

**FINAL**  
**FLORA AND FAUNA SURVEY REPORT**  
**FOR**  
**AIRWAYS GOLF COURSE**  
**FRESNO COUNTY, CALIFORNIA**  
**AUGUST 2023**



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**FINAL**

**FLORA AND FAUNA SURVEY REPORT FOR  
AIRWAYS GOLF COURSE  
FRESNO COUNTY, CALIFORNIA**

**Prepared for:**

**Cardno GS, Inc.  
2496 Old Ivy Road, Suite 300  
Charlottesville, VA 22903**

**Prepared by:**

**Gulf South Research Corporation  
8081 Innovation Park Drive  
Baton Rouge, LA 70820**

**August 2023**

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## ACRONYMS AND ABBREVIATIONS

144 FW	144th Fighter Wing
ANG	Air National Guard
BCC	Birds of Conservation Concern
Cal-IPC	California Invasive Plant Council
Cardno	Cardno GS, Inc.
CDFW	California Department of Fish and Wildlife
ECOS	Environmental Conservation Online System
EIS	Environmental Impact Statement
ESA	Endangered Species Act
GPS	Global Positioning System
GSRC	Gulf South Research Corporation
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
PLS	Planning Level Survey
RTE	Rare, Threatened, and Endangered
U.S.	United States
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
USFWS	U.S. Fish and Wildlife Service

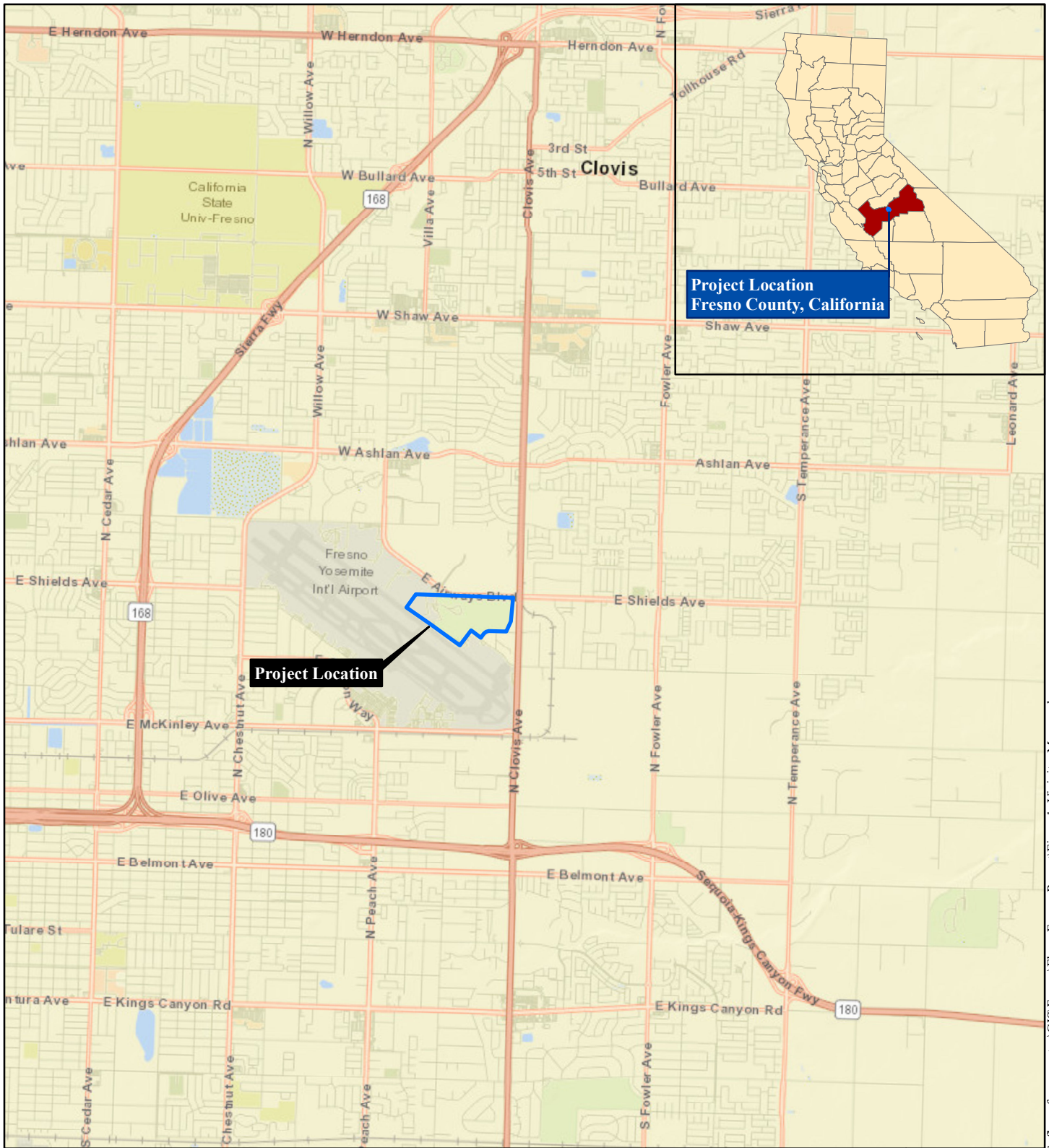
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## **1.0 INTRODUCTION**


The United States (U.S.) Air National Guard (ANG) contracted Cardno GS, Inc. (Cardno) who subcontracted Gulf South Research Corporation (GSRC) to conduct flora and fauna planning level surveys (PLSs) for the presence of sensitive and protected species, their suitable habitats, and general floral and faunal species occurrences within the Airways Golf Club and adjacent airport infrastructure (project area) in Fresno County, California (Figures 1 and 2). This work was performed under Contract Number W9127820D0044 – Task Order W9127821F0454. Surveys will provide baseline information needed for general planning purposes, as well as for inclusion into an Environmental Impact Statement (EIS) for the proposed F-15EX Eagle II and F-35A Lightning II operational beddown area.

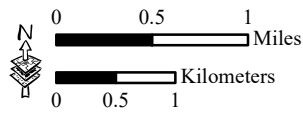
This report describes for the conditions present within the Airways Golf Course and adjacent airport infrastructure at the Fresno-Yosemite International Airport and provides a summary of the materials and methods used to complete the flora and fauna PLSs, as well as results and conclusions from these surveys. The project area is approximately 116 acres.



**Project Location**

**Project Location  
Fresno County, California**

**Legend**  
 Survey Boundary (116.4 ac.)




May 2023

**Figure 1. Vicinity Map**



**Legend**

Survey Boundary (116.4 ac.)


  
 0 250 500 Feet
   
 0 60 120 Meters

May 2023

Figure 2. Project Area Map

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**2.0 OBJECTIVES AND METHODS**

The objective of the PLS for flora and fauna was to document and quantify plant and animal species observed within the project area, and to determine if any state listed or federally threatened or endangered plant or animal species were present. A secondary objective was to document invasive plant and animal species observed within each habitat type to assist in the development of future land management recommendations.

Plant species were identified through visual confirmation, and animal species were identified through direct visual or auditory observation and/or detection of tracks, scat, and nests or refugia. The survey area was completely accessible by foot and/or vehicle.

**2.1 Background Research and Literature Review**

Several resources were consulted prior to conducting on-site surveys. U.S. Geological Survey (USGS) topographic maps and U.S. Department of Agriculture (USDA) soil survey maps were reviewed for baseline water feature and soils information (USDA Natural Resources Conservation Service [NRCS] 2023). U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping data was also reviewed to screen for potential wetlands or surface waters potentially occurring on site (USFWS 2023a).

**2.1.1 Federally Protected Species**

Species listed as threatened or endangered under the Endangered Species Act (ESA) with the potential to occur within the project area (according to the IPAC website) are included in Table 1 (USFWS 2023b). A description of each federally listed species, including life history and threats to the species, is provided below in Section 2.1.2. Additionally, a number of migratory birds that occur on the USFWS Birds of Conservation Concern list are expected to be present. These species are protected under the Migratory Bird Treaty Act (MBTA).

**Table 1. Federally Threatened and Endangered Species with the Potential to Occur in the Vicinity of the Project Area**

Common Name	Scientific Name	Status	Potential Habitat	Critical Habitat
<b>Mammals</b>				
Fresno kangaroo rat	<i>Dipodomys nitratoides</i>	Endangered	No	Yes (outside of project area)
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	Endangered	No	No
<b>Birds</b>				
California condor	<i>Gymnogyps californianus</i>	Endangered	No	Yes (outside of project area)
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Threatened	No	Yes (outside of project area)
<b>Reptiles</b>				
Blunt-nosed leopard lizard	<i>Gambelia silus</i>	Endangered	No	No
<b>Amphibians</b>				
California tiger salamander	<i>Ambystoma californiense</i>	Threatened	No	Yes (outside of project area)

Common Name	Scientific Name	Status	Potential Habitat	Critical Habitat
<b>Insects</b>				
Monarch butterfly	<i>Danaus plexippus</i>	Candidate	No	No
<b>Crustaceans</b>				
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	Endangered	No	Yes (outside of project area)
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Threatened	No	Yes (outside of project area)
<b>Plants</b>				
Greene's tuctoria	<i>Tuctoria greenei</i>	Endangered	No	Yes (outside of project area)

Source: USFWS 2023b – see Appendix A

### 2.1.2 Federally Listed Species

#### Fresno Kangaroo Rat (*Dipodomys nitratooides*)

The Fresno kangaroo rat is endemic to the San Joaquin Valley in California. This species has the smallest range of any *Dipodomys* species. It is a small, nocturnal rodent that is sandy brown or gray in color and has large hind legs, long ears, and a long tail (USFWS 2010a).

The Fresno kangaroo rat is adapted to the arid and semi-arid grasslands and shrublands of the San Joaquin Valley, where it primarily feeds on seeds, vegetation, and insects. It is an important prey species for a variety of predators, including birds of prey, snakes, and small carnivores.

The primary threat to the Fresno kangaroo rat is habitat loss and fragmentation due to urbanization, agricultural expansion, and infrastructure development. The conversion of natural grasslands and shrublands to other land uses has significantly reduced the species' available habitat, which has led to population declines. Additionally, the introduction of non-native species, such as grasses and weeds, has altered the Fresno kangaroo rat's natural habitat and food sources. Climate change is also a potential threat, as it may lead to changes in precipitation patterns and temperature regimes that have the potential to impact the species' habitat and food availability (USFWS 2010a).

#### San Joaquin Kit Fox (*Vulpes macrotis mutica*)

The federally endangered San Joaquin kit fox is the smallest canid in North America (USFWS 2010b). Historically, the San Joaquin kit fox range has extended throughout much of the southern half of the San Joaquin Valley, from Contra Costa County to Santa Barbara County. Although the current range appears to be similar, the extant populations are smaller and fragmented, and previous satellite populations appear to have been extirpated (USFWS 2010b). Suitable habitat is found on large, relatively flat tracts of natural habitat possessing good drainage, appropriate plant communities, and appropriate prey base. Suitable plant communities include grasslands, scrublands, oak woodlands, and vernal pool areas with relatively low cover and slopes of less than 15 percent. The preferred prey of the San Joaquin kit fox is the kangaroo rat (*Dipodomys* spp.), but other prey species also include rabbits (*Lepus* spp.), hares (*Sylvilagus* spp.), ground squirrels (*Ammospermophilus* and *Spermophilus* spp.), and insects (USFWS 2010b).

Current threats to the San Joaquin kit fox include habitat loss, alteration, and fragmentation, competition with and predation by other canids, and rodenticides. Rodenticides can have a direct effect by ingestion, but also have an indirect effect through reduction of prey availability (USFWS 2010b).

