by a qualified biologist shall be required if the activity has the potential to adversely affect the nest. For Swainson’s hawk nests, CDFG guidelines (1994) recommend maintenance of 0.25 mile buffers around Swainson’s hawk nests in developed areas, but the size of the buffer may be adjusted if a qualified biologist, in consultation with CDFW, determines that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist will be required if the activity has potential to adversely affect the nest.

<table>
<thead>
<tr>
<th>CULTURAL RESOURCES</th>
<th>Monitoring / Mitigation Timing</th>
<th>Reporting / Responsible Party</th>
<th>Verification of Compliance</th>
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City of Sacramento Storage

MITIGATION MONITORING AND REPORTING PROGRAM CHECKLIST FOR THE SACRAMENTO STORAGE

SACRAMENTO STORAGE

MITIGATION MONITORING AND REPORTING PROGRAM

JULY 2018
**MM CUL-01: Cultural and Tribal Cultural resources sensitivity and awareness training program.**
The City shall require the applicant/contractor to provide a cultural and tribal cultural resources sensitivity and awareness training program for all personnel involved in project construction, including field consultants and construction workers. The training will be developed in coordination with interested culturally affiliated Native American Tribes. The training will be conducted in coordination with qualified cultural resources specialists. The City may invite Native American Representatives from interested culturally affiliated Native American Tribes to participate. The training shall be conducted before any construction activities begins on the project site. The program will include relevant information regarding sensitive tribal cultural resources and archaeological resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations.

The worker cultural resources sensitivity and awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and who to contact if any potential Tribal Cultural Resources or archaeological resources or artifacts are encountered.

The program will emphasize the requirement for confidentiality and culturally-appropriate treatment of any discovery of significance to Native Americans and will discuss appropriate behaviors and responsive actions, consistent with Native American Tribal values.

| MM CUL-02: Avoid and minimize impacts to previously unknown archaeological resources. |
| If archaeological resources, or tribal cultural resources, are |
| Prior to and during construction – this mitigation measure shall be included in all |
| City of Sacramento; Archeologist or Qualified Cultural Resource Monitor; |

This mitigation measure shall be implemented prior to construction or earthmoving activities. City of Sacramento; Archeologist or Qualified Cultural Resource Monitor; and Construction Contractor.
encountered 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 tribal cultural resources:

- Each resource will be evaluated for California Register of Historical Resources (CRHR) eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with consulting Native American Tribes.

If a tribal cultural resource is determined to be eligible for listing on the CRHR, the City will avoid damaging effects to the resource in accordance with California PRC Section 21084.3, if feasible. If the City determines that the project may cause a significant impact to a tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to the resource. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached:

i. Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

ii. Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.

iii. Rebury the resource in place.

iv. Protect the resource.
Avoidance and preservation in place is the preferred manner of mitigating impacts to tribal cultural resources and archaeological resources and will be accomplished, if feasible, by several alternative means, including:

• Planning construction to avoid tribal cultural resources, archaeological sites and/or other resources; incorporating sites within parks, green-space or other open space; covering archaeological sites; deeding a site to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity.

• Recommendations for avoidance of Tribal Cultural Resources and Native American archaeological sites will be reviewed by the City representative, interested culturally affiliated Native American Tribes and other appropriate agencies, in light of factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources or modification or realignment to avoid highly significant features within a cultural resource.

• Native American Representatives from interested culturally affiliated Native American Tribes will be allowed to review and comment on these analyses and shall have the opportunity to meet with the City representative and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

• If the discovered resource can be avoided, the construction contractor(s), will install protective fencing outside the site boundary, including a 100-foot buffer area, before construction restarts. The boundary of a Tribal Cultural Resource or a Native American archaeological site will be determined in consultation with interested culturally affiliated Native American Tribes and such Tribes will be invited to monitor the installation of fencing. Use of temporary and permanent forms of protective fencing will
be determined in consultation with Native American Representatives from interested culturally affiliated Native American Tribes.

- The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an "Environmentally Sensitive Area".
- Native American Representatives from interested culturally affiliated Native American Tribes and the City representative will also consult to develop measures for long term management of any discovered Tribal Cultural Resources. Consultation will be limited to actions consistent with the jurisdiction of the City and taking into account ownership of the subject property. To the extent that the City has jurisdiction, routine operation and maintenance within Tribal Cultural Resources retaining tribal cultural integrity shall be consistent with the avoidance and minimization standards identified in this mitigation measure.

