

## Appendix C

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### Biological Resource Database Queries

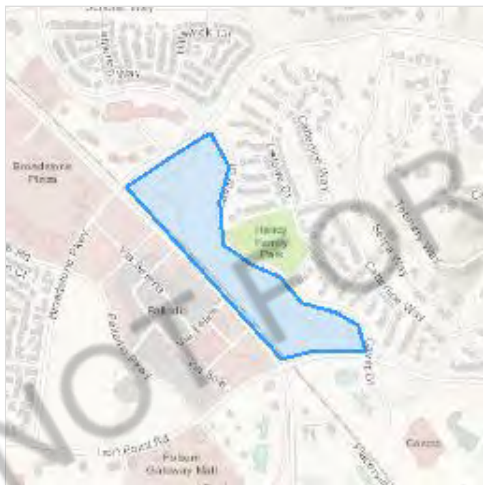
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Sacramento County, California



## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Reptiles

NAME

STATUS

Giant Garter Snake	Thamnophis gigas	Threatened
Wherever found		
No critical habitat has been designated for this species.		
<a href="https://ecos.fws.gov/ecp/species/4482">https://ecos.fws.gov/ecp/species/4482</a>		

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i>	Threatened
Wherever found	
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	
<a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	
California Tiger Salamander <i>Ambystoma californiense</i>	Threatened
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	
<a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	

## Fishes

NAME	STATUS
<b>Delta Smelt</b> <i>Hypomesus transpacificus</i>	Threatened
Wherever found	
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	
<a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	

## Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i>	Threatened
Wherever found	
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	
<a href="https://ecos.fws.gov/ecp/species/7850">https://ecos.fws.gov/ecp/species/7850</a>	

## Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi	Threatened
Wherever found	
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	
<a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	

Vernal Pool Tadpole Shrimp *Lepidurus packardii* Endangered  
 Wherever found  
 There is **final** critical habitat for this species. The location of the critical habitat is not available.  
<https://ecos.fws.gov/ecp/species/2246>

## Flowering Plants

NAME	STATUS
El Dorado Bedstraw <i>Galium californicum</i> ssp. <i>sierrae</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/5209">https://ecos.fws.gov/ecp/species/5209</a>	Endangered
Layne's Butterweed <i>Senecio layneae</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/4062">https://ecos.fws.gov/ecp/species/4062</a>	Threatened
Pine Hill Ceanothus <i>Ceanothus roderickii</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3293">https://ecos.fws.gov/ecp/species/3293</a>	Endangered
Pine Hill Flannelbush <i>Fremontodendron californicum</i> ssp. <i>decumbens</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/4818">https://ecos.fws.gov/ecp/species/4818</a>	Endangered
Stebbins' Morning-glory <i>Calystegia stebbinsii</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3991">https://ecos.fws.gov/ecp/species/3991</a>	Endangered

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A  
BREEDING SEASON IS INDICATED  
FOR A BIRD ON YOUR LIST, THE  
BIRD MAY BREED IN YOUR  
PROJECT AREA SOMETIME WITHIN  
THE TIMEFRAME SPECIFIED,  
WHICH IS A VERY LIBERAL  
ESTIMATE OF THE DATES INSIDE  
WHICH THE BIRD BREEDS  
ACROSS ITS ENTIRE RANGE.  
"BREEDS ELSEWHERE" INDICATES

**Bald Eagle** *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

**Burrowing Owl** *Athene cunicularia*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9737>

Breeds Mar 15 to Aug 31

**California Thrasher** *Toxostoma redivivum*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

**Clark's Grebe** *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Dec 31

**Common Yellowthroat** *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

**Golden Eagle** *Aquila chrysaetos*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Breeds Jan 1 to Aug 31

**Lawrence's Goldfinch** *Carduelis lawrencei*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

Breeds Mar 20 to Sep 20

**Lewis's Woodpecker** *Melanerpes lewis*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

Breeds Apr 20 to Sep 30

**Marbled Godwit** *Limosa fedoa*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

Breeds elsewhere

**Nuttall's Woodpecker** *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

**Oak Titmouse** *Baeolophus inornatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

Breeds Mar 15 to Jul 15

**Rufous Hummingbird** *selasphorus rufus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Breeds elsewhere

**Song Sparrow** *Melospiza melodia*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Feb 20 to Sep 5

**Spotted Towhee** *Pipilo maculatus clementae*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/4243>

Breeds Apr 15 to Jul 20

**Tricolored Blackbird** *Agelaius tricolor*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

Breeds Mar 15 to Aug 10

**Wrentit** *Chamaea fasciata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 10

**Yellow-billed Magpie** *Pica nuttalli*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9726>

Breeds Apr 1 to Jul 31

## Probability of Presence Summary



The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

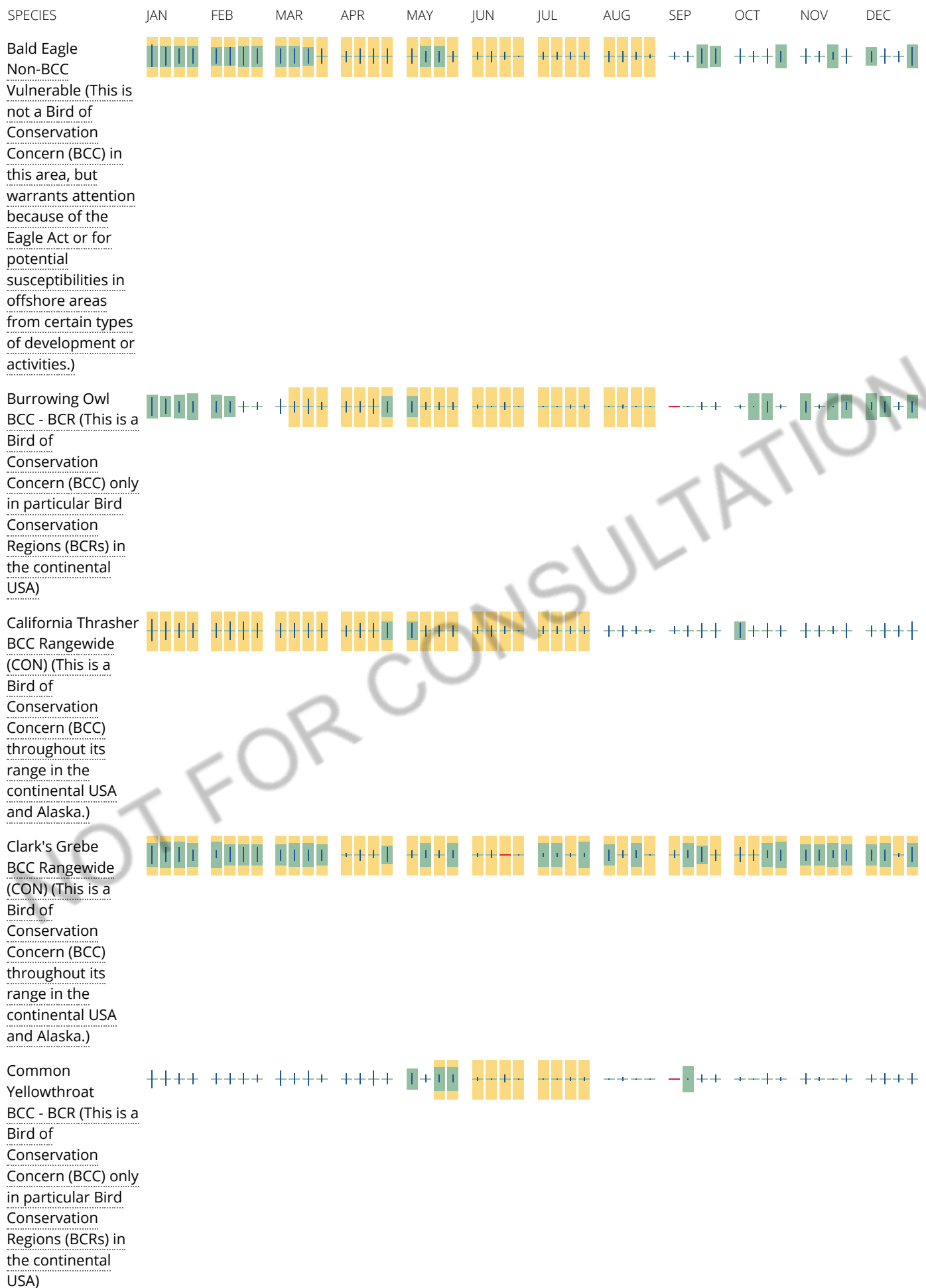
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

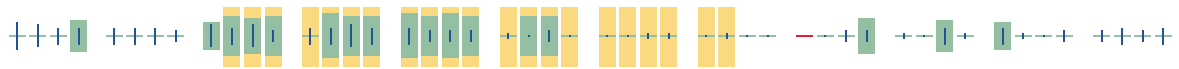
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



[illegible]



Tricolored  
Blackbird  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)



Wrentit  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)



Yellow-billed  
Magpie  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

## What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

## What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

## Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

## What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

## Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[PEM1A](#)

RIVERINE

[R4SBC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

#### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



**CNDDDB 9-Quad Species List 235 records.**

Element Type	Scientific Name	Common Name	Element Code	Federal Status	State Status	CDFW Status	CA Rare Plant Rank	Quad Code	Quad Name	Data Status	Taxonomic Sort
Animals - Amphibians	<i>Rana boylei</i>	foothill yellow-legged frog	AAABH01050	None	Endangered	SSC	-	3812161	CLARKSVILLE	Mapped	Animals - Amphibians - Ranidae - <i>Rana boylei</i>
Animals - Amphibians	<i>Rana draytonii</i>	California red-legged frog	AAABH01022	Threatened	None	SSC	-	3812161	CLARKSVILLE	Mapped	Animals - Amphibians - Ranidae - <i>Rana draytonii</i>
Animals - Amphibians	<i>Spea hammondi</i>	western spadefoot	AAABF02020	None	None	SSC	-	3812161	CLARKSVILLE	Mapped	Animals - Amphibians - Scaphiopodidae - <i>Spea hammondi</i>
Animals - Amphibians	<i>Spea hammondi</i>	western spadefoot	AAABF02020	None	None	SSC	-	3812162	FOLSOM	Mapped	Animals - Amphibians - Scaphiopodidae - <i>Spea hammondi</i>
Animals - Amphibians	<i>Spea hammondi</i>	western spadefoot	AAABF02020	None	None	SSC	-	3812173	ROSEVILLE	Mapped	Animals - Amphibians - Scaphiopodidae - <i>Spea hammondi</i>
Animals - Amphibians	<i>Spea hammondi</i>	western spadefoot	AAABF02020	None	None	SSC	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Amphibians - Scaphiopodidae - <i>Spea hammondi</i>
Animals - Amphibians	<i>Spea hammondi</i>	western spadefoot	AAABF02020	None	None	SSC	-	3812152	BUFFALO CREEK	Mapped	Animals - Amphibians - Scaphiopodidae - <i>Spea hammondi</i>
Animals - Arachnids	<i>Banksula californica</i>	Alabaster Cave harvestman	ILARA14020	None	None	-	-	3812171	PILOT HILL	Mapped and Unprocessed	Animals - Arachnids - Phalangodidae - <i>Banksula californica</i>
Animals - Birds	<i>Accipiter cooperii</i>	Cooper's hawk	ABNKC12040	None	None	WL	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Accipitridae - <i>Accipiter cooperii</i>
Animals - Birds	<i>Accipiter cooperii</i>	Cooper's hawk	ABNKC12040	None	None	WL	-	3812162	FOLSOM	Mapped and Unprocessed	Animals - Birds - Accipitridae - <i>Accipiter cooperii</i>
Animals - Birds	<i>Accipiter cooperii</i>	Cooper's hawk	ABNKC12040	None	None	WL	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Birds - Accipitridae - <i>Accipiter cooperii</i>
Animals - Birds	<i>Accipiter cooperii</i>	Cooper's hawk	ABNKC12040	None	None	WL	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Birds - Accipitridae - <i>Accipiter cooperii</i>
Animals - Birds	<i>Aquila chrysaetos</i>	golden eagle	ABNKC22010	None	None	FP , WL	-	3812153	CARMICHAEL	Mapped	Animals - Birds - Accipitridae - <i>Aquila chrysaetos</i>
Animals - Birds	<i>Aquila chrysaetos</i>	golden eagle	ABNKC22010	None	None	FP , WL	-	3812152	BUFFALO CREEK	Unprocessed	Animals - Birds - Accipitridae - <i>Aquila chrysaetos</i>
Animals - Birds	<i>Aquila chrysaetos</i>	golden eagle	ABNKC22010	None	None	FP , WL	-	3812161	CLARKSVILLE	Mapped and Unprocessed	Animals - Birds - Accipitridae - <i>Aquila chrysaetos</i>
Animals - Birds	<i>Aquila chrysaetos</i>	golden eagle	ABNKC22010	None	None	FP , WL	-	3812173	ROSEVILLE	Unprocessed	Animals - Birds - Accipitridae - <i>Aquila chrysaetos</i>
Animals - Birds	<i>Buteo regalis</i>	ferruginous hawk	ABNKC19120	None	None	WL	-	3812152	BUFFALO CREEK	Unprocessed	Animals - Birds - Accipitridae - <i>Buteo regalis</i>
Animals - Birds	<i>Buteo regalis</i>	ferruginous hawk	ABNKC19120	None	None	WL	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Birds - Accipitridae - <i>Buteo regalis</i>
Animals - Birds	<i>Buteo regalis</i>	ferruginous hawk	ABNKC19120	None	None	WL	-	3812151	FOLSOM SE	Mapped and Unprocessed	Animals - Birds - Accipitridae - <i>Buteo regalis</i>
Animals - Birds	<i>Buteo swainsoni</i>	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812151	FOLSOM SE	Mapped	Animals - Birds - Accipitridae - <i>Buteo swainsoni</i>

Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812173	ROSEVILLE	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812162	FOLSOM	Mapped	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	3812152	BUFFALO CREEK	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	3812153	CARMICHAEL	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812163	CITRUS HEIGHTS	Mapped	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812162	FOLSOM	Mapped	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812161	CLARKSVILLE	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812172	ROCKLIN	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812173	ROSEVILLE	Mapped	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812171	PILOT HILL	Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3812171	PILOT HILL	Mapped and Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3812161	CLARKSVILLE	Mapped and Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3812162	FOLSOM	Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3812153	CARMICHAEL	Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3812151	FOLSOM SE	Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Eremophila alpestris actia	California horned lark	ABPAT02011	None	None	WL	-	3812161	CLARKSVILLE	Unprocessed	Animals - Birds - Alaudidae - Eremophila alpestris actia
Animals - Birds	Chaetura vauxi	Vaux's swift	ABNUA03020	None	None	SSC	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Apodidae - Chaetura vauxi
Animals - Birds	Chaetura vauxi	Vaux's swift	ABNUA03020	None	None	SSC	-	3812153	CARMICHAEL	Unprocessed	Animals - Birds - Apodidae - Chaetura vauxi

Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812161	CLARKSVILLE	Mapped	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812162	FOLSOM	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812162	FOLSOM	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812163	CITRUS HEIGHTS	Mapped	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812161	CLARKSVILLE	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812171	PILOT HILL	Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812172	ROCKLIN	Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Egretta thula	snowy egret	ABNGA06030	None	None	-	-	3812153	CARMICHAEL	Unprocessed	Animals - Birds - Ardeidae - Egretta thula
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	3812153	CARMICHAEL	Unprocessed	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Pica nuttalli	yellow-billed magpie	ABPAV09020	None	None	-	-	3812153	CARMICHAEL	Unprocessed	Animals - Birds - Corvidae - Pica nuttalli
Animals - Birds	Falco columbarius	merlin	ABNKD06030	None	None	WL	-	3812152	BUFFALO CREEK	Unprocessed	Animals - Birds - Falconidae - Falco columbarius
Animals - Birds	Falco columbarius	merlin	ABNKD06030	None	None	WL	-	3812151	FOLSOM SE	Unprocessed	Animals - Birds - Falconidae - Falco columbarius
Animals - Birds	Falco columbarius	merlin	ABNKD06030	None	None	WL	-	3812162	FOLSOM	Mapped and Unprocessed	Animals - Birds - Falconidae - Falco columbarius
Animals - Birds	Falco mexicanus	prairie falcon	ABNKD06090	None	None	WL	-	3812151	FOLSOM SE	Unprocessed	Animals - Birds - Falconidae - Falco mexicanus
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	FP	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Falconidae - Falco peregrinus anatum
Animals - Birds	Spinus lawrencei	Lawrence's goldfinch	ABPBY06100	None	None	-	-	3812162	FOLSOM	Unprocessed	Animals - Birds - Fringillidae - Spinus lawrencei
Animals - Birds	Spinus lawrencei	Lawrence's goldfinch	ABPBY06100	None	None	-	-	3812152	BUFFALO CREEK	Unprocessed	Animals - Birds - Fringillidae - Spinus lawrencei
Animals - Birds	Progne subis	purple martin	ABPAU01010	None	None	SSC	-	3812172	ROCKLIN	Mapped and Unprocessed	Animals - Birds - Hirundinidae - Progne subis
Animals - Birds	Progne subis	purple martin	ABPAU01010	None	None	SSC	-	3812173	ROSEVILLE	Mapped and Unprocessed	Animals - Birds - Hirundinidae - Progne subis
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812163	CITRUS HEIGHTS	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812153	CARMICHAEL	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Birds - Icteridae - Agelaius tricolor

Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	3812151	FOLSOM SE	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	3812171	PILOT HILL	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	3812173	ROSEVILLE	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	3812162	FOLSOM	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	3812161	CLARKSVILLE	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Icteria virens	yellow-breasted chat	ABPBX24010	None	None	SSC	-	3812162	FOLSOM	Unprocessed	Animals - Birds - Icteridae - Icteria virens
Animals - Birds	Icteria virens	yellow-breasted chat	ABPBX24010	None	None	SSC	-	3812171	PILOT HILL	Unprocessed	Animals - Birds - Icteridae - Icteria virens
Animals - Birds	Lanius ludovicianus	loggerhead shrike	ABPBR01030	None	None	SSC	-	3812153	CARMICHAEL	Unprocessed	Animals - Birds - Lanidae - Lanius ludovicianus
Animals - Birds	Lanius ludovicianus	loggerhead shrike	ABPBR01030	None	None	SSC	-	3812152	BUFFALO CREEK	Unprocessed	Animals - Birds - Lanidae - Lanius ludovicianus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812153	CARMICHAEL	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812172	ROCKLIN	Mapped	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Setophaga petechia	yellow warbler	ABPBX03010	None	None	SSC	-	3812162	FOLSOM	Unprocessed	Animals - Birds - Parulidae - Setophaga petechia
Animals - Birds	Ammodramus savannarum	grasshopper sparrow	ABPBXA0020	None	None	SSC	-	3812173	ROSEVILLE	Mapped	Animals - Birds - Passerellidae - Ammodramus savannarum
Animals - Birds	Ammodramus savannarum	grasshopper sparrow	ABPBXA0020	None	None	SSC	-	3812151	FOLSOM SE	Mapped	Animals - Birds - Passerellidae - Ammodramus savannarum
Animals - Birds	Phalacrocorax auritus	double-crested cormorant	ABNFD01020	None	None	WL	-	3812162	FOLSOM	Mapped and Unprocessed	Animals - Birds - Phalacrocoracidae - Phalacrocorax auritus
Animals - Birds	Melanerpes lewis	Lewis' woodpecker	ABNYF04010	None	None	-	-	3812151	FOLSOM SE	Unprocessed	Animals - Birds - Picidae - Melanerpes lewis
Animals - Birds	Laterallus jamaicensis coturniculus	California black rail	ABNME03041	None	Threatened	FP	-	3812161	CLARKSVILLE	Mapped	Animals - Birds - Rallidae - Laterallus jamaicensis coturniculus
Animals - Birds	Laterallus jamaicensis coturniculus	California black rail	ABNME03041	None	Threatened	FP	-	3812172	ROCKLIN	Mapped	Animals - Birds - Rallidae - Laterallus jamaicensis coturniculus
Animals - Birds	Athene cunicularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812173	ROSEVILLE	Mapped	Animals - Birds - Strigidae - Athene cunicularia
Animals - Birds	Athene cunicularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812161	CLARKSVILLE	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cunicularia

Animals - Birds	Athene cunicularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812151	FOLSOM SE	Mapped	Animals - Birds - Strigidae - Athene cunicularia
Animals - Birds	Athene cunicularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cunicularia
Animals - Birds	Athene cunicularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cunicularia
Animals - Crustaceans	Calasellus californicus	An isopod	ICMAL34010	None	None	-	-	3812171	PILOT HILL	Unprocessed	Animals - Crustaceans - Asellidae - Calasellus californicus
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812172	ROCKLIN	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812173	ROSEVILLE	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812161	CLARKSVILLE	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812162	FOLSOM	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812163	CITRUS HEIGHTS	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812151	FOLSOM SE	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta mesovallensis	midvalley fairy shrimp	ICBRA03150	None	None	-	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta mesovallensis
Animals - Crustaceans	Branchinecta mesovallensis	midvalley fairy shrimp	ICBRA03150	None	None	-	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta mesovallensis
Animals - Crustaceans	Linderiella occidentalis	California linderiella	ICBRA06010	None	None	-	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Crustaceans - Chirocephalidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California linderiella	ICBRA06010	None	None	-	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Crustaceans - Chirocephalidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California linderiella	ICBRA06010	None	None	-	-	3812163	CITRUS HEIGHTS	Mapped and Unprocessed	Animals - Crustaceans - Chirocephalidae - Linderiella occidentalis

Animals - Crustaceans	Linderiella occidentalis	California linderiella	ICBRA06010	None	None	-	-	3812162	FOLSOM	Mapped and Unprocessed	Animals - Crustaceans - Chirocephalidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California linderiella	ICBRA06010	None	None	-	-	3812173	ROSEVILLE	Mapped and Unprocessed	Animals - Crustaceans - Chirocephalidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California linderiella	ICBRA06010	None	None	-	-	3812172	ROCKLIN	Mapped and Unprocessed	Animals - Crustaceans - Chirocephalidae - Linderiella occidentalis
Animals - Crustaceans	Dumontia oregonensis	hairy water flea	ICBRA23010	None	None	-	-	3812153	CARMICHAEL	Mapped	Animals - Crustaceans - Dumontiidae - Dumontia oregonensis
Animals - Crustaceans	Dumontia oregonensis	hairy water flea	ICBRA23010	None	None	-	-	3812152	BUFFALO CREEK	Mapped	Animals - Crustaceans - Dumontiidae - Dumontia oregonensis
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812173	ROSEVILLE	Mapped	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812162	FOLSOM	Mapped	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812163	CITRUS HEIGHTS	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 11
Animals - Fish	Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812171	PILOT HILL	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 11
Animals - Fish	Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812173	ROSEVILLE	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 11
Animals - Fish	Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812172	ROCKLIN	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 11
Animals - Fish	Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812162	FOLSOM	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 11
Animals - Fish	Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812153	CARMICHAEL	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 11