### **California Condor (*Gymnogyps californianus*)**

The federally endangered California condor is the largest bird in the U.S. and is one of the rarest bird species in the world (USFWS 2013). This large vulture has a featherless head and neck mottled with pink and purple, while the body is feathered in all black with the exception of white underwings. California condors are obligate scavengers that primarily feed on large mammalian carcasses, including livestock. Typically, condors feed in open areas, but have been observed feeding in wooded areas. California condors are cavity nesters. Clutch size consists of a single egg. Fledging occurs 5.5 to 7 months after hatching, but chicks may not become fully independent until the following year (USFWS 2013).

Historically, the California condor was widely distributed across North America; however, in the 1800s, their range was restricted to the west coast of North America, inland to the Cascade and Sierra Nevada mountain ranges. Its range continued to contract through the 1900s, and by 1950, it was restricted to six counties in southern California. Due to successful captive breeding programs and reintroduction, populations of California condors now exist in central and southern California, northern Arizona, and southern Utah, as well as northern Baja California (USFWS 2013).

### **Yellow-billed Cuckoo (*Coccyzus americanus*)**

The western population of yellow-billed cuckoo (*Coccyzus americanus*) is federally listed as threatened by USFWS (USFWS 2023c). Yellow-billed cuckoos are brown on top with a white ventral region; this species is slightly larger than a robin with a long tail consisting of graduated feathers tipped with white. Currently, there is Critical Habitat for the yellow-billed cuckoo; however, none of the Critical Habitat is located near the project area (USFWS 2023c).

There are three primary constituents that USFWS considers to be essential physical or biological features to yellow-billed cuckoo: riparian woodlands, adequate prey base, and dynamic riverine processes. Populations of yellow-billed cuckoo have been negatively impacted through modifications to all three of these constituents. Yellow-billed cuckoo primarily rely on riparian habitat for foraging, particularly in cottonwood (*Populus* spp.) and willow (*Salix* spp.) woodlands with vegetation high in foliage. These habitats usually sustain insect and amphibian fauna utilized by young and adult yellow-billed cuckoos during the nesting season and within post-breeding dispersal areas. The use of pesticides and the loss of riparian habitat in Arizona has had a direct negative impact on yellow-billed cuckoo foraging habitat. Changes in the landscape ecology have further exacerbated the degradation of riparian habitat through the construction of dams, water diversions, riverflow management, channelization, levees, and bank stabilization. These alterations can cause a transition from native riparian vegetation to monotypic stands of non-native vegetation (USFWS 2023c).

### **Blunt-nosed Leopard Lizard (*Gambelia silus*)**

The blunt-nosed leopard lizard is federally listed as endangered. It is a medium-sized lizard with a robust body and a distinct blunt snout. It has a unique pattern of dark blotches and spots on a light background, providing excellent camouflage in its sandy habitat. Adults typically reach lengths between 5 to 7 inches from snout to tail (USFWS 2021).

This lizard species is primarily found in arid and semi-arid habitats, including desert scrublands, grasslands, and sandy dunes. It is mainly active during the day, and is known for its swift movements and ability to quickly burrow into loose soil. The blunt-nosed leopard lizard primarily feeds on small invertebrates such as insects, spiders, and other arthropods. Threats to the blunt-nose leopard lizard include habitat loss and fragmentation, predation and competition associated with introduced species, and climate change (California Department of Fish and Wildlife [CDFW] 2022; USFWS 2021).

### **California Tiger Salamander (*Ambystoma californiense*)**

The California tiger salamander, which is designated as federally threatened throughout its range, is an amphibian within the family Ambystomatidae. The California tiger salamander is a large yellow and black salamander that is endemic and restricted to California and does not overlap with any other tiger salamander species (Holzman 2003). California tiger salamanders tend to live within vacant mammal burrows, particularly those made by ground squirrels and gophers, and lay their eggs in vernal or ephemeral pools and ponds (NatureServe 2019). Breeding generally occurs from December to February/March once the vernal pools fill. California tiger salamanders will migrate to breeding grounds up to 1.6 kilometers away to lay their eggs (Holzman 2003; NatureServe 2019).

Populations of the California tiger salamander are threatened by habitat loss and fragmentation, mainly due to human encroachment in the form of highways that block their migration routes (Holzman 2003; Mossman 2009). Infringement of predator species is another threat to populations of the California tiger salamander.

### **Monarch Butterfly (*Danaus plexippus*)**

The North American monarch butterfly (monarch) is a medium sized lepidopteran with orange wings veined in black bordered with two rows of white spots. The head and thorax are black with white dots (USFWS 2020). The monarch has become the focus of intense conservation efforts over the past two decades and is currently a Candidate for listing under the ESA.

The loss and degradation of monarch breeding habitat has been widespread and is an important driver in the decline of monarchs in North America (Billings 2019). Monarchs have been documented to successfully feed on milkweeds, especially common milkweed (*Asclepias syriaca*), growing in midwestern agricultural habitats. Crops within breeding habitat in this region have been genetically modified to be herbicide-resistant, which has increased the use of the herbicide glyphosate since the mid-1990s. As a result, milkweed losses in the Midwest have been documented more in field crops rather than in natural areas (Pelton et al. 2019). In addition to habitat loss, monarchs are especially susceptible to widely used insecticides due to their use of agricultural and residential areas along their migrations. For western monarchs, insecticides are considered one of the primary drivers of population declines (Crone et al. 2019; USFWS 2020). Systemic insecticides persist in the environment from months to years after a treatment and are absorbed by plants, which can be toxic to monarchs that utilize them.

### **Conservatory Fairy Shrimp (*Branchinecta conservatio*) and Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)**

Two species of concern with the potential to reside near the project area are the conservatory fairy shrimp and the vernal pool fairy shrimp. The conservatory fairy shrimp is federally endangered and the vernal pool fairy shrimp is federally threatened (USFWS 2023b). Neither species has been previously observed within the territory. These species are small, freshwater crustaceans that live in vernal pools; adults are approximately half an inch long (USFWS 2005).

Immediate threats to fairy shrimp are loss of habitat and climate change. Development of land with vernal pools has a direct impact on these species, as their dispersal capabilities are limited. Climate change further exacerbates the effects on these species due to inconsistent temperature and precipitation patterns which the fairy shrimp depend on for their continued survival (USFWS 2005).

### **Greene's Tuctoria (*Tuctoria greenei*)**

Greene's tuctoria is a federally listed endangered plant species (USFWS 2023b). This short-toothed, narrow-bladed grass is dependent on the existence of vernal pools for its survival and reproduction. Greene's tuctoria has been reported in ten counties in California, including Fresno County.

Greene's tuctoria needs very specific moisture periods to grow successfully and reach maturation. Habitat loss and fragmentation in addition to the direct and indirect effects of climate change are the main stressors to this species. Grazing from cattle and grasshoppers can also impact this species' survival (USFWS 2007).

## **2.1.3 State Listed Species**

The State of California maintains a list of state endangered or threatened plants and animals (Appendix B and Appendix C, respectively). These lists provide not only state listings but federal listings as well.

## **2.1.4 Invasive Plant Species**

California's Invasive Plant Council (Cal-IPC) maintains an invasive plant list (Appendix D). This plant list is sorted alphabetically by the scientific name. A severity rating (Watch, Limited, Moderate, High) is assigned to each plant species (Cal-IPC 2023).

## **2.1.5 Invasive Animal Species**

Invasive animal species are just as detrimental to native landscapes and habitats as invasive plant species. Within the state of California, the most common invasive animals are aquatic species. While an entire list of invasive species is not provided, the CDFW maintains species profiles of California's "Top Invaders" on their website (Appendix E) (CDFW 2023).

## **2.2 Data Collection**

On May 3, 4, and 5, 2023, GSRC biologist Beau Rapier surveyed the approximately 116.4-acre project area. Surveys were conducted twice on May 3 and May 4 (morning and evening survey events) with one additional survey the morning of May 5.

Prior to each survey, weather conditions were recorded. Photos were taken around the perimeter of the project area. At each point, the location on a global positioning system (GPS) was recorded and photos were taken in each cardinal direction.

Surveys consisted of the biologist conducting meandering pedestrian transect surveys within the project area to record all animal and plant species observed, as well as any habitats that might support state- or federally-listed species. The biologist, aided with binoculars, generally walked the project area perimeter each survey before walking through the central portions of the project area. Walking slowly, it took approximately 3.5 hours to cover the entire project area. Extra time



was spent if a flock of songbirds was observed or to move debris to check for the presence of reptiles, amphibians, and invertebrates. Due to recent storms, three large trees were blown over; approximately 10 days before the survey, the felled trees were cut and piled up. The biologist went to each pile and searched for animals within the piles (Photograph 1).



**Photograph 1. A recently cut tree that was searched for animals.**

The GSRC biologist utilized a Trimble™ GPS to obtain high-accuracy coordinates of all transect paths and all sensitive natural resources encountered. The GSRC biologist recorded field notes during the survey to document all findings and observations. Photographs were collected to show typical site conditions, representative plant communities observed across the project area, and to document sensitive natural resources and other natural resources findings (Appendix F). GSRC did not conduct species-specific protocol surveys for state or federally listed species within the project area.

### **2.2.1 On-site Interview**

The GSRC biologist met with the Airways Golf Course grounds crew each morning to establish contact and let them know what the survey plan was for the day. The GSRC biologist spoke to a few of the grounds crew employees about the plants and animals on the project area as well as the locations of any low, wet areas.

### **2.2.2 Survey Methods**

Meandering pedestrian surveys conducted by the GSRC biologist covered 100 percent of the project area each morning and afternoon. Surveys were completed in conjunction with wetland delineation fieldwork that required the entire project area to be viewed. Surveys were conducted by a biologist with training and experience in identification of flora and fauna, and equipped with binoculars and appropriate plant and animal identification guides.

### 3.0 RESULTS AND FINDINGS

#### 3.1 General Conditions

At the start of each morning survey and at the end of each afternoon survey, weather conditions were recorded. The weather was consistently cool with occasional cloud cover and no precipitation. Table 2 depicts the survey conditions during the survey period. Light rain was observed the morning of May 4 before the start of the survey.

**Table 2. Survey Conditions during Flora and Fauna Surveys**

Date	Start Time	End Time	Temperature (degrees Fahrenheit [°F])	Wind (miles per hour [mph])	Cloud Cover (percent [%])
5/3/2023	5:55 am	7:35 pm	49-60	0-8	60-75
5/4/2023	6:00 am	7:32 pm	52-71	0-5	75-90
5/5/2023	6:05 am	9:35 am	54-56	0-5	15-20

The site supports only manicured golf course grounds and adjacent airport infrastructure. The project area is heavily influenced by the planting of ornamental shrubs and trees. The understory is consistently mowed (Photograph 2) or dragged (Photograph 3) and trees are kept well pruned. The large, spaced-out trees, some of which bear fruit desirable by animals (i.e., olive, juniper), create a savannah-like environment that is readily used by migrating birds.

The photo locations and descriptions are recorded below in Table 3; the corresponding locations of these photo points is provided on Figure 3; the labeled photographs taken at each photo point are in Appendix E.

**Table 3. Photo Locations and Observations**

ID	Latitude	Longitude	Landcover
PP1	36.775811	-119.702020	Manicured golf course with planted eurabbie and Northern California walnut in the vicinity.
PP2	36.779102	-119.701226	Manicured golf course on the edge of bare ground.
PP3	36.778844	-119.704369	Bare ground – a frequently dragged area.
PP4	36.778999	-119.710785	Manicured golf course adjacent to a golf tee green.
PP5	36.776473	-119.711152	A generally disturbed area on the border of manicured golf course and bare ground.
PP6	36.774664	-119.707835	Manicured golf course adjacent to a golf tee green with oleander and various pines in the vicinity.
PP7	36.775185	-119.705321	Manicured golf course adjacent to a golf tee green with oleander and various pines in the vicinity.