To implement these avoidance and minimization standards, the following procedures shall be followed in the event of the discovery of a tribal cultural resource:

- If any tribal archaeological resources or Native American materials, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or Native American architectural remains or articulated or disarticulated human remains are discovered on the project site, work shall be suspended within 100 feet of the find (based on the apparent distribution of cultural resources), and the construction contractor shall immediately notify the project's City representative.
- The City shall coordinate the investigation of the find with a qualified (meeting the Secretary of the Interior’s Qualification Standards for Archaeology) archaeologist approved by the City and with one or more interested culturally affiliated Native American Tribes that respond to the City’s invitation. As part of the site investigation and resource assessment, the City and the archaeologist shall consult with interested culturally affiliated Native American Tribes to assess the significance of the find, make recommendations for further evaluation and treatment as necessary and provide proper management recommendations.
should potential impacts to the resources be determined by the City to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the City representative by the qualified archaeologist. These recommendations will be documented in the project record. For any recommendations made by interested culturally affiliated Native American Tribes which are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

- The City shall consider management recommendations for tribal cultural resources, including Native American archaeological resources, that are deemed appropriate, including resource avoidance or, where avoidance is infeasible in light of project design or layout or is unnecessary to avoid significant effects, preservation in place or other measures. The contractor shall implement any measures deemed by the City to be necessary and feasible to avoid or minimize significant impacts to the cultural resources. These measures may include inviting an interested culturally affiliated Native American Tribe to monitor ground-disturbing activities whenever work is occurring within 100 feet of the location of a discovered Tribal Cultural Resource or Native American archaeological site.
- If an adverse impact to tribal cultural resources, including Native American archaeological resources, occurs then consultation with interested culturally affiliated Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 shall occur, in order to identify mitigation for the impact.

**MM CUL-03: Implement Procedures in the Event of the Inadvertent Discovery of Native American Remains.**

If an inadvertent discovery of Native American human remains is made at any time during project-related construction activities or project planning, the City will implement the procedures listed above in Mitigation Measure 2. The following performance standards shall be met prior to implementing or continuing actions such as construction, that may result in damage to or destruction of human remains: In accordance with the California Health and Safety Code, if human remains are encountered during ground-disturbing activities, the City shall immediately halt potentially hazardous activities.

| Prior to and during construction – this mitigation measure shall be included in all construction documents for implementation during construction. | City of Sacramento; Archeologist and/or Qualified Cultural Resource Monitor; and Construction Contractor. |

**Sacramento Storage Mitigation Monitoring and Reporting Program**

July 2018
damaging excavation in the area of the burial and notify the Sacramento County Coroner and a professional archaeologist to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5(b)). If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (California Health and Safety Code Section 7050(c)). After the Coroner’s findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains. The responsibilities of the City for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

If the human remains are of historic age and are determined to be not of Native American origin, the City will follow the provisions of the California Health and Safety Code Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.

**MM CUL-04: Paleontological Resources**

Should paleontological resources be identified during any phase of project development, the construction manager shall cease operation at the site of the discovery and immediately notify the City of Sacramento Community Development Department. The project applicant shall retain a qualified paleontologist to provide an evaluation of the find and to prescribe mitigation measures to reduce impacts to a less than significant level. In considering any suggested mitigation proposed by the consulting paleontologist, the Community Development Department shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, land use assumptions, and other considerations. If avoidance is unnecessary or prior to and during construction – this mitigation measure shall be included in all construction documents for implementation during construction.

City of Sacramento; Archeologist and/or Construction Contractor.
infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.

<table>
<thead>
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<tbody>
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<td><strong>MM NOI-01: Operational Noise.</strong> Rooftops with HVAC units located within 107 feet of the adjacent assisted living and memory care facility shall include an architectural parapet to reduce noise levels. The parapet shall be constructed along the edges of the structures’ roofs. The parapet shall be at least one foot higher than the tallest rooftop equipment. No gaps or perforations shall be constructed in the parapet.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Noise</th>
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</thead>
<tbody>
<tr>
<td><strong>MM NOI-02: Subsequent Analysis</strong> Subsequent projects, which utilize this ISMND, shall submit a separate noise analysis demonstrating that the design, construction, and operation of the buildings would not exceed City thresholds as outlined in the City’s General Plan.</td>
</tr>
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</table>

<table>
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</thead>
<tbody>
<tr>
<td><strong>MM T-01: Fair Share Contribution.</strong> The project applicant shall pay a fair share contribution for impacts to bicycle and pedestrian access to the City of Sacramento, or construct equivalent improvements consistent with City standards.</td>
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</tbody>
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