Animals - Fish	Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812151	FOLSOM SE	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 11
Animals - Insects	Andrena blennospermatis	Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	-	-	3812161	CLARKSVILLE	Mapped	Animals - Insects - Andrenidae - Andrena blennospermatis
Animals - Insects	Andrena subapasta	An andrenid bee	IIHYM35210	None	None	-	-	3812163	CITRUS HEIGHTS	Mapped	Animals - Insects - Andrenidae - Andrena subapasta
Animals - Insects	Andrena subapasta	An andrenid bee	IIHYM35210	None	None	-	-	3812173	ROSEVILLE	Mapped	Animals - Insects - Andrenidae - Andrena subapasta
Animals - Insects	Bombus crotchii	Crotch bumble bee	IIHYM24480	None	Candidate Endangered	-	-	3812152	BUFFALO CREEK	Mapped	Animals - Insects - Apidae - Bombus crotchii
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	Candidate Endangered	-	-	3812171	PILOT HILL	Mapped and Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812171	PILOT HILL	Mapped	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812172	ROCKLIN	Mapped	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812163	CITRUS HEIGHTS	Mapped and Unprocessed	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812161	CLARKSVILLE	Mapped	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812162	FOLSOM	Mapped and Unprocessed	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812152	BUFFALO CREEK	Mapped	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Hydrochara rickseckeri	Ricksecker's water scavenger beetle	IICOL5V010	None	None	-	-	3812153	CARMICHAEL	Mapped	Animals - Insects - Hydrophilidae - Hydrochara rickseckeri
Animals - Insects	Hydrochara rickseckeri	Ricksecker's water scavenger beetle	IICOL5V010	None	None	-	-	3812152	BUFFALO CREEK	Mapped	Animals - Insects - Hydrophilidae - Hydrochara rickseckeri
Animals - Insects	Hydrochara rickseckeri	Ricksecker's water scavenger beetle	IICOL5V010	None	None	-	-	3812161	CLARKSVILLE	Mapped	Animals - Insects - Hydrophilidae - Hydrochara rickseckeri
Animals - Insects	Hydrochara rickseckeri	Ricksecker's water scavenger beetle	IICOL5V010	None	None	-	-	3812173	ROSEVILLE	Mapped	Animals - Insects - Hydrophilidae - Hydrochara rickseckeri
Animals - Insects	Cosumnoperla hypocrena	Cosumnes stripetail	IIPLE23020	None	None	-	-	3812171	PILOT HILL	Mapped	Animals - Insects - Perlodidae - Cosumnoperla hypocrena

Animals - Mammals	Vulpes vulpes patwin	Sacramento Valley red fox	AMAJA03015	None	None	-	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Mammals - Canidae - Vulpes vulpes patwin
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3812161	CLARKSVILLE	Mapped	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812162	FOLSOM	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812173	ROSEVILLE	Unprocessed	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Antrozous pallidus	pallid bat	AMACC10010	None	None	SSC	-	3812162	FOLSOM	Mapped	Animals - Mammals - Vespertilionidae - Antrozous pallidus
Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	3812162	FOLSOM	Mapped	Animals - Mammals - Vespertilionidae - Lasionycteris noctivagans
Animals - Mammals	Lasiurus blossevillii	western red bat	AMACC05060	None	None	SSC	-	3812162	FOLSOM	Unprocessed	Animals - Mammals - Vespertilionidae - Lasiurus blossevillii
Animals - Mammals	Myotis yumanensis	Yuma myotis	AMACC01020	None	None	-	-	3812162	FOLSOM	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis yumanensis
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812162	FOLSOM	Mapped and Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812161	CLARKSVILLE	Mapped and Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812173	ROSEVILLE	Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812172	ROCKLIN	Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812171	PILOT HILL	Mapped and Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812153	CARMICHAEL	Mapped and Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812152	BUFFALO CREEK	Mapped and Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812151	FOLSOM SE	Mapped and Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Thamnophis gigas	giant gartersnake	ARADB36150	Threatened	Threatened	-	-	3812151	FOLSOM SE	Mapped	Animals - Reptiles - Natricidae - Thamnophis gigas



Animals - Reptiles	Phrynosoma blainvillii	coast horned lizard	ARACF12100	None	None	SSC	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Reptiles - Phrynosomatidae - Phrynosoma blainvillii
Animals - Reptiles	Phrynosoma blainvillii	coast horned lizard	ARACF12100	None	None	SSC	-	3812162	FOLSOM	Unprocessed	Animals - Reptiles - Phrynosomatidae - Phrynosoma blainvillii
Community - Terrestrial	Alkali Meadow	Alkali Meadow	CTT45310CA	None	None	-	-	3812173	ROSEVILLE	Mapped	Community - Terrestrial - Alkali Meadow
Community - Terrestrial	Alkali Seep	Alkali Seep	CTT45320CA	None	None	-	-	3812173	ROSEVILLE	Mapped	Community - Terrestrial - Alkali Seep
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812173	ROSEVILLE	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812162	FOLSOM	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812152	BUFFALO CREEK	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812153	CARMICHAEL	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Volcanic Mud Flow Vernal Pool	Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	-	-	3812162	FOLSOM	Mapped	Community - Terrestrial - Northern Volcanic Mud Flow Vernal Pool
Community - Terrestrial	Northern Volcanic Mud Flow Vernal Pool	Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	-	-	3812173	ROSEVILLE	Mapped	Community - Terrestrial - Northern Volcanic Mud Flow Vernal Pool
Community - Terrestrial	Northern Volcanic Mud Flow Vernal Pool	Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	-	-	3812172	ROCKLIN	Mapped	Community - Terrestrial - Northern Volcanic Mud Flow Vernal Pool
Community - Terrestrial	Northern Volcanic Mud Flow Vernal Pool	Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	-	-	3812163	CITRUS HEIGHTS	Mapped	Community - Terrestrial - Northern Volcanic Mud Flow Vernal Pool
Community - Terrestrial	Valley Needlegrass Grassland	Valley Needlegrass Grassland	CTT42110CA	None	None	-	-	3812162	FOLSOM	Mapped	Community - Terrestrial - Valley Needlegrass Grassland
Plants - Vascular	Chlorogalum grandiflorum	Red Hills soaproot	PMLIL0G020	None	None	-	1B.2	3812171	PILOT HILL	Mapped	Plants - Vascular - Agavaceae - Chlorogalum grandiflorum
Plants - Vascular	Chlorogalum grandiflorum	Red Hills soaproot	PMLIL0G020	None	None	-	1B.2	3812161	CLARKSVILLE	Mapped	Plants - Vascular - Agavaceae - Chlorogalum grandiflorum
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812161	CLARKSVILLE	Mapped	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812153	CARMICHAEL	Mapped and Unprocessed	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812152	BUFFALO CREEK	Unprocessed	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812151	FOLSOM SE	Mapped	Plants - Vascular - Alismataceae - Sagittaria sanfordii

Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812163	CITRUS HEIGHTS	Mapped	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812162	FOLSOM	Unprocessed	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Allium sanbornii var. sanbornii	Sanborn's onion	PMLIL02212	None	None	-	4.2	3812171	PILOT HILL	Unprocessed	Plants - Vascular - Alliaceae - Allium sanbornii var. sanbornii
Plants - Vascular	Eryngium pinnatisectum	Tuolumne button-celery	PDAPI0Z0P0	None	None	-	1B.2	3812151	FOLSOM SE	Mapped	Plants - Vascular - Apiaceae - Eryngium pinnatisectum
Plants - Vascular	Balsamorhiza macrolepis	big-scale balsamroot	PDAST11061	None	None	-	1B.2	3812171	PILOT HILL	Mapped	Plants - Vascular - Asteraceae - Balsamorhiza macrolepis
Plants - Vascular	Balsamorhiza macrolepis	big-scale balsamroot	PDAST11061	None	None	-	1B.2	3812173	ROSEVILLE	Mapped	Plants - Vascular - Asteraceae - Balsamorhiza macrolepis
Plants - Vascular	Eriophyllum jepsonii	Jepson's woolly sunflower	PDAST3N040	None	None	-	4.3	3812161	CLARKSVILLE	Unprocessed	Plants - Vascular - Asteraceae - Eriophyllum jepsonii
Plants - Vascular	Hesperevax caulescens	hogwallow starfish	PDASTE5020	None	None	-	4.2	3812152	BUFFALO CREEK	Unprocessed	Plants - Vascular - Asteraceae - Hesperevax caulescens
Plants - Vascular	Packera layneae	Layne's ragwort	PDAST8H1V0	Threatened	Rare	-	1B.2	3812161	CLARKSVILLE	Mapped	Plants - Vascular - Asteraceae - Packera layneae
Plants - Vascular	Packera layneae	Layne's ragwort	PDAST8H1V0	Threatened	Rare	-	1B.2	3812171	PILOT HILL	Mapped	Plants - Vascular - Asteraceae - Packera layneae
Plants - Vascular	Wyethia reticulata	El Dorado County mule ears	PDAST9X0D0	None	None	-	1B.2	3812171	PILOT HILL	Mapped and Unprocessed	Plants - Vascular - Asteraceae - Wyethia reticulata
Plants - Vascular	Wyethia reticulata	El Dorado County mule ears	PDAST9X0D0	None	None	-	1B.2	3812161	CLARKSVILLE	Mapped	Plants - Vascular - Asteraceae - Wyethia reticulata
Plants - Vascular	Downingia pusilla	dwarf downingia	PDCAM060C0	None	None	-	2B.2	3812162	FOLSOM	Mapped	Plants - Vascular - Campanulaceae - Downingia pusilla
Plants - Vascular	Downingia pusilla	dwarf downingia	PDCAM060C0	None	None	-	2B.2	3812173	ROSEVILLE	Mapped	Plants - Vascular - Campanulaceae - Downingia pusilla
Plants - Vascular	Legenere limosa	legenere	PDCAM0C010	None	None	-	1B.1	3812173	ROSEVILLE	Mapped	Plants - Vascular - Campanulaceae - Legenere limosa
Plants - Vascular	Legenere limosa	legenere	PDCAM0C010	None	None	-	1B.1	3812152	BUFFALO CREEK	Mapped	Plants - Vascular - Campanulaceae - Legenere limosa
Plants - Vascular	Legenere limosa	legenere	PDCAM0C010	None	None	-	1B.1	3812153	CARMICHAEL	Mapped	Plants - Vascular - Campanulaceae - Legenere limosa
Plants - Vascular	Crocanthemum suffrutescens	Bisbee Peak rush-rose	PDCIS020F0	None	None	-	3.2	3812171	PILOT HILL	Mapped	Plants - Vascular - Cistaceae - Crocanthemum suffrutescens
Plants - Vascular	Crocanthemum suffrutescens	Bisbee Peak rush-rose	PDCIS020F0	None	None	-	3.2	3812161	CLARKSVILLE	Mapped	Plants - Vascular - Cistaceae - Crocanthemum suffrutescens
Plants - Vascular	Calystegia stebbinsii	Stebbins' morning-glory	PDCON040H0	Endangered	Endangered	-	1B.1	3812171	PILOT HILL	Mapped	Plants - Vascular - Convolvulaceae - Calystegia stebbinsii
Plants - Vascular	Carex xerophila	chaparral sedge	PMCYP03M60	None	None	-	1B.2	3812171	PILOT HILL	Mapped	Plants - Vascular - Cyperaceae - Carex xerophila
Plants - Vascular	Iris longipetala	coast iris	PMIRI092E0	None	None	-	4.2	3812161	CLARKSVILLE	Unprocessed	Plants - Vascular - Iridaceae - Iris longipetala