**Photograph 2. Mowed golf course fairways represent a majority of the project area.**



**Photograph 3. Portions of the golf course were devoid of vegetation from machine scraping.**



<p><b>Legend</b></p> <ul style="list-style-type: none"> <li>⊕ Photo Points</li> <li>■ Killdeer Fledglings</li> <li>▭ Survey Boundary (116.4 ac.)</li> </ul>	<p>0 250 500 Feet</p> <p>0 60 120 Meters</p> <p>North Arrow</p>	<p>May 2023</p>
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Figure 3. Flora and Fauna Map

The entire project area consists of maintained golf course grounds. The dominant vegetation present within the understory was annual meadow grass (*Poa annua*) and Bermuda grass (*Cynodon dactylon*). The understory had very little vegetation stratification with the exception of planted oleander (*Nerium oleander*) along the perimeter of the project area and a patch of invasive figs (*Ficus carica*) in the southwest corner of the golf course. The overstory consists of a variety of native and ornamental tree species, generally planted in rows or patches. Given the history of disturbance and anthropogenic land use of the project area, usable habitat for native animals is minimal.

### 3.2 Flora Survey Results

Sixty-two species of vascular plants were identified during surveys (Table 4). Most of the plants observed within the project area were trees (31 species) and herbaceous species (26 species). Almost all of the vegetation present within the project area is planted and/or maintained.

**Table 4. Plants Observed During the 144 FW Flora Survey**

Common Name	Scientific Name	Native/Nonnative
<b>Trees</b>		
Black locust	<i>Robinia pseudoacacia</i>	Native
California incense-cedar	<i>Calocedrus decurrens</i>	Native
California juniper	<i>Juniperus californica</i>	Native
Camphor tree	<i>Cinnamomum camphora</i>	Nonnative
Canary Island palm	<i>Phoenix canariensis</i>	Nonnative
Canary Island pine	<i>Pinus canariensis</i>	Nonnative
Canyon live oak	<i>Quercus chrysolepis</i>	Native
Chinese arborvitae	<i>Platycladus orientalis</i>	Nonnative
Chinese elm	<i>Ulmus parvifolia</i>	Nonnative
Coast live oak	<i>Quercus agrifolia</i>	Native
Common fig	<i>Ficus carica</i>	Nonnative
Cootamundra wattle	<i>Acacia baileyana</i>	Nonnative
Fremont cottonwood	<i>Populus fremontii</i>	Native
Gray pine	<i>Pinus sabiniana</i>	Native
Japanese cheesewood	<i>Pittosporum tobira</i>	Nonnative
Jeffrey pine	<i>Pinus jeffreyi</i>	Native
Northern California black walnut	<i>Juglans hindsii</i>	Native
Olive	<i>Olea europaea</i>	Nonnative
Ponderosa pine	<i>Pinus ponderosa</i>	Native
Red maple	<i>Acer rubrum</i>	Nonnative
Saltcedar	<i>Tamarix ramosissima</i>	Nonnative
Silk oak	<i>Grevillea robusta</i>	Nonnative
Sugar pine	<i>Pinus lambertiana</i>	Native
Sugarberry	<i>Celtis laevigata</i>	Nonnative
Western sycamore	<i>Platanus racemosa</i>	Native
White fir	<i>Abies concolor</i>	Native
Eurabbie	<i>Eucalyptus globulus</i>	Nonnative

<b>Common Name</b>	<b>Scientific Name</b>	<b>Native/Nonnative</b>
Mexican fan palm	<i>Washingtonia robusta</i>	Nonnative
Red fir	<i>Abies magnifica</i>	Native
Southern magnolia	<i>Magnolia grandiflora</i>	Nonnative
White mulberry	<i>Morus alba</i>	Nonnative
<b>Shrubs</b>		
Crimson bottlebrush	<i>Melaleuca citrina</i>	Nonnative
Oleander	<i>Nerium oleander</i>	Nonnative
Rose	<i>Rosa rubignosa</i>	Nonnative
Spanish dagger	<i>Yucca gloriosa</i>	Nonnative
<b>Herbaceous</b>		
Annual meadow-grass	<i>Poa annua</i>	Nonnative
Bachelor's buttons	<i>Cotula australis</i>	Nonnative
Bermuda grass	<i>Cynodon dactylon</i>	Nonnative
Cheeseweed mallow	<i>Malva parviflora</i>	Nonnative
Common peppergrass	<i>Lepidium densiflorum</i>	Nonnative
Common purslane	<i>Portulaca oleracea</i>	Nonnative
Common sowthistle	<i>Sonchus oleraceus</i>	Nonnative
Creeping lantana	<i>Lantana montevidensis</i>	Nonnative
Creeping wild rye	<i>Leymus triticoides</i>	Nonnative
Dwarf mallow	<i>Malva neglecta</i>	Nonnative
Flatspine bursage	<i>Ambrosia acanthicarpa</i>	Native
German chamomile	<i>Matricaria charnomilla</i>	Nonnative
Horseweed	<i>Erigeron canadensis</i>	Native
Lesser swine-cress	<i>Lepidium didymum</i>	Nonnative
Musk storks bill	<i>Erodium moschatum</i>	Nonnative
Prickly lettuce	<i>Lactuca serriola</i>	Nonnative
Rescue brome	<i>Bromus catharticus</i>	Nonnative
Rosemary	<i>Salvia rosmarinus</i>	Nonnative
Shortpod mustard	<i>Hirschfeldia incana</i>	Nonnative
Spotted spurge	<i>Euphorbia maculata</i>	Nonnative
Tumbleweed	<i>Salsola tragus</i>	Nonnative
Wall barley	<i>Hordeum murinum</i>	Nonnative
White clover	<i>Trifolium repens</i>	Nonnative
Common fiddleneck	<i>Amsinckia menziesii</i>	Native
Kellogg's tarweed	<i>Deinandra kelloggii</i>	Native
Puncture vine	<i>Tribulus terrestris</i>	Nonnative

### 3.3 Fauna Survey Results

During the survey, 78 species of animals, including birds, mammals, and invertebrates were observed, either through direct observations or vocalizations. Findings of the fauna survey is included in Table 5. A Western aphideater (*Eupeodes fumipennis*), observed during the fauna survey, is shown below in Photograph 4.

**Table 5. Animals Observed During the 144 FW Fauna Survey**

Common Name	Scientific Name	Number Observed*	Native/Invasive
<b>Birds</b>			
American crow	<i>Corvus brachyrhynchos</i>	6	Native
American kestrel	<i>Falco sparverius</i>	2	Native
American robin	<i>Turdus migratorius</i>	8	Native
Anna's hummingbird	<i>Calypte anna</i>	8	Native
Barn swallow	<i>Hirundo rustica</i>	2	Native
Black-throated gray warbler	<i>Setophaga nigrescens</i>	1	Native
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	18	Native
Brown-headed cowbird	<i>Molothrus ater</i>	3	Native
Bullock's oriole	<i>Icterus bullockii</i>	1	Native
California scrub-jay	<i>Aphelocoma californica</i>	7	Native
Canada goose	<i>Branta canadensis</i>	2	Native
Cassin's vireo	<i>Vireo cassinii</i>	1	Native
Cedar waxwing	<i>Bombycilla cedrorum</i>	5	Native
Cooper's hawk	<i>Accipiter cooperii</i>	1	Native
Double-crested cormorant	<i>Nannopterum auritum</i>	1	Native
Eurasian collared-dove	<i>Streptopelia decaocto</i>	12	Invasive
European starling	<i>Sturnus vulgaris</i>	38	Invasive
Great-tailed grackle	<i>Quiscalus mexicanus</i>	7	Native
Hermit warbler	<i>Setophaga occidentalis</i>	1	Native
Hooded oriole	<i>Icterus cucullatus</i>	7	Native
House finch	<i>Haemorhous mexicanus</i>	34	Native
House sparrow	<i>Passer domesticus</i>	31	Invasive
Killdeer	<i>Charadrius vociferus</i>	7	Native
Lesser goldfinch	<i>Spinus psaltria</i>	3	Native
Mourning dove	<i>Zenaida macroura</i>	14	Native
Northern flicker	<i>Colaptes auratus</i>	1	Native
Northern mockingbird	<i>Mimus polyglottos</i>	14	Native
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>	1	Native
Nuttall's woodpecker	<i>Picoides nuttalli</i>	1	Native
Orange-crowned warbler	<i>Leiothlypis celata</i>	1	Native
Red-tailed hawk	<i>Buteo jamaicensis</i>	3	Native
Red-winged blackbird	<i>Agelaius phoeniceus</i>	1	Native
Rock dove	<i>Columba livia</i>	5	Invasive
Snowy egret	<i>Egretta thula</i>	1	Native
Townsend's warbler	<i>Setophaga townsendi</i>	2	Native



Common Name	Scientific Name	Number Observed*	Native/Invasive
Tree swallow	<i>Tachycineta bicolor</i>	1	Native
Warbling vireo	<i>Vireo gilvus</i>	1	Native
Western kingbird	<i>Tyrannus verticalis</i>	3	Native
Western tanager	<i>Piranga ludoviciana</i>	10	Native
Wilson's warbler	<i>Cardellina pusilla</i>	4	Native
<b>Invertebrates</b>			
Argentine ant	<i>Linepitherna humile</i>	Innumerable	Invasive
Black blow fly	<i>Phormia regina</i>	1	Native
Brachydeutera sp.	<i>Brachydeutera</i> sp.	1	Native
California harvester ant	<i>Pogonomyrmex californicus</i>	Innumerable	Native
Common earthworm	<i>Lumbricus terrestris</i>	Innumerable	Invasive
Common European greenbottle fly	<i>Lucilia sericata</i>	2	Invasive
Common pill woodlouse	<i>Armadillidium vulgare</i>	Innumerable	Invasive
Condylostylus sp.	<i>Condylostylus longicornis</i>	1	Native
Convergent lady beetle	<i>Hippodamia convergens</i>	1	Native
Cosmopolitan ground beetle	<i>Laemostenus complanatus</i>	Innumerable	Native
European earwig	<i>Forficula auricularia</i>	Innumerable	Invasive
European harvestman	<i>Phalangium opilio</i>	1	Invasive
Flowery blue isopod	<i>Porcellionides floria</i>	Innumerable	Invasive
Giant western crane fly	<i>Holorusia hespera</i>	4	Native
Gray bird grasshopper	<i>Schistocera nitens</i>	1	Native
Long-bodied cellar spider	<i>Pholcus phalangioides</i>	2	Invasive
Millipede	<i>Tylobolus monachus</i>	2	Native
Mosquito sp.	<i>Aedes</i> sp.	1	Native
Oxybelus wasps	<i>Oxybelus</i> sp.	Innumerable	Native
Paper wasp	<i>Polistes</i> sp.	N/A	Unknown
Rove beetle	<i>Dinothenarus saphyrinus</i>	1	Native
Shoot fly	<i>Atherigona</i> sp.	1	Native
Silverfish	<i>Lepisma saccharinum</i>	Innumerable	Native
Small milkweed bug	<i>Lygaeus kalmii</i>	Innumerable	Native
Spined turban gall wasp	<i>Cynips douglasii</i>	Innumerable	Native
Stone centipede	<i>Lithobius</i> sp.	5	Native
Swift woodlouse	<i>Porcellio laevis</i>	Innumerable	Invasive
Threeband slug	<i>Ambigolimax</i> sp.	Innumerable	Invasive
Turkestan cockroach	<i>Shelfordella lateralis</i>	Innumerable	Invasive
Variiegated meadowhawk	<i>Sympteryum corruptum</i>	2	Native
Western honey bee	<i>Apis mellifera</i>	1	Native
Woodland ground beetle	<i>Calathus ruficollis</i>	Innumerable	Native
Woodlouse spider	<i>Dysdera crocata</i>	4	Invasive
Western aphideater	<i>Eupeodes fumipennis</i>	1	Native
Western drywood termite	<i>Incisitermes minor</i>	Innumerable	Native
Yellow cellar slug	<i>Limacus flavus</i>	1	Invasive

Common Name	Scientific Name	Number Observed*	Native/Invasive
<b>Mammals</b>			
Domestic cat	<i>Felis catus</i>	2	Invasive
Fox squirrel	<i>Sciurus niger</i>	14	Invasive

\*indicates the highest number observed in a calendar day



**Photograph 4. A Western aphideater on a rose flower.**

No bird nests were observed during the PLSs. However, a mated pair of killdeer (*Charadrius vociferus*) with four fledglings were seen each day in the southeast corner of the project area (see Figure 3).

### 3.4 Federally Listed Species Results

No ESA- listed plant or animal species or their potential habitat were identified during the surveys. A number of migratory birds listed on the USFWS Birds of Conservation Concern were observed. These species are protected by the MBTA.

### 3.5 State Listed Species Results

No California state endangered or threatened plant or animal species, or their potential habitats, were observed within the project area. Two species of birds listed as Birds of Conservation Concern (BCC) were observed: Bullock’s oriole (*Icterus bullockii*) and Nuttall’s woodpecker (*Picoides nuttallii*). A list of BCC with the potential to occur within the project area is provided in

Appendix A. A photograph of a Bullock’s oriole observed within the project area is provided in Photograph 5.



**Photograph 5. Bullock’s oriole, a BCC bird, observed within the project area.**

### 3.6 Invasive Plant Species Results

Fourteen species identified by Cal-IPC as invasive plants for California were observed within the project area (Table 6). Of the invasive plants observed, half are intentionally planted including all trees and shrubs listed as nonnative in Table 4 were intentionally planted, with the exception of fig and saltcedar (*Tamarix ramosissima*). Chinese arborvitae (*Platycladus orientalis*), a planted ornamental was commonly observed within the project area (Photograph 6). A photograph of puncture vine (*Tribulus terrestris*) (Photograph 7), a frequently observed invasive plant species, is provided below.

**Table 6. Cal-IPC Invasive Plants Observed Within the Project Area**

Common Name	Scientific Name	Planted (Yes/No)
<b>Trees</b>		
Cootamundra wattle	<i>Acacia baileyana</i>	Yes
Black locust	<i>Robinia pseudoacacia</i>	No
Canary Island palm	<i>Phoenix canariensis</i>	Yes
Eurabbie	<i>Eucalyptus globulus</i>	Yes
Fig	<i>Ficus carica</i>	No
Mexican fan palm	<i>Washingtonia robusta</i>	Yes
Olive	<i>Olea europaea</i>	Yes
Saltcedar	<i>Tamarix ramosissima</i>	No

Common Name	Scientific Name	Planted (Yes/No)
Silk oak	<i>Grevillea robusta</i>	Yes
<b>Herbaceous</b>		
Bermuda grass	<i>Cynodon dactylon</i>	Yes
Puncture vine	<i>Tribulus terrestris</i>	No
Shortpod mustard	<i>Hirschfeldia incana</i>	No
Tumbleweed	<i>Salsola tragus</i>	No
Wall barley	<i>Hordeum murinum</i>	No



**Photograph 6. Arborvitae was a frequently observed ornamental within the project area.**



**Photograph 7. Puncture vine, a California “C-rated” invasive weed, was frequently observed on the perimeter of the project area.**

Considering the highly managed nature of the project area, insights gained from assessing the invasive species at this location is limited. However, the most frequently observed herbaceous species not intentionally planted in the project area were cheeseweed mallow (*Malva parviflora*), Musk storks bill (*Erodium moschatum*), lesser swine-cress (*Lepidium didymum*), and puncture vine (see Photograph 7). These nonnative, invasive, herbaceous species were typically observed on the perimeter of the project area near the fence line delineating the property. None of the species listed above were observed in monoculture or infestation-level quantities.

### **3.7 Invasive Animal Species Results**

Two invasive mammal species (fox squirrel [*Sciurus niger*] and feral cat [*Felis domesticus*]) and multiple invasive invertebrate species were frequently observed within the project area. Brown-headed cowbird (*Molothrus ater*), a species highlighted on the CDFW – California’s Invaders web page, was also observed within the project area (CDFW 2023).

#### **3.7.1 Fox Squirrel**

According to the CDFW, fox squirrels were introduced to California in the early 1900s by individuals who brought them from other states as pets or for hunting (University of California Integrated Pest Management 2022). This species has more or less been naturalized throughout portions of the state.

Fourteen fox squirrels were observed on one survey event on the morning of May 4, 2023. These individuals were mostly concentrated around fruiting ornamental trees (i.e., olive), and were habituated to humans (Photograph 8).



**Photograph 8. Invasive fox squirrel located within the project area.**

### **3.7.2 Feral Cat**

Feral cats pose a significant threat to the environment due to their predatory nature and rapid reproduction rates. They have been identified as one of the leading causes of bird, herpetofauna, and small mammal population declines in many areas, with over ten billion vertebrates being taken annually in the U.S. alone (Loss et al. 2013).

Two individual feral cats were observed during PLSs. One feral cat was seen on May 3 during the afternoon survey. This individual was observed on the west side of the project area adjacent to the road used to access the golf course. A second feral cat (with different coloring) was observed on the afternoon of May 4 near the businesses located on the southeast side of the project area.

### **3.7.3 Invasive Invertebrates**

Out of the 39 invertebrate species observed, 16 are not native to California. However, many of these nonnative invertebrates have been naturalized, such as the European earwig (*Forficula*

*auricularia*) and common earthworm (*Lumbricus terrestris*), both of which were locally common within the project area.

The only invertebrate species that was frequently observed that could pose a potential risk to the human environment was the Turkestan cockroach (*Shelfordella lateralis*). This cockroach is typically found outdoors in California where it competes with native woodroaches. Turkestan cockroach populations have the potential to explode if debris piles and water are present and left unattended (University of California Integrated Pest Management 2023). Considering the cut wood piles and sprinkler/underground irrigation system present at the golf course, suitable conditions are present for this species to thrive. This was reflected in the findings of this survey with at least one individual found under almost every piece of wood or debris flipped. Not only is this species a nuisance that competes with native species, it also has the potential to carry a variety of zoonotic diseases (Shahraki et al. 2013). Multiple life stages of this species were observed.

Other frequently encountered invertebrates were isopods. Photograph 9 shows a swift woodlouse (*Porcellio laevis*) and common pill bug (*Armadillidium vulgare*), both of these were frequently observed under debris.



Photograph 9. A swift woodlouse (top) and a common pill bug (bottom)

#### 3.7.4 Brown-headed Cowbird

The brown-headed cowbird is a native species, but, according to the CDFW, should be considered a nuisance species as it is a nest parasite that is frequently observed in open areas (CDFW 2023). Brown-headed cowbirds have historically coexisted with native species and are particularly successful at colonizing nests in a fragmented landscape, which has resulted in population increases of this species in the past (USFWS 2022).

Brown-headed cowbirds were observed on multiple occasions throughout the PLS. While frequently observed, the high count recorded at the project area for a single day was only three individuals.

#### **4.0 CONCLUSIONS**

During the surveys conducted in May 2023, the undeveloped portion of the project area (i.e., Airways Golf Course) was found to be highly managed with no native habitats. A total of 62 plant species and 78 animal species were observed. No federally or state listed flora or fauna species were observed, and no potential habitat exists for any of these species within the project area. A consultation with the USFWS regional office was not conducted for this report. It should be noted that these survey efforts were conducted at a reconnaissance level and did not include an individual survey for any one particular species of concern.

The most likely utilization of the project area by federally protected species would be by migratory bird species and would be transitory in nature. Prior to any new construction within the project area, potential impacts to protected species of the region should be evaluated to avoid impacts to those species, and any necessary permits should be obtained from the USFWS.



## 5.0 REFERENCES

- Billings, J. 2019. Opening a window on southwestern monarchs: Fall migrant monarch butterflies, *Danaus plexippus* (L.), tagged synchronously in southeastern Arizona migrate to overwintering regions in either southern California or Central Mexico. *Journal of the Lepidopterists Society*, 73, 257–267.
- California Department of Fish and Wildlife (CDFW). 2022. Blunt-nosed leopard lizard (*Gambelia sika*). URL Address: <https://wildlife.ca.gov/Conservation/Reptiles-and-Amphibians/Blunt-Nosed-Leopard-Lizard>.
- CDFW. 2023. California's Invaders. URL Address: <https://wildlife.ca.gov/conservation/invasives/species>.
- California Invasive Plant Council (Cal-IPC). 2023. The Cal-IPC Inventory. URL Address: <https://www.cal-ipc.org/plants/inventory/>.
- Crone, E. E., Pelton, E. M., Brown, L. M., Thomas, C. C., and Schultz, C. B. 2019. Why are monarch butterflies declining in the west? Understanding the importance of multiple correlated drivers. *Ecological Applications*, 29, e01975.
- Holzman, B. 2003. San Francisco State University: Geography 316: Biogeography and The Biogeography of the California Tiger Salamander (*Ambystoma californiense*). URL Address: <http://bss.sfsu.edu/holzman/courses/Fall%2003%20project/CAtigert salamander.htm>. Last updated 11 December 2003.
- Loss, S. R., Will, T., and Marra, P. P. 2013. The impact of free-ranging domestic cats on wildlife of the United States. *Nature Communications*, 4, 1396.
- Mossman, H. 2009. U.S. Fish and Wildlife Service - Sacramento Fish and Wildlife Office. Species Account: California Tiger Salamander (*Ambystoma californiense*).
- NatureServe. 2019. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. URL Address: <http://www.natureserve.org/explorer>.
- Pelton, E. M., Schultz, C. B., Jepsen, S. J., Black, S. H., and Crone, E. E. 2019. Western monarch population plummets: Status, probable causes, and recommended conservation actions. *Frontiers in Ecology and Evolution*, 7, 258.
- Shahraki, G. H., Parhizkar, S., Nejad, A. R. S. 2013. Cockroach Infestation and Factors Affecting the Estimation of Cockroach Population in Urban Communities. – *International Journal of Zoology* 2013: 1-6.
- United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS). 2023. Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. URL Address: <http://websoilsurvey.nrcs.usda.gov>.