Plants - Vascular	<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	PMJUN011L1	None	None	-	1B.2	3812152	BUFFALO CREEK	Mapped	Plants - Vascular - Juncaceae - <i>Juncus leiospermus</i> var. <i>ahartii</i>
Plants - Vascular	<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	PMJUN011L1	None	None	-	1B.2	3812153	CARMICHAEL	Mapped	Plants - Vascular - Juncaceae - <i>Juncus leiospermus</i> var. <i>ahartii</i>
Plants - Vascular	<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	PMJUN011L2	None	None	-	1B.1	3812173	ROSEVILLE	Mapped	Plants - Vascular - Juncaceae - <i>Juncus leiospermus</i> var. <i>leiospermus</i>
Plants - Vascular	<i>Fritillaria agrestis</i>	stinkbells	PMLIL0V010	None	None	-	4.2	3812173	ROSEVILLE	Unprocessed	Plants - Vascular - Liliaceae - <i>Fritillaria agrestis</i>
Plants - Vascular	<i>Fritillaria agrestis</i>	stinkbells	PMLIL0V010	None	None	-	4.2	3812172	ROCKLIN	Unprocessed	Plants - Vascular - Liliaceae - <i>Fritillaria agrestis</i>
Plants - Vascular	<i>Fritillaria agrestis</i>	stinkbells	PMLIL0V010	None	None	-	4.2	3812162	FOLSOM	Unprocessed	Plants - Vascular - Liliaceae - <i>Fritillaria agrestis</i>
Plants - Vascular	<i>Fritillaria agrestis</i>	stinkbells	PMLIL0V010	None	None	-	4.2	3812163	CITRUS HEIGHTS	Mapped and Unprocessed	Plants - Vascular - Liliaceae - <i>Fritillaria agrestis</i>
Plants - Vascular	<i>Lilium humboldtii</i> ssp. <i>humboldtii</i>	Humboldt lily	PMLIL1A071	None	None	-	4.2	3812171	PILOT HILL	Unprocessed	Plants - Vascular - Liliaceae - <i>Lilium humboldtii</i> ssp. <i>humboldtii</i>
Plants - Vascular	<i>Fremontodendron decumbens</i>	Pine Hill flannelbush	PDSTE03030	Endangered	Rare	-	1B.2	3812161	CLARKSVILLE	Mapped	Plants - Vascular - Malvaceae - <i>Fremontodendron decumbens</i>
Plants - Vascular	<i>Calandrinia breweri</i>	Brewer's calandrinia	PDPOR01020	None	None	-	4.2	3812161	CLARKSVILLE	Unprocessed	Plants - Vascular - Montiaceae - <i>Calandrinia breweri</i>
Plants - Vascular	<i>Clarkia biloba</i> ssp. <i>brandegeae</i>	Brandegee's clarkia	PDONA05053	None	None	-	4.2	3812161	CLARKSVILLE	Mapped and Unprocessed	Plants - Vascular - Onagraceae - <i>Clarkia biloba</i> ssp. <i>brandegeae</i>
Plants - Vascular	<i>Clarkia biloba</i> ssp. <i>brandegeae</i>	Brandegee's clarkia	PDONA05053	None	None	-	4.2	3812162	FOLSOM	Mapped and Unprocessed	Plants - Vascular - Onagraceae - <i>Clarkia biloba</i> ssp. <i>brandegeae</i>
Plants - Vascular	<i>Clarkia biloba</i> ssp. <i>brandegeae</i>	Brandegee's clarkia	PDONA05053	None	None	-	4.2	3812172	ROCKLIN	Mapped	Plants - Vascular - Onagraceae - <i>Clarkia biloba</i> ssp. <i>brandegeae</i>
Plants - Vascular	<i>Clarkia biloba</i> ssp. <i>brandegeae</i>	Brandegee's clarkia	PDONA05053	None	None	-	4.2	3812171	PILOT HILL	Mapped	Plants - Vascular - Onagraceae - <i>Clarkia biloba</i> ssp. <i>brandegeae</i>
Plants - Vascular	<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid salty bird's-beak	PDSCR0J0D1	None	None	-	1B.1	3812173	ROSEVILLE	Mapped and Unprocessed	Plants - Vascular - Orobanchaceae - <i>Chloropyron molle</i> ssp. <i>hispidum</i>
Plants - Vascular	<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	-	1B.2	3812173	ROSEVILLE	Mapped	Plants - Vascular - Plantaginaceae - <i>Gratiola heterosepala</i>
Plants - Vascular	<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	-	1B.2	3812172	ROCKLIN	Mapped	Plants - Vascular - Plantaginaceae - <i>Gratiola heterosepala</i>
Plants - Vascular	<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	-	1B.2	3812153	CARMICHAEL	Mapped	Plants - Vascular - Plantaginaceae - <i>Gratiola heterosepala</i>
Plants - Vascular	<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	-	1B.2	3812152	BUFFALO CREEK	Mapped	Plants - Vascular - Plantaginaceae - <i>Gratiola heterosepala</i>
Plants - Vascular	<i>Orcuttia tenuis</i>	slender Orcutt grass	PMPOA4G050	Threatened	Endangered	-	1B.1	3812152	BUFFALO CREEK	Mapped	Plants - Vascular - Poaceae - <i>Orcuttia tenuis</i>

Plants - Vascular	Orcuttia viscida	Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	-	1B.1	3812152	BUFFALO CREEK	Mapped and Unprocessed	Plants - Vascular - Poaceae - Orcuttia viscida
Plants - Vascular	Orcuttia viscida	Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	-	1B.1	3812153	CARMICHAEL	Mapped	Plants - Vascular - Poaceae - Orcuttia viscida
Plants - Vascular	Orcuttia viscida	Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	-	1B.1	3812162	FOLSOM	Mapped	Plants - Vascular - Poaceae - Orcuttia viscida
Plants - Vascular	Leptosiphon ambiguus	serpentine leptosiphon	PDPLM09020	None	None	-	4.2	3812171	PILOT HILL	Unprocessed	Plants - Vascular - Polemoniaceae - Leptosiphon ambiguus
Plants - Vascular	Navarretia myersii ssp. myersii	pincushion navarretia	PDPLM0C0X1	None	None	-	1B.1	3812162	FOLSOM	Mapped	Plants - Vascular - Polemoniaceae - Navarretia myersii ssp. myersii
Plants - Vascular	Ceanothus roderickii	Pine Hill ceanothus	PDRHA04190	Endangered	Rare	-	1B.1	3812161	CLARKSVILLE	Mapped	Plants - Vascular - Rhamnaceae - Ceanothus roderickii
Plants - Vascular	Ceanothus roderickii	Pine Hill ceanothus	PDRHA04190	Endangered	Rare	-	1B.1	3812171	PILOT HILL	Mapped	Plants - Vascular - Rhamnaceae - Ceanothus roderickii
Plants - Vascular	Galium californicum ssp. sierrae	El Dorado bedstraw	PDRUB0N0E7	Endangered	Rare	-	1B.2	3812171	PILOT HILL	Mapped	Plants - Vascular - Rubiaceae - Galium californicum ssp. sierrae
Plants - Vascular	Galium californicum ssp. sierrae	El Dorado bedstraw	PDRUB0N0E7	Endangered	Rare	-	1B.2	3812161	CLARKSVILLE	Mapped	Plants - Vascular - Rubiaceae - Galium californicum ssp. sierrae
Plants - Vascular	Brodiaea rosea ssp. vallicola	valley brodiaea	PMLIL0C0K2	None	None	-	4.2	3812162	FOLSOM	Unprocessed	Plants - Vascular - Themidaceae - Brodiaea rosea ssp. vallicola
Plants - Vascular	Brodiaea rosea ssp. vallicola	valley brodiaea	PMLIL0C0K2	None	None	-	4.2	3812163	CITRUS HEIGHTS	Unprocessed	Plants - Vascular - Themidaceae - Brodiaea rosea ssp. vallicola
Plants - Vascular	Brodiaea rosea ssp. vallicola	valley brodiaea	PMLIL0C0K2	None	None	-	4.2	3812173	ROSEVILLE	Unprocessed	Plants - Vascular - Themidaceae - Brodiaea rosea ssp. vallicola
Plants - Vascular	Brodiaea rosea ssp. vallicola	valley brodiaea	PMLIL0C0K2	None	None	-	4.2	3812153	CARMICHAEL	Unprocessed	Plants - Vascular - Themidaceae - Brodiaea rosea ssp. vallicola
Plants - Vascular	Brodiaea rosea ssp. vallicola	valley brodiaea	PMLIL0C0K2	None	None	-	4.2	3812152	BUFFALO CREEK	Unprocessed	Plants - Vascular - Themidaceae - Brodiaea rosea ssp. vallicola

ScientificName	CommonName	Family	Lifeform	CRPR
<i>Allium sanbornii</i> var. <i>sanbornii</i>	Sanborn's onion	Alliaceae	perennial bulbiferous herb	4.2
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	Asteraceae	perennial herb	1B.2
<i>Brodiaea rosea</i> ssp. <i>vallicola</i>	valley brodiaea	Themidaceae	perennial bulbiferous herb	4.2
<i>Calandrinia breweri</i>	Brewer's calandrinia	Montiaceae	annual herb	4.2
<i>Calystegia stebbinsii</i>	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.1
<i>Carex xerophila</i>	chaparral sedge	Cyperaceae	perennial herb	1B.2
<i>Ceanothus roderickii</i>	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	1B.1
<i>Chlorogalum grandiflorum</i>	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	1B.2
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.1
<i>Clarkia biloba</i> ssp. <i>brandegeae</i>	Brandegee's clarkia	Onagraceae	annual herb	4.2
<i>Crocanthemum suffrutescens</i>	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	3.2
<i>Downingia pusilla</i>	dwarf downingia	Campanulaceae	annual herb	2B.2
<i>Eriophyllum jepsonii</i>	Jepson's woolly sunflower	Asteraceae	perennial herb	4.3
<i>Eryngium pinnatisectum</i>	Tuolumne button-celery	Apiaceae	annual/perennial herb	1B.2
<i>Fremontodendron decumbens</i>	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	1B.2
<i>Fritillaria agrestis</i>	stinkbells	Liliaceae	perennial bulbiferous herb	4.2
<i>Galium californicum</i> ssp. <i>sierrae</i>	El Dorado bedstraw	Rubiaceae	perennial herb	1B.2
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2
<i>Hesperervax caulescens</i>	hogwallow starfish	Asteraceae	annual herb	4.2
<i>Iris longipetala</i>	coast iris	Iridaceae	perennial rhizomatous herb	4.2
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	Juncaceae	annual herb	1B.2
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	Juncaceae	annual herb	1B.1
<i>Legenere limosa</i>	legenere	Campanulaceae	annual herb	1B.1
<i>Leptosiphon ambiguus</i>	serpentine leptosiphon	Polemoniaceae	annual herb	4.2
<i>Lilium humboldtii</i> ssp. <i>humboldtii</i>	Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2
<i>Navarretia myersii</i> ssp. <i>myersii</i>	pincushion navarretia	Polemoniaceae	annual herb	1B.1
<i>Orcuttia tenuis</i>	slender Orcutt grass	Poaceae	annual herb	1B.1
<i>Orcuttia viscida</i>	Sacramento Orcutt grass	Poaceae	annual herb	1B.1
<i>Packera layneae</i>	Layne's ragwort	Asteraceae	perennial herb	1B.2
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	1B.2
<i>Wyethia reticulata</i>	El Dorado County mule ears	Asteraceae	perennial herb	1B.2

<b>CESA</b>	<b>FESA</b>	<b>BloomingP</b>	<b>Habitat</b>
None	None	May-Sep	Chaparral, Cismontane woodland, Lower montane coniferous forest
None	None	Mar-Jun	Chaparral, Cismontane woodland, Valley and foothill grassland
None	None	Apr-May(Ju	Valley and foothill grassland, Vernal pools
None	None	(Jan)Mar-Ju	Chaparral, Coastal scrub
CE	FE	Apr-Jul	Chaparral, Cismontane woodland
None	None	Mar-Jun	Chaparral, Cismontane woodland, Lower montane coniferous forest
CR	FE	Apr-Jun	Chaparral, Cismontane woodland
None	None	May-Jun	Chaparral, Cismontane woodland, Lower montane coniferous forest
None	None	Jun-Sep	Meadows and seeps, Playas, Valley and foothill grassland
None	None	May-Jul	Chaparral, Cismontane woodland, Lower montane coniferous forest
None	None	Apr-Aug	Chaparral
None	None	Mar-May	Valley and foothill grassland, Vernal pools
None	None	Apr-Jun	Chaparral, Cismontane woodland, Coastal scrub
None	None	May-Aug	Cismontane woodland, Lower montane coniferous forest, Vernal pools
CR	FE	Apr-Jul	Chaparral, Cismontane woodland
None	None	Mar-Jun	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland
CR	FE	May-Jun	Chaparral, Cismontane woodland, Lower montane coniferous forest
CE	None	Apr-Aug	Marshes and swamps, Vernal pools
None	None	Mar-Jun	Valley and foothill grassland, Vernal pools
None	None	Mar-May(J	Coastal prairie, Lower montane coniferous forest, Meadows and seeps
None	None	Mar-May	Valley and foothill grassland
None	None	Mar-Jun	Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland, Vernal pools
None	None	Apr-Jun	Vernal pools
None	None	Mar-Jun	Cismontane woodland, Coastal scrub, Valley and foothill grassland
None	None	May-Jul(Au	Chaparral, Cismontane woodland, Lower montane coniferous forest
None	None	Apr-May	Vernal pools
CE	FT	May-Sep(O	Vernal pools
CE	FE	Apr-Jul(Sep	Vernal pools
CR	FT	Apr-Aug	Chaparral, Cismontane woodland
None	None	May-Oct(N	Marshes and swamps
None	None	Apr-Aug	Chaparral, Cismontane woodland, Lower montane coniferous forest