- United States Fish and Wildlife Service (USFWS). 2005. Vernal Pool Brachipods of the United States; Species List, Geographic Distribution, and Conservation Concerns. URL Address: <https://www.fws.gov/species/vernal-pool-fairy-shrimp-branchinecta-lynchi>.
- USFWS. 2007. Greene's tuctoria (*Tuctoria greenei*). 5-Year Review: Summary and Evaluation. URL Address: [https://ecos.fws.gov/docs/five\\_year\\_review/doc1867.pdf](https://ecos.fws.gov/docs/five_year_review/doc1867.pdf).
- USFWS. 2010a. Fresno Kangaroo Rat (*Dipodomys nitratoides exilis*). 5-Year Review: Summary and Evaluation. URL Address: [https://ecos.fws.gov/docs/five\\_year\\_review/doc3214.pdf](https://ecos.fws.gov/docs/five_year_review/doc3214.pdf).
- USFWS. 2010b. San Joaquin Kit Fox (*Vulpes macrotis mutica*); 5-Year Review: Summary and Evaluation. Sacramento Fish and Wildlife Office, Sacramento, California. 122p.
- USFWS. 2013. California Condor (*Gymnogyps californianus*); 5-year Review: Summary and Evaluation. Pacific Southwest Region. June 2013. 64p.
- USFWS. 2020. Endangered and Threatened Wildlife and Plants; 12-month Findings for the Monarch Butterfly. 82 FR 81813.
- USFWS. 2021. Blunt-Nosed Leopard Lizard (*Gambelia sila*) 5-Year Review: Summary and Evaluation. URL Address: [https://ecos.fws.gov/docs/tess/species\\_nonpublish/2990.pdf](https://ecos.fws.gov/docs/tess/species_nonpublish/2990.pdf).
- USFWS. 2022. Brown-headed Cowbird: Overview. URL Address: <https://fws.gov/species/brown-headed-cowbird-molothrus-ater>.
- USFWS. 2023a. National Wetlands Inventory -Wetlands Mapper. URL Address: <https://www.fws.gov/wetlands/data/mapper.html>.
- USFWS. 2023b. Information for Planning and Consultation. URL Address: <https://ipac.ecosphere.fws.gov/>.
- USFWS. 2023c. Yellow-billed Cuckoo: Overview. URL Address: <https://www.fws.gov/species/yellow-billed-cuckoo-coccyzus-americanus>.
- University of California Integrated Pest Management Program. 2022. Tree Squirrels. URL Address: <https://ipm.ucanr.edu/home-and-landscape/tree-squirrels/pest-notes/?src=302www&fr=3788#:~:text=Eastern%20fox%20squirrels%20were%20introduced,lands%20round%20these%20same%20cities>.
- University of California Integrated Pest Management Program. 2023. Turkestan Cockroach (*Blatta lateralis*). URL Address: <https://ipm.ucanr.edu/Invasive-and-Exotic/Pests/Turkestan-Cockroach/>.

**Appendix A**  
**USFWS Information for Planning and Consultation Results**

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# 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

Fresno 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

NOT FOR CONSULTATION

# 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:

## Mammals

NAME	STATUS
<p>Fresno Kangaroo Rat <i>Dipodomys nitratoides exilis</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/5150">https://ecos.fws.gov/ecp/species/5150</a></p>	Endangered
<p>San Joaquin Kit Fox <i>Vulpes macrotis mutica</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/2873">https://ecos.fws.gov/ecp/species/2873</a></p>	Endangered

## Birds

NAME	STATUS
<p>California Condor <i>Gymnogyps californianus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a></p>	Endangered
<p>Yellow-billed Cuckoo <i>Coccyzus americanus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a></p>	Threatened

## Reptiles

NAME	STATUS
<p>Blunt-nosed Leopard Lizard <i>Gambelia silus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/625">https://ecos.fws.gov/ecp/species/625</a></p>	Endangered

## Amphibians

NAME	STATUS
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California Tiger Salamander <i>Ambystoma californiense</i>	Threatened
There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.	
<a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i>	Candidate
Wherever found	
No critical habitat has been designated for this species.	
<a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	

## Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i>	Endangered
Wherever found	
There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.	
<a href="https://ecos.fws.gov/ecp/species/8246">https://ecos.fws.gov/ecp/species/8246</a>	
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i>	Threatened
Wherever found	
There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.	
<a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	

## Flowering Plants

NAME	STATUS
Greene's Tuctoria <i>Tuctoria greenei</i>	Endangered
Wherever found	
There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.	
<a href="https://ecos.fws.gov/ecp/species/1573">https://ecos.fws.gov/ecp/species/1573</a>	

## 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.

You are still required to determine if your project(s) may have effects on all above listed species.

## 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 <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.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
<p><b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i></p> <p>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.</p>	Breeds Jan 1 to Aug 31
<p><b>Belding's Savannah Sparrow</b> <i>Passerculus sandwichensis beldingi</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/8">https://ecos.fws.gov/ecp/species/8</a></p>	Breeds Apr 1 to Aug 15
<p><b>Bullock's Oriole</b> <i>Icterus bullockii</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds Mar 21 to Jul 25
<p><b>California Gull</b> <i>Larus californicus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 1 to Jul 31
<p><b>Golden Eagle</b> <i>Aquila chrysaetos</i></p> <p>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. <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a></p>	Breeds Jan 1 to Aug 31
<p><b>Lawrence's Goldfinch</b> <i>Carduelis lawrencei</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9464">https://ecos.fws.gov/ecp/species/9464</a></p>	Breeds Mar 20 to Sep 20

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

Breeds Apr 1 to Jul 20

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>

**Oak Titmouse** *Baeolophus inornatus*

Breeds Mar 15 to Jul 15

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

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

## Probability of Presence Summary

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

### Probability of Presence (■)

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

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

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

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

### Breeding Season (■)

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

### Survey Effort (|)

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

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

### No Data (-)

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

### Survey Timeframe

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



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

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) 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 list of migratory birds that potentially occur 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 [Rapid Avian Information Locator \(RAIL\) Tool](#).

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

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

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

## **How do I know if a bird is breeding, wintering or migrating in my 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 query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. 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 (NWI)

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

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

### Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

#### Data limitations



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

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

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

### **Data exclusions**

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

### **Data precautions**

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

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**Appendix B**  
**California State and Federally Listed Plant Species**

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**STATE AND FEDERALLY LISTED ENDANGERED,  
THREATENED, AND RARE PLANTS OF  
CALIFORNIA**

April 2023

State of California  
Natural Resources Agency  
Department of Fish and Wildlife  
Biogeographic Data Branch  
California Natural Diversity Database (CNDDDB)

Recommended Citation:

California Natural Diversity Database (CNDDDB). April 2023. State and Federally Listed Endangered, Threatened, and Rare Plants of California. California Department of Fish and Wildlife. Sacramento, CA.

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## Introduction

This document contains a list of California plant taxa that have been officially classified as Endangered, Threatened, or Rare by the California Fish & Game Commission (FGC; state listed) or by the U.S. Secretary of the Interior or the U.S. Secretary of Commerce (federally listed). This list also includes taxa that are official Candidates for state or federal listing, or have been officially Proposed for federal listing, as well as taxa that were once listed but have since been delisted.

State listing is pursuant to the Native Plant Protection Act of 1977 (Fish and Game Code Chapter 10 §§1900-1913) and the California Endangered Species Act of 1984 (CESA; California Code of Regulations, Title 14, Chapter 6, §§783.0-787.9; Fish and Game Code Chapter 1.5, §§2050-2115.5). The official California listing of Endangered, Threatened, and Rare plants is contained in the California Code of Regulations, [Title 14, §670.2](#).

Federal listing is pursuant to the Federal Endangered Species Act of 1973, as amended (16 USC §§1531-1544; 50 CFR §§17.1-17.108). The federal agencies responsible for listing are the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The official federal listing of Endangered and Threatened plants is published in the Federal Register, [50 CFR §17.12](#).

Common and scientific names are shown as they are in current usage, typically based on the NatureServe Natural Heritage Network, unless otherwise noted. If current nomenclature differs from that in state and federal listing documents, the nomenclature at the time of listing is provided in the notes. Synonyms are included when state, federal, and/or CNDDDB usage differs; name changes and other clarifying points are also noted. Where state and federal listings apply to different ranges, subspecies, or populations, each taxon will be listed separately, and statuses that apply to only a



portion of the taxon, or that also encompass other taxa, will be shown in parentheses. Where state and federal listings differ in name, but represent the same biological unit, the common name will be listed using the California state listing; the federal name will be listed in the notes.

The “List Date” for final federal listing is the date the listing became effective. This is typically *not* the date of publication of the rule in the Federal Register; it is usually about 30 days after publication, but may be longer.

If a plant was previously listed and no longer has any listing status, the entry text is shown in grey. For taxa having more than one status entry, the current status is in bold and underlined. All dates are in the “YYYYMMDD” format.

## Listing Status Summary Table

Abbreviation	Designation	Totals
<b>SE</b>	State Listed - Endangered	137
<b>ST</b>	State Listed - Threatened	21
<b>SR</b>	State Listed - Rare	64
<b>SC</b>	State Candidate for Listing	4
<b>SDR</b>	State Delisted (Recovered)	0
<b>SDE</b>	State Delisted (Extinct)	0
<b>FE</b>	Federally Listed - Endangered	131
<b>FT</b>	Federally Listed - Threatened	51
<b>FPE</b>	Federally Proposed - Endangered	1
<b>FPT</b>	Federally Proposed - Threatened	1
<b>FC</b>	Federal Candidate for Listing	0
<b>FDR</b>	Federally Delisted (Recovered)	9
<b>FDE</b>	Federally Delisted (Extinct)	0
	<b># Plant Taxa State Listed Only</b>	<b>104</b>
	<b># Plant Taxa Federally Listed Only</b>	<b>64</b>
	<b># Plant Taxa State AND Federally Listed</b>	<b>118</b>
	<b>Total # State Listed Taxa (SE, ST, SR)</b>	<b>222</b>
	<b>Total # Federally Listed Taxa (FE, FT)</b>	<b>182</b>
	<b>Total # Listed Plant Taxa</b>	<b>286</b>

## Abbreviations

CCR: California Code of Regulations

CDFW: California Department of Fish and Wildlife (previously Department of Fish and Game (DFG))

CESA: California Endangered Species Act

ESA: Endangered Species Act (Federal)

FGC: California Fish and Game Commission

USFWS: United States Fish and Wildlife Service

## Additional Resources

The [California Fish and Game Commission](#) publishes notices related to changes to Title 14 of the California Code of Regulations.

Title 14 of the California Code of Regulations can be accessed through the [Office of Administrative Law](#).

The [U.S. Fish and Wildlife Service](#) is responsible for protecting Endangered and Threatened species, and conserving candidate species and at-risk species so that ESA listing is not necessary.

## State and Federally Listed Endangered, Threatened, and Rare Plants of California – April 2023

Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Abronia alpina</i>	Ramshaw Meadows abronia					FC on 20040504; removed from FC list on 20151008.
<i>Acanthomintha duttonii</i>	San Mateo thorn-mint	SE	197907XX	FE	19851018	Scientific name at time of listing: <i>Acanthomintha obovata</i> ssp. <i>duttonii</i>
<i>Acanthomintha ilicifolia</i>	San Diego thorn-mint	SE	19820117	FT	19981112	
<i>Acanthoscyphus parishii</i> var. <i>goodmaniana</i>	Cushenbury oxytheca			FE	19940923	Scientific name at time of listing: <i>Oxytheca parishii</i> var. <i>goodmaniana</i>
<i>Acmispon argophyllus</i> var. <i>adsurgens</i>	San Clemente Island bird's-foot trefoil	SE	197911XX			Scientific name at time of listing: <i>Lotus argophyllus</i> var. <i>adsurgens</i>
<i>Acmispon argophyllus</i> var. <i>niveus</i>	Santa Cruz Island bird's-foot trefoil	SE	198108XX			Scientific name at time of listing: <i>Lotus argophyllus</i> var. <i>niveus</i>
<i>Acmispon dendroideus</i> var. <i>traskiae</i>	San Clemente Island lotus	SE	198204XX	<b>FDR</b> FT FE	20230224 20130826 19770912	Scientific name at time of listing: <i>Lotus scoparius</i> ssp. <i>traskiae</i>
<i>Agrostis blasdalei</i> var. <i>marinensis</i>	Blasdale's bent grass	<b>Delisted</b> SR	200804XX 197811XX			Current taxonomic treatment no longer recognizes varieties within <i>A. blasdalei</i> .
<i>Allium munzii</i>	Munz's onion	ST	199001XX	FE	19981112	
<i>Allium yosemitense</i>	Yosemite onion	SR	198207XX			
<i>Alopecurus aequalis</i> var. <i>sonomensis</i>	Sonoma alopecurus			FE	19971121	
<i>Ambrosia pumila</i>	San Diego ambrosia			FE	20020801	
<i>Amsinckia grandiflora</i>	large-flowered fiddleneck	SE	198204XX	FE	19850607	
<i>Arabis mcdonaldiana</i>	McDonald's rockcress	SE	197907XX	FE	19781029	
<i>Arctostaphylos bakeri</i> ssp. <i>bakeri</i>	Baker's manzanita	SR	197909XX			Listing status includes the entire species, <i>A. bakeri</i> .
<i>Arctostaphylos bakeri</i> ssp. <i>sublaevis</i>	The Cedars manzanita	SR	197909XX			Listing status includes the entire species, <i>A. bakeri</i> .

## State and Federally Listed Endangered, Threatened, and Rare Plants of California – April 2023

Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Arctostaphylos confertiflora</i>	Santa Rosa Island manzanita			FE	19970902	
<i>Arctostaphylos densiflora</i>	Vine Hill manzanita	SE	198108XX			
<i>Arctostaphylos edmundsii</i> var. <i>parvifolia</i>	Little Sur manzanita	<u>Delisted</u> SR	200804XX 198108XX			Current taxonomic treatment no longer recognizes varieties within <i>A. edmundsii</i> .
<i>Arctostaphylos franciscana</i>	Franciscan manzanita			FE	20121005	
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	Del Mar manzanita			FE	19961106	
<i>Arctostaphylos hookeri</i> ssp. <i>hearstiorum</i>	Hearsts' manzanita	SE	197909XX			
<i>Arctostaphylos imbricata</i>	San Bruno Mountain manzanita	SE	197909XX			
<i>Arctostaphylos montana</i> ssp. <i>ravenii</i>	Presidio manzanita	SE	197811XX	FE	19791128	Scientific name at time of listing: <i>Arctostaphylos hookeri</i> var. <i>ravenii</i>
<i>Arctostaphylos morroensis</i>	Morro manzanita			FT	19950117	
<i>Arctostaphylos myrtifolia</i>	lone manzanita			FT	19990625	
<i>Arctostaphylos pacifica</i>	Pacific manzanita	SE	197909XX			
<i>Arctostaphylos pallida</i>	pallid manzanita	SE	197911XX	FT	19980522	
<i>Arenaria paludicola</i>	marsh sandwort	SE	199002XX	FE	19930803	
<i>Astragalus agnicidus</i>	Humboldt milk-vetch	SE	198204XX			
<i>Astragalus albens</i>	Cushenbury milk-vetch			FE	19940923	
<i>Astragalus brauntonii</i>	Braunton's milk-vetch			FE	19970228	
<i>Astragalus claranus</i>	Clara Hunt's milk-vetch	<u>SE</u> ST	20211206 199001XX	FE	19971121	Scientific name at time of listing: <i>Astragalus clarianus</i>
<i>Astragalus jaegerianus</i>	Lane Mountain milk-vetch			FE	19981105	
<i>Astragalus johannis-howellii</i>	Long Valley milk-vetch	SR	198207XX			

## State and Federally Listed Endangered, Threatened, and Rare Plants of California – April 2023

Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Astragalus lentiginosus</i> var. <i>coachellae</i>	Coachella Valley milk-vetch			FE	19981105	
<i>Astragalus lentiginosus</i> var. <i>piscinensis</i>	Fish Slough milk-vetch			FT	19981105	
<i>Astragalus lentiginosus</i> var. <i>sesquimetralis</i>	Sodaville milk-vetch	SE	197909XX			
<i>Astragalus magdalenae</i> var. <i>peirsonii</i>	Peirson's milk-vetch	SE	197911XX	FT	19981105	
<i>Astragalus monoensis</i>	Mono milk-vetch	SR	198207XX			
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Ventura Marsh milk-vetch	SE	200004XX	FE	20010620	
<i>Astragalus tener</i> var. <i>titi</i>	coastal dunes milk-vetch	SE	198202XX	FE	19980911	
<i>Astragalus traskiae</i>	Trask's milk-vetch	SR	197911XX			
<i>Astragalus tricarinatus</i>	triple-ribbed milk-vetch			FE	19981105	
<i>Atriplex coronata</i> var. <i>notatior</i>	San Jacinto Valley crownscale			FE	19981112	
<i>Atriplex tularensis</i>	Bakersfield smallscale	SE	198701XX			
<i>Baccharis vanessae</i>	Encinitas baccharis	SE	198701XX	FT	19961106	
<i>Bensoniella oregona</i>	bensoniella	SR	198207XX			
<i>Berberis nevinii</i>	Nevin's barberry	SE	198701XX	FE	19981112	
<i>Berberis pinnata</i> ssp. <i>insularis</i>	island barberry	SE	197911XX	FE	19970902	
<i>Blennosperma bakeri</i>	Sonoma sunshine	SE	199202XX	FE	19920102	
<i>Blennosperma nanum</i> var. <i>robustum</i>	Point Reyes blennosperma	SR	197811XX			
<i>Bloomeria humilis</i>	dwarf goldenstar	SR	197811XX			
<i>Boechera hoffmannii</i>	Hoffmann's rockcress			FE	19970902	Scientific name at time of listing: <i>Arabis hoffmannii</i>
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	SE	19820117	FT	19981112	

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Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Brodiaea insignis</i>	Kaweah brodiaea	SE	197911XX			
<i>Brodiaea pallida</i>	Chinese Camp brodiaea	SE	197811XX	FT	19981014	
<i>Brodiaea rosea</i>	Indian Valley brodiaea	SE	197909XX			Scientific name at time of listing: <i>Brodiaea coronaria</i> ssp. <i>rosea</i>
<i>Calamagrostis foliosa</i>	leafy reed grass	SR	197911XX			
<i>Calochortus dunnii</i>	Dunn's mariposa-lily	SR	197911XX			
<i>Calochortus persistens</i>	Siskiyou mariposa-lily	SR	198207XX			FC on 20040504; removed from FC list on 20151008.
<i>Calochortus tiburonensis</i>	Tiburon mariposa-lily	ST	198705XX	FT	19950306	
<i>Calyptridium pulchellum</i>	Mariposa pussypaws			FT	19981014	
<i>Calystegia stebbinsii</i>	Stebbins' morning-glory	SE	198108XX	FE	19961118	
<i>Camissonia benitensis</i>	San Benito evening-primrose			<u>FDR</u> FT	20220307 19850314	
<i>Carex albida</i>	white sedge	SE	197911XX	FE	19971121	Current taxonomic treatment considers <i>Carex albida</i> as a synonym of <i>Carex lemmonii</i> , a common taxon. No longer tracked by CNDDDB.
<i>Carex tompkinsii</i>	Tompkins' sedge	SR	197911XX			
<i>Carpenteria californica</i>	tree-anemone	ST	199001XX			
<i>Castilleja affinis</i> var. <i>neglecta</i>	Tiburon paintbrush	ST	199001XX	FE	19950306	Scientific name at time of listing: <i>Castilleja affinis</i> ssp. <i>neglecta</i>
<i>Castilleja campestris</i> var. <i>succulenta</i>	succulent owl's-clover	SE	197909XX	FT	19970425	Scientific name at time of listing: <i>Castilleja campestris</i> ssp. <i>succulenta</i>
<i>Castilleja cinerea</i>	ash-gray paintbrush			FT	19981014	
<i>Castilleja gleasoni</i>	Mt. Gleason paintbrush	SR	198207XX			
<i>Castilleja grisea</i>	San Clemente Island paintbrush	SE	198204XX	<u>FDR</u> FT FE	20230224 20130826 19770912	

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Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Castilleja mollis</i>	soft-leaved paintbrush			FE	19970902	
<i>Castilleja uliginosa</i>	Pitkin Marsh paintbrush	SE	197811XX			
<i>Caulanthus californicus</i>	California jewel-flower	SE	198701XX	FE	19900820	
<i>Caulanthus stenocarpus</i>	slender-pod jewel-flower	<u>Delisted</u> SR	200804XX 197911XX			Current taxonomic treatment considers <i>Caulanthus stenocarpus</i> as a synonym of <i>Caulanthus heterophyllus</i> , a common taxon.
<i>Ceanothus ferrisiae</i>	Coyote ceanothus			FE	19950306	Scientific name at time of listing: <i>Ceanothus ferrisiae</i>
<i>Ceanothus hearstiorum</i>	Hearsts' ceanothus	SR	198108XX			
<i>Ceanothus maritimus</i>	maritime ceanothus	SR	197811XX			
<i>Ceanothus masonii</i>	Mason's ceanothus	SR	197811XX			
<i>Ceanothus ophiochilus</i>	Vail Lake ceanothus	SE	199401XX	FT	19981112	
<i>Ceanothus roderickii</i>	Pine Hill ceanothus	SR	198207XX	FE	19961118	
<i>Cercocarpus traskiae</i>	Catalina Island mountain-mahogany	SE	198204XX	FE	19970908	
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	SE	197907XX	FE	19781029	Scientific name at time of listing: <i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>
<i>Chloropyron molle</i> ssp. <i>molle</i>	soft bird's-beak	SR	197907XX	FE	19971222	Scientific name at time of listing: <i>Cordylanthus mollis</i> ssp. <i>mollis</i> . Synonym: soft salty bird's-beak.
<i>Chloropyron palmatum</i>	palmate-bracted bird's-beak	SE	198405XX	FE	19860731	Scientific name at time of listing: <i>Cordylanthus palmatus</i> . Synonym: palmate salty bird's-beak.
<i>Chorizanthe howellii</i>	Howell's spineflower	ST	198701XX	FE	19920622	
<i>Chorizanthe orcuttiana</i>	Orcutt's spineflower	SE	197911XX	FE	19961106	



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<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	SE	200108XX			FC on 20040504, reclassified as FPT on 20160915, Proposed Rule withdrawn on 20180315.
<i>Chorizanthe pungens</i> var. <i>hartwegiana</i>	Ben Lomond spineflower			FE	19940307	
<i>Chorizanthe pungens</i> var. <i>pungens</i>	Monterey spineflower			FT	19940307	
<i>Chorizanthe robusta</i> var. <i>hartwegii</i>	Scotts Valley spineflower			FE	19940307	USFWS listed the entire species, <i>Chorizanthe robusta</i> .
<i>Chorizanthe robusta</i> var. <i>robusta</i>	robust spineflower			FE	19940307	USFWS listed the entire species, <i>Chorizanthe robusta</i> .
<i>Chorizanthe valida</i>	Sonoma spineflower	SE	199001XX	FE	19920622	
<i>Cirsium ciliolatum</i>	Ashland thistle	SE	198209XX			
<i>Cirsium fontinale</i> var. <i>fontinale</i>	fountain thistle	SE	197907XX	FE	19950306	Synonym: Crystal Springs fountain thistle
<i>Cirsium fontinale</i> var. <i>obispoense</i>	Chorro Creek bog thistle	SE	199306XX	FE	19950117	Synonym: San Luis Obispo fountain thistle
<i>Cirsium hydrophilum</i> var. <i>hydrophilum</i>	Suisun thistle			FE	19971222	
<i>Cirsium rhotophilum</i>	surf thistle	ST	199002XX			
<i>Cirsium scariosum</i> var. <i>loncholepis</i>	La Graciosa thistle	ST	199002XX	FE	20000419	Scientific name at time of listing: <i>Cirsium loncholepis</i>
<i>Clarkia franciscana</i>	Presidio clarkia	SE	197811XX	FE	19950306	
<i>Clarkia imbricata</i>	Vine Hill clarkia	SE	197811XX	FE	19971121	
<i>Clarkia lingulata</i>	Merced clarkia	SE	198701XX			
<i>Clarkia speciosa</i> ssp. <i>immaculata</i>	Pismo clarkia	SR	197811XX	FE	19950117	
<i>Clarkia springvillensis</i>	Springville clarkia	SE	197909XX	FT	19981014	
<i>Cordylanthus nidularius</i>	Mt. Diablo bird's-beak	SR	197811XX			