## Appendix C

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<b>Plants</b>			
<i>Allium sanbornii</i> var. <i>sanbornii</i> Sanborn's onion	--/--/4.2	A perennial herb found in cismontane woodland, lower montane coniferous forest and valley and foothill grassland, sometimes in serpentine soil from 45 – 1,555 meters elevation. Blooms March – June (CNPS 2021).	<b>Will Not Occur.</b> There is no suitable chaparral, cismontane woodland, or grassland habitat within the project site.
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	--/--/1B.2	A perennial herb found on slopes in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentine soil from 45 – 1,555 meters elevation. Blooms March – June (CNPS 2021).	<b>Will Not Occur.</b> There is no suitable chaparral, cismontane woodland, or grassland habitat within the project site.
<i>Brodiaea rosea</i> ssp. <i>vallicola</i> valley brodiaea	--/--/4.2	A perennial bulbiferous herb found in old alluvial terraces, silty, sandy, and gravelly loam soils and occurs in swales of valley and foothill grassland and in the vernal pools from 1--335 meters elevation. Blooms April – May (June) (CNPS 2021).	<b>Will Not Occur.</b> Suitable habitat and vernal pools are absent from the project site.
<i>Calandrinia breweri</i> Brewer's calandrinia	--/--/4.2	An annual herb found in sandy or loamy soils and in disturbed or burned sites and occurs in chaparral and coastal scrub from 10 - 1220 meters elevation. Blooms (January) March – June (CNPS 2021).	<b>Will Not Occur.</b> Suitable habitat is absent from the project site.
<i>Calystegia stebbinsii</i> Stebbin's morning-glory	FE/SE/1B.1	A perennial rhizomatous herb found in gabbroic or serpentinite soils and occurs in chaparral openings and cismontane woodland at 300-meter elevation. Blooms April – July (CNPS 2021).	<b>Will Not Occur.</b> Suitable serpentinite and gabbroic soils are absent from the project site.
<i>Carex xerophila</i> chaparral sedge	--/--/1B.2	A perennial herb found in gabbroic and serpentinite soils and occurs in chaparral, cismontane woodland, and lower montane coniferous forest from 440 - 770 meters elevation. Blooms March – June (CNPS 2021).	<b>Will Not Occur.</b> Suitable serpentinite and gabbroic soils are absent from the project site.
<i>Ceanothus roderickii</i> Pine Hill ceanothus	FE/--/1B.1	A perennial evergreen shrub found in serpentinite or nutrient-deficient forms of	<b>Will Not Occur.</b> Suitable serpentinite and gabbroic soils are absent from

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
		gabbro-derived soils characterized by low concentrations of available K, P, S, Fe, and Zn. Occurs in chaparral and cismontane woodland from 245 - 1090 meters elevation. Blooms April – June (CNPS 2021).	the project site.
<i>Chlorogalum grandiflorum</i> Red Hills soaproot	--/--/1B.2	A perennial bulbiferous herb found in serpentinite, gabbroic, and other soils and occurs in chaparral, cismontane woodland, and lower montane coniferous forest from 245 - 1690 meters elevation. Blooms May – June (CNPS 2021).	<b>Will Not Occur.</b> Suitable serpentinite and gabbroic soils are absent from the project site.
<i>Chloropyron molle</i> ssp. <i>hispidum</i> hispid bird's-beak	--/--/1B.1	An annual hemiparasitic herb found in alkaline habitats in meadows, seeps, playas, and valley and foothill grassland from 1 – 155 meters elevation in the Central Valley. Blooms June – September (CNPS 2021).	<b>Will Not Occur.</b> Suitable aquatic habitat is absent from the project site.
<i>Clarkia biloba</i> ssp. <i>brandegeae</i> Brandegee's clarkia	--/--/4.2	An annual herb found often in roadcuts and occurs in chaparral, cismontane woodland, and lower montane coniferous forest from 75 - 915 meters elevation. Blooms May – July (CNPS 2021).	<b>Will not occur.</b> There is no suitable habitat for this species on the project site.  There are two known occurrences of this species within a 5-mile radius of the project site (CDFW 2021).
<i>Crocanthemum suffrutescens</i> Bisbee Peak rush-rose	--/--/3.2	A perennial evergreen shrub found often in gabbroic or lone soils and often in burned or disturbed areas and occurs in chaparral from 75 - 670 meters elevation. Blooms April – August (CNPS 2021).	<b>Will Not Occur.</b> Suitable gabbroic and lone soils are absent from the project site.
<i>Downingia pusilla</i> dwarf downingia	--/--/2B.2	An annual forb typically occurring on slightly acidic clay to clay loam mesic areas on the edge of pools and lakes in valley and foothill grassland and vernal pool habitat from 1 – 440 meters elevation. Blooms March – May (CNPS 2021).	<b>Will Not Occur.</b> There is no suitable aquatic habitat within the project site.
<i>Eriophyllum jepsonii</i>	--/--/4.3	A perennial herb found sometimes in serpentinite	<b>Will Not Occur.</b> Suitable serpentinite



## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
Jepson's woolly sunflower		soils and occurs in chaparral, cismontane woodland and coastal scrub from 200 - 1025 meters elevation. Blooms April – June (CNPS 2021).	soils are absent from the project site.
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	--/--/1B.2	An annual/perennial herb found in mesic soils and occurs in cismontane woodland, lower montane coniferous forest, and vernal pools from 70 - 915 meters elevation. Blooms May – August (CNPS 2021).	<b>Will Not Occur.</b> Suitable habitat is absent from the project site.
<i>Fremontodendron decumbens</i> Pine Hill flannelbush	FE/--/1B.2	A perennial evergreen shrub found in rocky gabbroic or serpentinite soils and occurs in chaparral and cismontane woodland from 425 - 760 meters elevation. Blooms April – July (CNPS 2021).	<b>Will Not Occur.</b> Suitable serpentinite and gabbroic soils are absent from the project site. Additionally, this species would have been identifiable during the survey if it were present since it is an evergreen shrub.
<i>Fritillaria agrestis</i> Stinkbells	--/--/4.2	An annual herb in cismontane woodland, chaparral, valley and foothill grassland, pinyon, and juniper woodland; sometimes on serpentinite soils but typically clay soils in nonnative grassland from 10 – 1,555 meters elevation. Blooms from March – June (CNPS 2021).	<b>Will Not Occur.</b> There is no suitable habitat within the project site for this species.
<i>Galium californicum</i> ssp. <i>sierrae</i> El Dorado bedstraw	FE/--/1B.2	A perennial herb found in gabbroic and occurs in chaparral, cismontane woodland, and lower montane coniferous forest from 100 - 585 meters elevation. Blooms May – June (CNPS 2021).	<b>Will Not Occur.</b> Suitable gabbroic soils are absent from the project site.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	--/SE/1B.2	An annual herb found on clay soils usually in vernal pools and sometimes on lake margins or in freshwater marshes and swamps from 10 – 2,375 meters elevation. Blooms April – August (CNPS 2021).	<b>Will Not Occur.</b> Suitable habitat for this species is absent from the project site.
<i>Hesperervax caulescens</i> hogwallow starfish	--/--/4.2	An annual herb found in valley and foothill grassland vernal pools from 10 – 2,375 meters elevation. Blooms Mar-Jun (CNPS 2021).	<b>Will Not Occur.</b> Suitable habitat for this species is absent from the project site.

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<i>Iris longipetala</i> coast iris	--/--/4.2	A perennial rhizomatous herb found on coastal prairie, lower montane coniferous forest, and meadows and seeps from 1 – 460 meters elevation. Blooms Mar-May (Jun) (CNPS 2021).	<b>Will Not Occur.</b> There is no coastal prairie, lower montane coniferous forest, or meadows and seep habitat within the project site.
<i>Juncus leiospermus</i> var. <i>ahartii</i> Ahart's dwarfrush	--/--/1B.2	An annual herb found in mesic valley and foothill grassland from 30 – 229 meters elevation. Blooms March – May (CNPS 2021).	<b>Will Not Occur.</b> There is no suitable habitat for this species within the project site.
<i>Juncus leiospermus</i> var. <i>leiospermus</i> Red Bluff dwarf rush	--/--/1B.1	An annual herb found in vernal pools and vernal mesic microsites in chaparral, cismontane woodland, meadows, seeps, and valley and foothill grassland from 35 – 1,250 meters elevation. Blooms March – June (CNPS 2021).	<b>Will not occur.</b> Suitable for this species is absent from the project site.
<i>Legenere limosa</i> legenere	--/--/1B.1	An annual herb found in vernal pools from 1 – 880 meters elevation. Blooms April – June (CNPS 2021).	<b>Will Not Occur.</b> Suitable habitat for the species is absent from the project site.  There is one CNDDDB occurrence within a 5-mile radius of the project site (CDFW 2021).
<i>Leptosiphon ambiguous</i> serpentine leptosiphon	--/--/4.2	An annual herb found in cismontane woodland, coastal scrub, and valley and foothill grassland from 120 - 1130 meters elevation. Blooms Mar-Jun (CNPS 2021).	<b>Will Not Occur.</b> Suitable habitat for this species is absent from the project site.
<i>Lilium humboldtii</i> ssp. <i>humboldtii</i> Humboldt lily	--/--/4.2	A perennial bulbiferous herb that occurs in the openings of chaparral, cismontane woodland, and lower montane coniferous forest from 30 - 1800 meters elevation. Blooms May – July (August) (CNPS 2021).	<b>Will Not Occur.</b> Suitable habitat for this species is absent from the project site.
<i>Navarretia myserii</i> ssp. <i>myserii</i> pincushion navarretia	--/--/1B.1	An annual herb found in vernal pools, often in acidic soils from 20 – 90 meters elevation. Blooms April – May (CNPS 2021).	<b>Will Not Occur.</b> There is no suitable soil or vernal pool habitat within the project site for this species.