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Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>	seaside bird's-beak	SE	19820117			
<i>Cordylanthus tenuis</i> ssp. <i>capillaris</i>	Pennell's bird's-beak	SR	197811XX	FE	19950306	
<i>Crocanthemum greenei</i>	island rush-rose			FT	19970902	Scientific name at time of listing: <i>Helianthemum greenei</i>
<i>Croton wigginsii</i>	Wiggins' croton	SR	198201XX			
<i>Dedeckera eurekaensis</i>	July gold	SR	197811XX			
<i>Deinandra arida</i>	Red Rock tarplant	SR	198207XX			Scientific name at time of listing: <i>Hemizonia arida</i>
<i>Deinandra bacigalupii</i>	Livermore tarplant	SE	20171001			
<i>Deinandra conjugens</i>	Otay tarplant	SE	197911XX	FT	19981112	Scientific name at time of listing: <i>Hemizonia conjugens</i>
<i>Deinandra increscens</i> ssp. <i>villosa</i>	Gaviota tarplant	SE	199001XX	FE	20000419	Scientific name at time of listing: <i>Hemizonia increscens</i> ssp. <i>villosa</i>
<i>Deinandra minthornii</i>	Santa Susana tarplant	SR	197811XX			Scientific name at time of listing: <i>Hemizonia minthornii</i>
<i>Deinandra mohavensis</i>	Mojave tarplant	SE	19820117			Scientific name at time of listing: <i>Hemizonia mohavensis</i>
<i>Delphinium bakeri</i>	Baker's larkspur	SE	200704XX	FE	20000225	
<i>Delphinium hesperium</i> ssp. <i>cuyamaca</i>	Cuyamaca larkspur	SR	198207XX			
<i>Delphinium luteum</i>	golden larkspur	SR	197909XX	FE	20000225	
<i>Delphinium variegatum</i> ssp. <i>kinkiense</i>	San Clemente Island larkspur	SE	197909XX	<b>FDR</b> FE	20230224 19770912	Scientific name at time of listing: <i>Delphinium kinkiense</i>
<i>Dieteria asteroides</i> var. <i>lagunensis</i>	Mount Laguna aster	SR	197909XX			Scientific name at time of listing: <i>Machaeranthera asteroides</i> var. <i>lagunensis</i>

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Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Diplacus vandenbergensis</i>	Vandenberg monkeyflower			FE	20140925	Scientific name when proposed as a Federal Candidate: <i>Mimulus fremontii</i> var. <i>vandenbergensis</i>
<i>Dithyrea maritima</i>	beach spectaclepod	ST	199002XX			
<i>Dodecahema leptoceras</i>	slender-horned spineflower	SE	198201XX	FE	19871028	Scientific name at time of listing: <i>Centrostegia leptoceras</i>
<i>Downingia concolor</i> var. <i>brevior</i>	Cuyamaca Lake downingia	SE	198202XX			
<i>Dudleya abramsii</i> ssp. <i>setchellii</i>	Santa Clara Valley dudleya			FE	19950306	Scientific name at time of listing: <i>Dudleya setchellii</i>
<i>Dudleya brevifolia</i>	short-leaved dudleya	SE	19820117			
<i>Dudleya cymosa</i> ssp. <i>agourensis</i>	Agoura Hills dudleya			FT	19970228	USFWS listed the more encompassing <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> from which ssp. <i>agourensis</i> was split.
<i>Dudleya cymosa</i> ssp. <i>marcescens</i>	marcescent dudleya	SR	197811XX	FT	19970228	
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Santa Monica dudleya			FT	19970228	
<i>Dudleya nesiotica</i>	Santa Cruz Island dudleya	SR	197911XX	FT	19970902	
<i>Dudleya parva</i>	Conejo dudleya			FT	19970228	Scientific name at time of listing: <i>Dudleya abramsii</i> ssp. <i>parva</i>
<i>Dudleya stolonifera</i>	Laguna Beach dudleya	ST	198701XX	FT	19981112	
<i>Dudleya traskiae</i>	Santa Barbara Island dudleya	SE	197911XX	FE	19780527	
<i>Dudleya verityi</i>	Verity's dudleya			FT	19970228	
<i>Enceliopsis nudicaulis</i> var. <i>corrugata</i>	Ash Meadows daisy			FT	19850619	

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Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Eremalche parryi</i> ssp. <i>kernensis</i>	Kern mallow			FE	19900820	Scientific name at time of listing: <i>Eremalche kernensis</i>
<i>Eremogone ursina</i>	Big Bear Valley sandwort			FT	19981014	Scientific name at time of listing: <i>Arenaria ursina</i>
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	SE	198701XX	FE	19871028	
<i>Eriastrum erterae</i>	Lime Ridge eriastrum	SC	20220222			
<i>Eriastrum hooveri</i>	Hoover's woolly-star			<u>FDR</u> FT	20031007 19900820	
<i>Eriastrum tracyi</i>	Tracy's eriastrum	SR	198207XX			
<i>Erigeron parishii</i>	Parish's daisy			FT	19940923	
<i>Eriodictyon altissimum</i>	Indian Knob mountainbalm	SE	197907XX	FE	19950117	
<i>Eriodictyon capitatum</i>	Lompoc yerba santa	SR	197909XX	FE	20000419	
<i>Eriogonum alpinum</i>	Trinity buckwheat	SE	197907XX			
<i>Eriogonum apricum</i> var. <i>apricum</i>	lone buckwheat	SE	198108XX	FE	19990625	USFWS listed the entire species, <i>Eriogonum apricum</i> .
<i>Eriogonum apricum</i> var. <i>prostratum</i>	Irish Hill buckwheat	SE	198701XX	FE	19990625	USFWS listed the entire species, <i>Eriogonum apricum</i> .
<i>Eriogonum butterworthianum</i>	Butterworth's buckwheat	SR	197911XX			
<i>Eriogonum crocatum</i>	conejo buckwheat	SR	197909XX			
<i>Eriogonum giganteum</i> var. <i>compactum</i>	Santa Barbara Island buckwheat	SR	197911XX			
<i>Eriogonum grande</i> var. <i>timorum</i>	San Nicolas Island buckwheat	SE	197911XX			Scientific name at time of listing: <i>Eriogonum grande</i> ssp. <i>timorum</i> . CCR lists common name as San Nicholas Island buckwheat.
<i>Eriogonum kelloggii</i>	Kellogg's buckwheat	SE	198204XX			FC on 20040504; removed from FC list on 20140918.

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<i>Eriogonum kennedyi</i> var. <i>austromontanum</i>	southern mountain buckwheat			FT	19981014	
<i>Eriogonum ovalifolium</i> var. <i>vineum</i>	Cushenbury buckwheat			FE	19940923	
<i>Eriogonum thornei</i>	Thorne's buckwheat	SE	197909XX			Scientific name at time of listing: <i>Eriogonum ericifolium</i> var. <i>thornei</i>
<i>Eriogonum twisselmannii</i>	Twisselmann's buckwheat	SR	198207XX			
<i>Eriophyllum congdonii</i>	Congdon's woolly sunflower	SR	198207XX			
<i>Eriophyllum latilobum</i>	San Mateo woolly sunflower	SE	199206XX	FE	19950306	
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	SE	197907XX	FE	19930803	
<i>Eryngium constancei</i>	Loch Lomond button-celery	SE	198701XX	FE	19870122	Emergency FE listing 19850801; formal FE status on 19870122. Synonym: Loch Lomond coyote thistle.
<i>Eryngium racemosum</i>	Delta button-celery	SE	19820117			
<i>Erysimum capitatum</i> var. <i>angustatum</i>	Contra Costa wallflower	SE	197811XX	FE	19780527	
<i>Erysimum menziesii</i>	Menzies' wallflower	SE	198409XX	FE	19920622	
<i>Erysimum teretifolium</i>	Santa Cruz wallflower	SE	198108XX	FE	19940307	
<i>Euphorbia hooveri</i>	Hoover's spurge			FT	19970425	Scientific name at time of listing: <i>Chamaesyce hooveri</i>
<i>Fremontodendron decumbens</i>	Pine Hill flannelbush	SR	197907XX	FE	19961118	Scientific name at time of listing: <i>Fremontodendron californicum</i> ssp. <i>decumbens</i>
<i>Fremontodendron mexicanum</i>	Mexican flannelbush	SR	198207XX	FE	19981112	
<i>Fritillaria gentneri</i>	Gentner's fritillary			FE	20000110	

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<i>Fritillaria roderickii</i>	Roderick's fritillary	SE	197911XX			
<i>Fritillaria striata</i>	striped adobe-lily	ST	198701XX			
<i>Galium angustifolium</i> ssp. <i>borregoense</i>	Borrego bedstraw	SR	197909XX			
<i>Galium buxifolium</i>	box bedstraw	SR	197911XX	FE	19970902	
<i>Galium californicum</i> ssp. <i>sierrae</i>	El Dorado bedstraw	SR	197911XX	FE	19961118	
<i>Galium catalinense</i> ssp. <i>acrispum</i>	San Clemente Island bedstraw	SE	198204XX			
<i>Gilia tenuiflora</i> ssp. <i>arenaria</i>	sand gilia	ST	198701XX	FE	19920622	Synonym: Monterey gilia
<i>Gilia tenuiflora</i> ssp. <i>hoffmannii</i>	Hoffmann's slender-flowered gilia			FE	19970902	
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	SE	197811XX			
<i>Grindelia fraxinipratensis</i>	Ash Meadows gumplant			FT	19850619	Scientific name at time of listing: <i>Grindelia fraxino-pratensis</i>
<i>Hazardia orcuttii</i>	Orcutt's hazardia	ST	200208XX			FC on 20040504; removed from FC list on 20131122.
<i>Helianthus niveus</i> ssp. <i>tephrodes</i>	Algodones Dunes sunflower	SE	197911XX			
<i>Hesperocyparis abramsiana</i> var. <i>abramsiana</i>	Santa Cruz cypress	SE	197911XX	<u>FT</u> FE	20160321 19870209	USFWS listed the entire species, <i>Cupressus abramsiana</i> , as FE on 19870209; reclassified as FT on 20160321.
<i>Hesperocyparis abramsiana</i> var. <i>butanoensis</i>	Butano Ridge cypress	SE	197911XX	<u>FT</u> FE	20160321 19870209	USFWS listed the entire species, <i>Cupressus abramsiana</i> , as FE on 19870209; reclassified as FT on 20160321.
<i>Hesperocyparis goveniana</i>	Gowen cypress			FT	19980911	Scientific name at time of listing: <i>Cupressus goveniana</i> ssp. <i>goveniana</i>

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<i>Hesperolinon congestum</i>	Marin western flax	ST	199206XX	FT	19950306	
<i>Hesperolinon didymocarpum</i>	Lake County western flax	SE	198108XX			
<i>Holmgrenanthe petrophila</i>	rock lady	SR	198207XX			Scientific name at time of listing: <i>Maurandya petrophila</i>
<i>Holocarpha macradenia</i>	Santa Cruz tarplant	SE	197909XX	FT	20000419	
<i>Hooveria purpurea</i> var. <i>purpurea</i>	Santa Lucia purple amole			FT	20000419	Scientific name at time of listing: <i>Chlorogalum purpureum</i> var. <i>purpureum</i> . USFWS listed the entire species, <i>Chlorogalum purpureum</i> .
<i>Hooveria purpurea</i> var. <i>reducta</i>	Camatta Canyon amole	SR	197811XX	FT	20000419	Scientific name at time of listing: <i>Chlorogalum purpureum</i> var. <i>reductum</i> . USFWS listed the entire species, <i>Chlorogalum purpureum</i> .
<i>Howellia aquatilis</i>	water howellia			<b>FDR</b> FT	20210716 19940815	
<i>Ivesia callida</i>	Tahquitz ivesia	SR	198207XX			
<i>Ivesia webberi</i>	Webber's ivesia			FT	20140703	
<i>Lasthenia burkei</i>	Burke's goldfields	SE	197909XX	FE	19920102	
<i>Lasthenia conjugens</i>	Contra Costa goldfields			FE	19970718	
<i>Layia carnosa</i>	beach layia	SE	199001XX	<b>FT</b> FE	20220502 19920622	FE on 19920622; moved to FT on 20220502.
<i>Leptosiphon croceus</i>	coast yellow leptosiphon	SE	20190401			
<i>Lessingia germanorum</i>	San Francisco lessingia	SE	199001XX	FE	19970721	Synonym: <i>Lessingia germanorum</i> var. <i>germanorum</i>
<i>Lewisia congdonii</i>	Congdon's lewisia	SR	198207XX			
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	SR	197911XX			
<i>Lilium occidentale</i>	western lily	SE	19820117	FE	19940916	