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<i>Orcuttia tenuis</i> slender Orcutt grass	FT/CE/1B.1	An annual herb found in vernal pools, often in gravelly soils, from 35 - 1760 meters elevation. Blooms May – September (October) (CNPS 2021).	<b>Will Not Occur.</b> There is no suitable habitat for this species within the project site.
<i>Orcuttia viscida</i> Sacramento Orcutt grass	FE/SE/1B.1	An annual herb found in vernal pools from 30 – 100 meters elevation. This species grows in deep vernal pools that remain flooded for relatively long periods of time. It is associated with ancient alluvial soils, such as prehistoric floodplains. Sacramento Orcutt grass is known from fewer than 10 occurrences all in Sacramento county. Blooms April-July (Sep) (CNPS 2021).	<b>Will Not Occur.</b> There is no suitable habitat for this species within the project site.  There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2021).
<i>Packera layneae</i> Layne's ragwort	FT/--/1B.2	A perennial herb found in rocky gabbroic or serpentinite soils and occurs in chaparral and cismontane woodland from 200 - 1085 meters elevation. Blooms April – August (CNPS 2021).	<b>Will Not Occur.</b> Suitable serpentinite and gabbroic soils are absent from the project site.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	--/--/1B.2	A perennial rhizomatous herb found in marshes, swamps, and assorted shallow freshwater habitats from 0 – 650 meters elevation. Blooms May – October (November) (CNPS 2021).	<b>Will Not Occur.</b> There is no suitable habitat for this species within the project site.  There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2021).
<i>Wyethia reticulata</i> El Dorado County mule ears	--/--/1B.2	A perennial herb found in clay or gabbroic soils and occurs in chaparral, cismontane woodland, and lower montane coniferous forest from 185 - 630 meters elevation. Blooms April – August (CNPS 2021).	<b>Will Not Occur.</b> Suitable serpentinite and gabbroic soils are absent from the project site.
<b>Animals</b>			
<b>Invertebrates</b>			
<i>Bombus crotchii</i> Crotch bumble bee	--/Candidate E/--	Crotch bumble bee occurs in grassland and scrub habitats (CDFW 2019). New colonies are initiated by solitary queens, generally in the early spring, which typically occupy abandoned rodent	<b>Will Not Occur.</b> Some select food plants are present on site for western bumble bee; however, this species is currently rare across its range and is

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
		burrows (CDFW 2019). This species is a generalist forager and have been reported visiting a wide variety of flowering plants. A short-tongued bumble bee; food plants include <i>Asclepias</i> spp., <i>Antirrhinum</i> spp., <i>Clarkia</i> spp., <i>Eschscholzia</i> spp., <i>Eriogonum</i> spp., <i>Chaenactis</i> spp., <i>Lupinus</i> spp., <i>Medicago</i> spp., <i>Phacelia</i> spp., and <i>Salvia</i> spp. (Koch et al. 2012). The flight period for queens in California is from February to October. New queens hibernate over the winter and initiate a new colony the following spring (CDFW 2019). Rare throughout its range and in decline in the Central Valley and southern California (CDFW 2019).	in decline in California and is limited to high elevation meadows in the Sierra Nevada and small coastal populations (CDFW 2019). The project site does not provide suitable vegetation communities for this species and is subject to regular disturbance.
<i>Bombus occidentalis</i> western bumble bee	--/CE/--	Bumble bees are primitively eusocial insects that live in underground colonies made up of one queen, female workers, and reproductive members of the colony. New colonies are initiated by solitary queens, generally in the early spring, which typically occupy abandoned rodent burrows. This species is a generalist forager and have been reported visiting a wide variety of flowering plants. A short-tongued bumble bee; select food plants include <i>Melilotus</i> spp., <i>Cirsium</i> spp., <i>Trifolium</i> spp., <i>Centaurea</i> spp., <i>Eriogonum</i> spp., and <i>Chrysothamnus</i> spp. (Koch et al. 2012). This species has a short tongue and typically prefers open flowers with short corollas but is known to chew through the base of flowers with long corollas. The flight period for queens in California is from early February to late November, peaking in late June and late September. New queens hibernate over the winter and initiate a new colony the following spring. Rare throughout its range and in decline	<b>Will Not Occur.</b> Suitable foraging habitat and rodent burrows are absent from the project site.

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
		west of the Sierra Nevada crest.	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT/--/--	The range of the vernal pool fairy shrimp (VPFS) within California includes the Central Valley and southern California. (USFWS 2005). Populations are known from Stillwater Plain in Shasta County through most of the length of the Central Valley to Pixley in Tulare County (additional disjunct populations exist at various locations throughout state). VPFS occurs mostly in vernal pools, however it is also found in a variety of both natural and artificial wetland habitats, such as alkali pools, ephemeral drainages, stock ponds, roadside ditches, vernal swales, and rock outcrop pools (Helm 1998). Occupied wetlands are typically small (ranging from 0.1 to 0.05 acres in size), and pond for a relatively short duration (3-4 weeks) (Eriksen and Belk 1999). Soil types associated with VPFS vary greatly with geography and influence the ecology of the species. This fairy shrimp occurs in pools with 48 to 481 ppm salinity, and pH from 6.3 to 8.5 (Eriksen and Belk 1999).	<b>Will Not Occur.</b> There is no vernal pool habitat within the project site.  There are four CNDDB occurrences within a 5-mile radius of the site (CDFW 2021).
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT/--/--	Endemic to elderberry shrubs ( <i>Sambucus</i> spp.) occurring in riparian habitat in the Sacramento and San Joaquin Valleys, riparian habitats in the Sacramento and San Joaquin Valleys, and less common throughout riparian forests of the Central Valley from Redding to Fresno County (USFWS 2014) typically below 152 m amsl (USFWS 2017a).	<b>Will Not Occur.</b> There are no elderberry shrubs within the project site, which provide habitat for valley elderberry longhorn beetle.  There are five CNDDB occurrences within a 5-mile radius of the site (CDFW 2021).
<i>Lepidurus packardii</i>	FE/--/--	The vernal pool tadpole shrimp (VPTS) occurs	<b>Will Not Occur.</b> There is no vernal

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
vernal pool tadpole shrimp		within the Central Valley of California and in the San Francisco Bay area (USFWS 2005), with the majority of the populations occurring in the Sacramento Valley. This species has also been reported from the Sacramento River Delta to the east side of San Francisco Bay, and from a few scattered localities in the San Joaquin Valley from San Joaquin County to Madera County (Rogers 2001). Suitable habitats vary considerably, including vernal pools, clay flats, alkaline pools, ephemeral stock tanks, roadside ditches, and road ruts (Rogers 2001). Vernal pools may range in size from small, clear, and well-vegetated to highly turbid, alkali scald pools to large winter lakes (Rogers 2001) ranging in size from 54 square feet to 89 acres (USFWS 2005), containing clear- to highly-turbid water. They may be seasonal or ephemeral and may exhibit a wide range of salinity levels. However, VPTS survival requires that water bodies be deeper than 5 inches, pond for 40 days or more, and not experience wide daily temperature fluctuations (Rogers 2001). VPTS cysts (resting eggs) also must have the opportunity to dry out before they can hatch.	pool habitat within the project site.  There are six CNDDDB occurrences within a 5-mile radius of the site (CDFW 2021).
<b>Fishes</b>			
<i>Hypomesus transpacificus</i> Delta smelt	FT/SE/--	Delta smelt are tolerant of a wide salinity range. For a large part of their one-year life span, delta smelt live along the freshwater edge of the mixing zone (saltwater-freshwater interface). Shortly before spawning, adults migrate upstream from the brackish-water habitat associated with the mixing zone and disperse into river channels and tidally-influenced	<b>Will Not Occur.</b> There is no suitable aquatic habitat within the project site.

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
		backwater sloughs. They spawn in shallow, fresh or slightly brackish water upstream of the mixing zone. Most spawning happens in tidally-influenced backwater sloughs and channel edgewaters. Although spawning has not been observed in the wild, the eggs are thought to attach to substrates such as cattails, tules, tree roots and submerged branches. Delta smelt are found only from Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties (USFWS 1995).	
<i>Entosphenus tridentatus</i> Pacific lamprey	--/--/SCC	Pacific Lamprey are a relatively large anadromous and parasitic fish reaching over 800 cm. Their bodies are elongate, eel-like. This species is found in Found in North America, their distribution includes major river systems such as the Fraser, Columbia, Klamath- 8 Trinity, Eel, and Sacramento-San Joaquin rivers, as well as most intervening streams (Goodman 2012).	<b>Will Not Occur.</b> There is no suitable aquatic habitat within the project site.
<i>Oncorhynchus mykiss irideus</i> pop. 11 Central Valley Steelhead DPS	FT/--/--	This distinct population segment includes all naturally spawned anadromous steelhead populations below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries, as well as two artificial propagation programs: the Coleman NFH, and Feather River Hatchery steelhead hatchery programs (NMFS 2016). Steelhead spawn in rivers and streams with cool, clear, water and suitable silt free substrate (NMFS 2016).	<b>Will Not Occur.</b> There is no suitable aquatic habitat within the project site.
<b>Amphibians</b>			
<i>Ambystoma californiense</i>		California tiger salamanders are generally	<b>Will Not Occur.</b> There is no suitable

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
California tiger salamander		restricted to vernal pools and seasonal ponds, including many constructed stock ponds, in grassland and oak savannah plant communities from sea level to about 1,500 feet in central California. This species spends the majority of its life in upland areas in the vicinity of suitable breeding ponds, where it inhabits rodent burrows. In order to provide suitable habitat for this species, suitable breeding habitat must be present in combination with suitable upland habitat. In the Coastal region, populations are scattered from Sonoma County in the northern San Francisco Bay Area to Santa Barbara County, and in the Central Valley and Sierra Nevada foothills from Yolo to Kern counties (USFWS 2017b).	aquatic or upland habitat for this species within the project site.
<i>Rana boylei</i> foothill yellow-legged frog	--/SE/SSC	The foothill yellow-legged frog occurs along the coast ranges from Oregon to Los Angeles and along the western side of the Sierra Nevada. This species uses perennial rocky streams in a wide variety of habitats up to 6,400 feet above msl. This species rarely ventures far from water, is usually found basking in the water, or under surface debris or underground within 165 feet of water. Eggs are laid in clusters attached to gravel or rocks along stream margins in flowing water. Tadpoles typically require up to four months to complete aquatic development. Breeding typically follows winter rainfall and snowmelt, which varies based upon location (Jennings and Hayes 1994).	<b>Will Not Occur.</b> There is no suitable aquatic or upland habitat for this species within the project site.  There is on CNDDB occurrence within a 5-mile radius of the project site.
<i>Rana draytonii</i> California red-legged frog	FT/--/SSC	The California red-legged frog occupies a fairly distinct habitat, combining both specific aquatic and riparian components. The adults require	<b>Will Not Occur.</b> There is no suitable aquatic or upland habitat for this species within the project site.



## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
		<p>dense, shrubby, or emergent riparian vegetation closely associated with deep (greater than 2 1/3-foot deep) still or slow-moving water. The largest densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willows (<i>Salix</i> spp.) and an intermixed fringe of cattails (<i>Typha latifolia</i>). Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter. California red-legged frogs aestivate (enter a dormant state during summer or dry weather) in small mammal burrows and moist leaf litter. They have been found up to 100 feet from water in adjacent dense riparian vegetation. Studies have indicated that this species cannot inhabit water bodies that exceed 70° F, especially if there are no cool, deep portions (USFWS 2002).</p>	
<p><i>Spea hammondi</i> western spadefoot toad</p>	--/--/SSC	<p>Amphibian that breeds in vernal pools and seasonal ponds or slow portions of streams in grasslands and woodlands. Adults spend most of their time in underground burrows in grasslands surrounding breeding pools (Jennings and Hayes 1994). Breeding is typically finished by the end of March. Tadpoles mature through late-spring and disperse as pools dry (Zeiner et al. 1988-1990).</p>	<p><b>Will Not Occur.</b> There is no suitable aquatic or upland habitat for this species within the project site. Additionally, the site which is surrounded by commercial and residential parcels was devoid of animal burrows that provide habitat for this species.</p> <p>There is one CNDDDB occurrences within 5 miles of the project site (CDFW 2021).</p>

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<b>Reptiles</b>			
<i>Actinemys (=Emys) marmorata</i> western pond turtle	--/--/SSC	Requires permanent to semi-permanent water with dense submerged vegetation, abundant basking sites, gently sloping banks, and dry clay or silt soils in nearby uplands. Turtles will lay eggs up to 0.25-mile from water, but typically go no more than 600 feet (Jennings and Hayes 1994).	<b>Will Not Occur.</b> There is no suitable aquatic or upland habitat in the project site.  There are five CNDDDB occurrences within 5 miles radius of the project site (CDFW 2021).
<i>Phrynosoma blainvillii</i> coast horned lizard	--/--/SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes in chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinyon and juniper woodlands, and riparian scrub and woodland (CDFW 2020).	<b>Not Expected.</b> Suitable loose soil for burying is not present in the project site and the site is subject to regular disturbance which likely precludes this species from utilizing the site.
<i>Thamnophis gigas</i> giant garter snake	FT/ST/--	Endemic to the San Joaquin and Sacramento Valley floors. Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands. Requires adequate water during its active season (early spring through mid-fall) to provide food and cover, emergent, herbaceous wetland vegetation for foraging and cover, grassy banks, and openings in waterside vegetation for basking, and higher elevation uplands for cover and refuge from flood waters during its dormant season (winter). Inhabits small mammal burrows and other soil crevices with sunny exposure along south and west facing slopes, above prevailing flood elevations when dormant. Primarily found in marshes and sloughs as well as slow-moving creeks but absent from large rivers (USFWS 2017c).	<b>Will Not Occur.</b> There is no suitable aquatic or upland habitat for this species within the project site.

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<b>Birds</b>			
<i>Accipiter cooperii</i> Cooper's hawk	--/--/WL	Nests in woodlands and urban forests. Preys on medium-sized birds and small mammals. Forages in open woodland and habitat edges (Zeiner et al. 1988-1990).	<b>Will not occur.</b> The project site does not provide suitable nesting or foraging habitat for this species.  There is one CNDDDB occurrence within a 5- mile radius of the project site (CDFW 2021).
<i>Agelaius tricolor</i> tricolored blackbird	--/ST/--	Common locally throughout central California. Nests and seeks cover in emergent wetland vegetation and thorny vegetation such as Himalayan blackberry ( <i>Rubus armeniacus</i> ) as well as cattails and tules. Nesting area must be large enough to support a minimum colony of 50 pairs as they are a highly colonial species. Forages on ground in croplands, grassy fields, flooded land, and edges of ponds for insects (Shuford and Gardali 2008).	<b>Will Not Occur.</b> There is no nesting or foraging habitat within the project to support this species.  There are thirteen CNDDDB occurrence within a 5- mile radius of the project site (CDFW 2021).
<i>Ammodramus savannarum</i> grasshopper sparrow	--/--/SSC	A summer resident of foothills and lowlands west of the Cascade-Sierra Nevada crest. Occurs in grasslands with scattered shrubs or other tall structures which it utilizes as singing perches. Nests on the ground in dense grass with overhanging taller grasses and forbs (Zeiner et al. 1988-1990).	<b>Will Not Occur.</b> There is no suitable grassland habitat within the project site. The site is surrounded by urban development.
<i>Aquila chrysaetos</i> golden eagle	--/--/FP	Typically occurs in rolling foothills, mountain areas, deserts, and other open habitats up to 3,822 m amsl. Typically nests on cliff ledges or large trees in open areas in canyons. Will occasionally use other tall structures for nesting, such as electrical transmission towers. Prey consists mostly of rodents, carrion, birds, reptiles, and occasionally small livestock (Zeiner	<b>Will Not Occur.</b> There is no suitable foraging habitat in the project site. The site is too small in size to provide adequate foraging habitat and is surrounded by urban development.  There are two CNDDDB occurrences within a 5- mile radius of the project

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
		et al. 1990).	site and are associated with Folsom Lake.
<i>Ardea alba</i> great egret	--/--/(Nesting Colony)	Nests in colonies in large trees usually near water. Nesting colonies must be relatively isolated from human activities. Forages in shallow water in a variety of habitats.	<b>Will Not Occur.</b> There is no suitable rookery habitat within the project site.  There are two CNDDDB occurrences within a 5- mile radius of the project site.
<i>Ardea Herodias</i> great blue heron	--/--/(Nesting Colony)	Inhabits both freshwater and saltwater habitats and forages in grassland and agricultural field. Breeding colonies are located within 2 to 4 miles of feeding areas, often in isolated swamps or on islands, and near lakes and ponds bordered by forests (Collazo 1979).	<b>Will Not Occur.</b> There is no suitable rookery habitat within the project site.  There are four CNDDDB occurrences within a 5- mile radius of the project site.
<i>Athene cunicularia</i> burrowing owl	--/--/SSC	Forages in grasslands, agricultural fields, and disturbed places where burrowing mammals are abundant with low and sparse vegetation. Nests in burrows, especially those of California ground squirrel, but will use other refuge sites ( <i>Otospermophilus beecheyi</i> ; Shuford and Gardali 2008). In the Central Valley of California, most foraging occurs within a 600-m radius of the nest.	<b>Will not occur.</b> The project site does not provide suitable habitat to support nesting burrowing owl, is surrounded by commercial and residential parcels, and was devoid of animal burrows that provide habitat for this species.
<i>Buteo regalis</i> ferruginous hawk	--/--/WL	Found in arid and semi-arid open grasslands, sagebrush flats, desert scrub, low foothills and areas of pinyon and juniper habitat. Ferruginous hawks' nest in trees, large shrubs, utility poles and occasionally on the ground near river cut banks. Preys upon ground squirrels, rabbits, mice, and gophers. (Dechant et al. 1999)	<b>Will Not Occur.</b> The project site lacks suitable nesting and foraging habitat for this species. Ferruginous hawks require large open tracts of land for foraging.
<i>Buteo swainsoni</i> Swainson's hawk	--/CT/--	Swainson's hawk breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak	<b>Will not occur.</b> The project site lacks suitable nesting and foraging habitat

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
		<p>savannah in the Central Valley and forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. Swainson's hawks breed in California and winter in Mexico and South America. Swainson's hawks usually arrive in the Central Valley between March 1 and April 1 and migrate south between September and October. Swainson's hawks usually nest in trees adjacent to suitable foraging habitat. Swainson's hawk nests are usually located in trees near the edges of riparian stands, in lone trees or groves of trees in agricultural fields, and in mature roadside trees. Valley oak, Fremont cottonwood, walnut, and large willow with an average height of about 58 feet, and ranging from 41 to 82 feet, are the most commonly used nest trees in the Central Valley. Suitable foraging areas for Swainson's hawk include native grasslands or lightly grazed pastures, alfalfa and other hay crops, idle land, certain grain and row croplands, and ruderal lands. Swainson's hawks primarily feed on voles; however, they will feed on a variety of prey including small mammals, birds, and insects (CDFW 1994).</p>	<p>for this species. Swainson's hawk require large open tracts of land for foraging and typically nest in individual trees next to foraging habitat. Additionally, much of the area within a 5-mile radius of the project site is developed with few open spaces available for foraging.</p> <p>There are four CNDDDB records for this species within a 5-mile radius of the project site (CDFW 2021).</p>
<i>Chaetura vauxi</i> Vaux's swift	--/--/SSC	<p>Vaux's Swifts use mature and old-growth coniferous and mixed forests for nesting, especially those with plenty of hollow trees. Forests with coastal redwood, grand fir, ponderosa pine, western hemlock, Douglas-fir, and western redcedar have the largest populations of this swift, as they tend to produce more nesting and roosting cavities than other tree species. Nonbreeding birds also use tree hollows during the summer, roosting communally in large trees especially. In many</p>	<p><b>Will Not Occur.</b> The project site lacks suitable nesting and foraging habitat for this species.</p>

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
		cases, old woodpecker holes serve as the roost entrances. In preparation for migration to wintering areas in the tropics, Vaux's Swifts gather in large flocks and use both trees and chimneys (often in large metropolitan centers) for communal roosts. On the wintering grounds, Vaux's use old-growth forest at many elevations. They feed over forest gaps and fields as well as towns. Very little is known about roosting of migrant Vaux's Swifts, but the locally nesting populations in the Yucatán Peninsula sometimes roost and nest in natural limestone wells (Bull 2007).	
<i>Elanus leucurus</i> white-tailed kite	--/--/FP	Inhabits rolling foothills and valley margins with scattered oaks, as well as river bottomlands or marshes next to deciduous woodland. Nests in isolated, dense-topped trees in open areas. Forages in a variety of habitats including grassland, marshes, and agricultural fields (Zeiner 1990).	<p><b>Not Expected.</b> There is no suitable nesting habitat within the project site. Trees located within a 250-foot buffer of the project site could provide nesting sites. However, they are located adjacent to a busy roadway and a heavy traffic park site. Additionally, the project site contains marginal forging habitat as the site is highly disturbed, and the site which is surrounded by commercial and residential parcels was devoid of animal burrows that provide habitat for prey for this species.</p> <p>There are four CNDDDB occurrences within a 5-mile radius of the project site.</p>

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<i>Eremophila alpestris actia</i> California horned lark	--/--/WL	Inhabits areas of short vegetation avoiding places where grasses grow more than a couple of inches high. Common habitats include prairies, deserts, tundra, beaches, dunes, and heavily grazed pastures. Also, frequent areas cleared by humans, such as plowed fields and mowed expanses around airstrips. In wintertime, flocks of Horned larks, often mixing with other birds of open ground, can be seen along roadsides, in feedlots, and on fields spread with waste grain and manure. Nest are built on the ground out of woven fine grass or other plant materials and lined with finer material.	<b>Will Not Occur.</b> There is no suitable habitat for this species within the project site.
<i>Falco columbarius</i> merlin	--/--/WL (wintering)	An uncommon winter migrant in California; breeds in Alaska and Canada. Uses a variety of habitats but requires trees close to water for cover and is usually found near coastlines, lakeshores, and wetlands (Zeiner et al. 1988-1990).	<b>Will Not Occur.</b> This species is a wintering California migrant and would not nest in the project region.  There is one CNDDDB occurrences within a 5-mile radius of the project site.
<i>Falco mexicanus</i> prairie falcon	--/--/WL	Inhabits dry, open terrain, including deserts and grasslands and well open spaces past treeline.	<b>Will not occur.</b> There is no suitable nesting habitat within the project site. Trees located within a 250-foot buffer of the project site could provide nesting sites. However, they are located adjacent to a busy roadway and a heavy traffic park site. Additionally, the project site contains marginal foraging habitat as the site is highly disturbed, and the site which is surrounded by commercial and residential parcels was devoid of animal burrows that provide habitat for prey for this species.

## Appendix C (cont.)

## Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<i>Falco peregrinus anatum</i> American peregrine falcon	--/--/FP (Delisted)	Found in a wide variety of habitats from open country, cliffs (mountains to coast), tundra, desert, and sometimes in cities. Is found often near water, especially along the coast, and migrants may fly far out to sea. Nests are typically situated on ledges of vertical rocky cliffs commonly with shelter overhang; however, locally, river banks, tundra mounds, open bogs, large stick nests of other species and man-made structures (ledges of city buildings) are also used.	<b>Will not occur.</b> There is no suitable nesting habitat within the project site. Additionally, the project site contains marginal foraging habitat as the site is highly disturbed, and the site which is surrounded by commercial and residential parcels was devoid of animal burrows that provide habitat for prey for this species.



## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<i>Haliaeetus leucocephalus</i> bald eagle	FD/SE/FP	Requires large bodies of water with an abundant fish population. Feeds on fish, carrion, small mammals, and water-fowl. Nests are usually located within a 1-mile radius of water. Nests are most often situated in large trees with a commanding view of the area (Zeiner et al. 1990).	<b>Will Not Occur.</b> There are no suitable nest trees in the project site or surrounding the project site that would support this species nesting. This species is well documented as nesting adjacent to Folsom Lake and Lake Natoma (CDFW 2021).  There is one CNDDDB occurrence of this species within a 5-mile radius of the site (CDFW 2021).
<i>Icteria virens</i> yellow-breasted chat	--/--/SSC	Found in areas of dense shrubbery, including abandoned farm fields, powerline corridors, fencerows, forest edges and openings, swamps, and edges of streams and ponds. Its habitat often includes blackberry bushes. In arid regions of the West it is frequently found in shrubby habitats along rivers.	<b>Will Not Occur.</b> There is no suitable habitat within the project site for this species.
<i>Lanius ludovicianus</i> loggerhead shrike	--/--/SSC	Found in grasslands, semi-open terrain, woodland clearing or desert with scattered shrubs. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	<b>Will Not Occur.</b> There is no suitable habitat within the project site for this species.
<i>Laterallus jamaicensis coturniculus</i> California black rail	--/ST/FP	Saltwater, brackish, and freshwater marshes. Does not occur in wetland areas with annual fluctuations in water level and need a permanent water source of at least 1 inch in depth.	<b>Will Not Occur.</b> There is no suitable habitat within the project site for this species.
<i>Melospiza melodia</i> song sparrow ("Modesto" population)	--/--/SSC	Breeds in riparian thickets in shrubs or vines near fresh or saline emergent wetland. Nests are typically situated low to the ground or on the ground under dense riparian vegetation (Zeiner et al. 1990).	<b>Will Not Occur.</b> There is no suitable riparian habitat within the project site for this species.

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<i>Pandion haliaetus</i> osprey	--/--/WL	Nests in treetops within 15 miles of open bodies of water including ocean shores, bays, freshwater lakes, and larger streams (CFDW 2021).	<b>Will Not Occur.</b> There is no suitable nesting habitat or aquatic foraging habitat within the project site for this species.
<i>Phalacrocorax auritus</i> double-crested cormorant	--/--/WL	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Inhabits riparian forest, riparian scrub, and riparian woodland (CDFW 2021).	<b>Will Not Occur.</b> There is no suitable nesting or foraging habitat within the project site for this species.
<i>Progne subis</i> purple martin	--/--/SSC	Occurs as a summer resident and migrant, primarily from mid-March to late September. Breeds from May (rarely late Apr) to mid-August. Purple martins are widely but locally distributed in forest and woodland areas at low to intermediate elevations throughout much of the state. Martins use a wide variety of nest substrates (e.g., tree cavities, bridges, utility poles, lava tubes, and, formerly, buildings), but nonetheless are very selective of habitat conditions nearby. Martins are most abundant in mesic regions, near large wetlands and other water bodies, and at upper slopes and ridges, which likely concentrate aerial insects (Shuford and Gardali 2008).	<b>Will Not Occur.</b> There is no suitable nesting or foraging habitat within the project site for this species.  There is one CNDDDB occurrence within a 5- mile radius of the site.
<i>Riparia riparia</i> bank swallow	--/ST/--	Found primarily in riparian and lowland habitat in California. Nests in colonies along cliffs or steep riverbanks in holes. In California, most of the population is situated along the Sacramento River and the Feather River. Other smaller populations persist near Monterey and north of Shasta counties (Zeiner et al. 1988-1990).	<b>Will Not Occur.</b> There is no suitable nesting or foraging habitat within the project site for this species.
<i>Setophaga petechia</i> yellow warbler	--/--/SSC	Migratory resident common in willow thickets, orchards, and suburban shrubbery.	<b>Will Not Occur.</b> There is no suitable nesting or foraging habitat within the project site for this species.

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
<b>Mammals</b>			
<i>Antrozous pallidus</i> pallid bat	--/--/SSC	Occurs throughout California except for the high Sierra Nevada and the northern Coast Ranges. Habitats include grasslands, shrublands, woodlands, and forests from sea level to 6,000 feet. Most common in open, dry habitats with rocky areas for roosting; roosts also include cliffs, abandoned buildings, tree hollows, bird boxes, and under bridges (Bolster, ed. 1998).	<b>Will Not Occur.</b> There are no roosting sites or rocky habitat to support this species on or adjacent to the project site.
<i>Lasiurus blossevillii</i> western red bat	--/--/SSC	<p>Typical tree bat, which is closely associated with cottonwoods in riparian areas at elevations below 6,500 feet. Especially favored roosts are found where leaves form a dense canopy above and branches do not obstruct the bats' flyway below. Western red bats are also known to roost in orchards, especially in the Sacramento Valley of California. Despite their bright amber color, these bats are actually rather cryptic, resembling dead leaves when they curl up in their furry tail membranes to sleep.</p> <p>Like all tree bats, this species is solitary, coming together only to mate and to migrate. Tree bats often give birth to twins, and western red bats can have litters of up to four pups, though three is the average. These bats typically feed along forest edges, in small clearings, or around street-lights where they prefer moths (Bat Conservation International 2021).</p>	<b>Will not occur.</b> There is no suitable roosting habitat for this species in the project site.
<i>Lasionycteris noctivagans</i> silver-haired bat	--/--/WBWG: M	Typically occurs in coniferous forests, valley and foothill woodlands and riparian habitats. Requires close proximity to water, which it will forage over. Typically considered a moth specialist that will emerge from its roost earlier	<b>Will Not Occur.</b> There are no roosting sites on or adjacent to the project site

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

Species Name/ Common Name <sup>1</sup>	Status <sup>2</sup>	Habit, Ecology and Life History	Potential to Occur
		than other bats. Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark (Zeiner et al. 1988-1990).	
<i>Taxidea ta</i> American badger	--/--/SSC	Inhabits drier open stages of most shrub, forest, and herbaceous habitats with loose, friable soils. Preys on a wide variety of mammals, reptiles, birds, and carrion, and hunts mostly by digging out fossorial prey. Occasionally takes prey on the surface. Not tolerant of cultivation. No longer occur in the Central Valley except in the extreme western edge (Williams 1986).	<b>Will Not Occur.</b> There is no suitable habitat for this species within the project site. Additionally, the surrounding area is developed and surrounded by busy roadways.  There is one CNDDDB records for this species within a 5-mile radius of the project site (CDFW 2021).

<sup>1</sup> Sensitive species reported in CNDDDB or CNPS on “Folsom, Clarksville, Citrus Heights, Carmichael, Buffalo Creek, Folsom SE, Pilot Hill, Rocklin, and Roseville” Geological Survey (USGS) 7.5-minute series quadrangles USGS quads, or in USFWS lists for the Study Site.

<sup>2</sup> Status is as follows: Federal (ESA) listing/State (CESA) listing/other CDFW status or CRPR. F = Federal; S = State of California; E = Endangered; T = Threatened; C = Candidate; FP=Fully Protected; SSC=Species of Special Concern; WL=Watch List; Western Bat Working Group (WBWG) M = Medium.

<sup>3</sup> Status in the Study Area is assessed as follows. **Will Not Occur:** Species is either sessile (*i.e.* plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur on the Study Area; **Not Expected:** Species moves freely and might disperse through or across the Study Area, but suitable habitat for residence or breeding does not occur on the Study Area, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100% certainty; **Presumed Absent:** Habitat suitable for residence and breeding occurs on the Study Area; however, focused surveys conducted for the current project were negative; **May Occur:** Species was not observed on the site and breeding habitat is not present but the species has the potential to utilize the site for dispersal, **High:** Habitat suitable for residence and breeding occurs on the Study Area and the species has been recorded recently on or near the Study Area, but was not observed during surveys for the current project; **Present:** The species was observed during biological surveys for the current project and is assumed to occupy the Study Area or utilize the Study Area during some portion of its life cycle.

CRPR = California Rare Plant Rank: 1B – rare, threatened, or endangered in California and elsewhere; 2B – rare, threatened, or endangered in California but more common elsewhere; 3- plants about which more information is needed; and 4- Plants of limited distribution. Extension codes: .1 – seriously endangered; .2 – moderately endangered

## REFERENCES

- Bat Conservation International 2021. *Lasiurus-blossevillei*. <https://www.batcon.org/bat/lasiurus-blossevillei>. Accessed on 8/12/2021.
- Bottorff, R.L. 2007. *Cosumnoperla sequoia*, a new species of stonefly from the Sierra Nevada, California (Plecoptera: Perlodidae: Isoperlinae). *Illesia*, 3(6): 46-52
- Bolster, B.C., editor. 1998. Terrestrial Mammal Species of Special Concern in California. Draft Final Report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Report submitted to California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No. FG3146WM.
- Bowman, T.E. 1975. Three new troglobitic asellids from western North America (Crustacea: Isopoda: Asellidae). *International Journal of Speleology* 7:339-356
- Bull, Evelyn L. and Charles T. Collins. (2007). Vaux's Swift (*Chaetura vauxi*), version 2.0. In *The Birds of North America* (P. G. Rodewald, editor). Cornell Lab of Ornithology, Ithaca, New York, USA.
- California Department of Fish and Wildlife (CDFW). 1994. Staff report regarding mitigation for impacts to Swainson's hawk (*Buteo swainsoni*) in the Central Valley of California. November 1.
2019. Report to the Fish and Game Commission: Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered Under the California Endangered Species Act. April 2019. Special California Department of Fish and Wildlife, Sacramento, California, USA.
- Collazo, J. A. 1979. Breeding biology and food habits of the Great Blue Heron at Heyburn State Park, Benewah County, Idaho. Master's Thesis. Univ. Idaho, Moscow.
- Dechant, J. A., M. L. Sondreal, D. H. Johnson, L. D. Igl, C. M. Goldade, A. L. Zimmerman, and B. R. Euliss. 1999 (revised 2002). Effects of management practices on grassland birds: Ferruginous hawk. Northern Prairie Wildlife Research Center, Jamestown, ND. 23 pages.
- Eriksen, C. H. and D. Belk. 1999. Fairy shrimps of California's puddles, pools, and playas. Mad River Press, Eureka, California.
- Goodman, D.H. and S.B. Reid. 2012. Pacific Lamprey (*Entosphenus tridentatus*) Assessment and Template for Conservation Measures in California. U.S. Fish and Wildlife Service, Arcata, California. 117 pp.
- Helm, Brent, 1998, Biogeography of Eight Large Branchiopods Endemic to California. In C. W. Witham; E.T. Bauder, D. Belk, W.R. Ferren, Jr., R. Omduff Ecology, Conservation and Management of Vernal Pool Ecosystems- Proceedings from a 1996 Conference. Sacramento CA.
- Jennings, M.R. and M.P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Final Report submitted to the California Department of Fish and [Wildlife], Inland Fisheries Division.
- Koch, J., J. Strange, and P. Williams. 2012. Bumble bees of the Western United States. USDA-Forest Service, Pollinator Partnership. Washington, DC. 144 pp.
- National Marine Fisheries Service (NMFS). 2016. California Central Valley Steelhead Distinct Population Segment: 5-year Review. California Central Valley Area Office.

## Appendix C (cont.)

### Potential for Regionally Occurring Special-status Species to Occur in the Project Site

- Rogers, D.C. 2001. Revision of the North American *Lepidurus* (Notostraca: Crustacea) with a description of a new species previously confused with two other species. *Journal of Crustacean Biology* 21(4): 991-1006.
- Shuford, W.D., and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. *Studies of Western Birds* 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- U.S. Fish and Wildlife Service (USFWS). 1995. Sacramento – San Joaquin Delta Native Fishes Recovery Plan. U.S. Fish and Wildlife Service, Portland, OR.
2002. Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Portland, Oregon. viii + 173 pp.
2005. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. Region 1, U.S. Fish and Wildlife Service, Portland, OR. December 15.
2014. 50 CFR Part 17 RIN–1018–AV29 Endangered and Threatened Wildlife and Plants; Withdrawal of the Proposed Rule to Remove the Valley Elderberry Longhorn Beetle from the Federal List of Endangered and Threatened Wildlife. *Federal Register* Vol. 79, No. 180. September 17.
- 2017a. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento, California. 28 pp.
- 2017b. Recovery Plan for the Central California Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. v + 69pp.
- 2017c. Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. vii + 71 pp.
- Williams, D.F. 1986. California Mammal Species of Special Concern in California. Department of Biological Sciences California State University, Stanislaus and California Department of Fish and Game, Sacramento.
- Zeiner, D.C., W.R. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990. California's Wildlife Volume II: Birds. State of California: The Resource Agency, Department of Fish and Game, Sacramento, California.