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<i>Lilium pardalinum</i> ssp. <i>pitkinense</i>	Pitkin Marsh lily	SE	197811XX	FE	19971121	
<i>Limnanthes alba</i> ssp. <i>parishii</i>	Parish's meadowfoam	SE	197907XX			Scientific name at time of listing: <i>Limnanthes gracilis</i> var. <i>parishii</i>
<i>Limnanthes bakeri</i>	Baker's meadowfoam	SR	197811XX			
<i>Limnanthes douglasii</i> ssp. <i>sulphurea</i>	Point Reyes meadowfoam	SE	198204XX			
<i>Limnanthes floccosa</i> ssp. <i>californica</i>	Butte County meadowfoam	SE	198202XX	FE	19920608	
<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	SE	197911XX	FE	19920102	
<i>Lithophragma maximum</i>	San Clemente Island woodland star	SE	198202XX	FE	19970908	
<i>Lupinus citrinus</i> var. <i>deflexus</i>	Mariposa lupine	ST	199001XX			
<i>Lupinus constancei</i>	The Lassics lupine	SE	20190401	FPE	20221006	
<i>Lupinus milo-bakeri</i>	Milo Baker's lupine	ST	198701XX			As of 20210216, <i>L. milo-bakeri</i> is being re-evaluated from ST to SE.
<i>Lupinus nipomensis</i>	Nipomo Mesa lupine	SE	198701XX	FE	20000419	
<i>Lupinus padre-crowleyi</i>	Father Crowley's lupine	SR	198108XX			
<i>Lupinus tidestromii</i>	Tidestrom's lupine	SE	198701XX	FE	19920622	Federally listed at the species level; state listed as <i>Lupinus tidestromii</i> var. <i>tidestromii</i> (plants of <i>L. tidestromii</i> from Monterey County only)
<i>Mahonia sonnei</i>	Truckee barberry	<b>Delisted</b> SE	200804XX 197907XX	<b>Delisted</b> FE	20031001 19791206	Synonym: <i>Berberis sonnei</i> . Current taxonomic treatment considers <i>B. sonnei</i> as a form of the common <i>B. aquifolium</i> var. <i>repens</i> , and not a separate taxon.
<i>Malacothamnus clementinus</i>	San Clemente Island bush-mallow	SE	198202XX	<b>FDR</b> FE	20230224 19770912	



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Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Malacothamnus fasciculatus</i> var. <i>nesioticus</i>	Santa Cruz Island bush-mallow	SE	197911XX	FE	19970902	Scientific name at time of listing: <i>Malacothamnus fasciculatus</i> ssp. <i>nesioticus</i>
<i>Malacothrix indecora</i>	Santa Cruz Island malacothrix			FE	19970902	
<i>Malacothrix squalida</i>	island malacothrix			FE	19970902	
<i>Monardella viminea</i>	willowy monardella	SE	197911XX	FE	19981112	Scientific name at time of listing: <i>Monardella linoides</i> ssp. <i>viminea</i>
<i>Monolopia congdonii</i>	San Joaquin woollythreads			FE	19900820	Scientific name at time of listing: <i>Lembertia congdonii</i>
<i>Nasturtium gambelii</i>	Gambel's water cress	ST	199001XX	FE	19930803	Scientific name at time of listing: <i>Rorippa gambellii</i>
<i>Navarretia fossalis</i>	spreading navarretia			FT	19981112	
<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	few-flowered navarretia	ST	199001XX	FE	19970718	Synonym: <i>Navarretia pauciflora</i>
<i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	many-flowered navarretia	SE	197911XX	FE	19970718	
<i>Nemacladus twisselmannii</i>	Twisselmann's nemacladus	SR	198207XX			
<i>Neostapfia colusana</i>	Colusa grass	SE	197911XX	FT	19970425	
<i>Neviusia cliftonii</i>	Shasta snow-wreath	SC	20200501			Federal 90-day finding published on 20210324.
<i>Nitrophila mohavensis</i>	Amargosa nitrophila	SE	197911XX	FE	19850619	
<i>Noccaea fendleri</i> ssp. <i>californica</i>	Kneeland Prairie pennycress			FE	20000310	Scientific name at time of listing: <i>Thlapsi californicum</i>
<i>Nolina interrata</i>	Dehesa nolina	SE	197911XX			

State and Federally Listed Endangered, Threatened, and Rare Plants of California – April 2023

Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Oenothera californica</i> ssp. <i>eurekensis</i>	Eureka Dunes evening-primrose	SR	197811XX	<b>FDR</b> FE	20180329 19780527	Scientific name at time of listing: <i>Oenothera avita</i> ssp. <i>eurekensis</i> . FE on 19780527; removed from FE list on 20180329.
<i>Oenothera deltooides</i> ssp. <i>howellii</i>	Antioch Dunes evening-primrose	SE	197811XX	FE	19780527	
<i>Opuntia basilaris</i> var. <i>treleasei</i>	Bakersfield cactus	SE	199001XX	FE	19900820	Scientific name at time of listing: <i>Opuntia treleasei</i>
<i>Orcuttia californica</i>	California Orcutt grass	SE	197909XX	FE	19930803	
<i>Orcuttia inaequalis</i>	San Joaquin Valley Orcutt grass	SE	197909XX	FT	19970425	
<i>Orcuttia pilosa</i>	hairy Orcutt grass	SE	197909XX	FE	19970425	
<i>Orcuttia tenuis</i>	slender Orcutt grass	SE	197909XX	FT	19970425	
<i>Orcuttia viscida</i>	Sacramento Orcutt grass	SE	197907XX	FE	19970425	
<i>Oreocarya roosiorum</i>	bristlecone cryptantha	SR	198207XX			Scientific name at time of listing: <i>Cryptantha roosiorum</i>
<i>Ornithostaphylos oppositifolia</i>	Baja California birdbush	SE	200105XX			
<i>Packera ganderi</i>	Gander's ragwort	SR	198207XX			Scientific name at time of listing: <i>Senecio ganderi</i>
<i>Packera layneae</i>	Layne's ragwort	SR	197911XX	FT	19961118	Scientific name at time of listing: <i>Senecio layneae</i>
<i>Panicum acuminatum</i> var. <i>thermale</i>	Geysers panicum	SE	197809XX			Scientific name at time of listing: <i>Dichanthelium lanuginosum</i> var. <i>thermale</i>
<i>Pedicularis dudleyi</i>	Dudley's lousewort	SR	197909XX			
<i>Pentachaeta bellidiflora</i>	white-rayed pentachaeta	SE	199206XX	FE	19950306	
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	SE	199001XX	FE	19970228	
<i>Perityle inyoensis</i>	Inyo rock daisy	SC	20220818			
<i>Phacelia argentea</i>	sand dune phacelia			FPT	20220322	

## State and Federally Listed Endangered, Threatened, and Rare Plants of California – April 2023

Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Phacelia insularis</i> var. <i>insularis</i>	northern Channel Islands phacelia			FE	19970902	Scientific name at time of listing: <i>Phacelia insularis</i> ssp. <i>insularis</i> . Synonym: island phacelia.
<i>Phacelia stellaris</i>	Brand's star phacelia					FC on 20040504; removed from FC list on 20131122.
<i>Phlox hirsuta</i>	Yreka phlox	SE	198701XX	FE	20000306	
<i>Physaria kingii</i> ssp. <i>bernardina</i>	San Bernardino Mountains bladderpod			FE	19940923	Scientific name at time of listing: <i>Lesquerella kingii</i> ssp. <i>bernardina</i>
<i>Pinus albicaulis</i>	whitebark pine			FT	20230117	Not tracked by the CNDDDB.
<i>Piperia yadonii</i>	Yadon's rein orchid			FE	19980911	
<i>Plagiobothrys diffusus</i>	San Francisco popcornflower	SE	197909XX			
<i>Plagiobothrys strictus</i>	Calistoga popcornflower	ST	199001XX	FE	19971121	
<i>Pleuropogon hooverianus</i>	North Coast semaphore grass	ST	200208XX			
<i>Poa atropurpurea</i>	San Bernardino blue grass			FE	19981014	
<i>Poa napensis</i>	Napa blue grass	SE	197907XX	FE	19971121	
<i>Pogogyne abramsii</i>	San Diego mesa mint	SE	197907XX	FE	19781029	
<i>Pogogyne clareana</i>	Santa Lucia mint	SE	197911XX			
<i>Pogogyne nudiuscula</i>	Otay Mesa mint	SE	198701XX	FE	19930803	
<i>Polygonum hickmanii</i>	Scotts Valley polygonum	SE	200410XX	FE	20030508	
<i>Potentilla basaltica</i>	Black Rock potentilla					FC on 20040504; removed from FC list on 20130802.
<i>Potentilla hickmanii</i>	Hickman's cinquefoil	SE	197909XX	FE	19980911	
<i>Pseudobahia bahiifolia</i>	Hartweg's golden sunburst	SE	19820117	FE	19970310	
<i>Pseudobahia peirsonii</i>	San Joaquin adobe sunburst	SE	198701XX	FT	19970310	

## State and Federally Listed Endangered, Threatened, and Rare Plants of California – April 2023

Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Rorippa subumbellata</i>	Tahoe yellow cress	SE	198204XX			FC on 20040504; removed from FC list on 20151008.
<i>Rosa minutifolia</i>	small-leaved rose	SE	198910XX			
<i>Sanicula maritima</i>	adobe sanicle	SR	198108XX			
<i>Sanicula saxatilis</i>	rock sanicle	SR	198207XX			
<i>Sedella leiocarpa</i>	Lake County stonecrop	SE	199001XX	FE	19970718	Scientific name at time of listing: <i>Parvisedum leiocarpum</i>
<i>Sedum laxum</i> ssp. <i>eastwoodiae</i>	Red Mountain stonecrop					Scientific name at time of listing: <i>Sedum eastwoodiae</i> . FC on 20040504; removed from FC list on 20140918.
<i>Sibara filifolia</i>	Santa Cruz Island winged-rockcress			FE	19970908	
<i>Sidalcea covillei</i>	Owens Valley checkerbloom	SE	197907XX			
<i>Sidalcea hickmanii</i> ssp. <i>anomala</i>	Cuesta Pass checkerbloom	SR	197911XX			
<i>Sidalcea hickmanii</i> ssp. <i>parishii</i>	Parish's checkerbloom	SR	197911XX			
<i>Sidalcea keckii</i>	Keck's checkerbloom			FE	20000317	
<i>Sidalcea oregana</i> ssp. <i>valida</i>	Kenwood Marsh checkerbloom	SE	19820117	FE	19971121	
<i>Sidalcea pedata</i>	bird-foot checkerbloom	SE	19820117	FE	19841001	
<i>Sidalcea stipularis</i>	Scadden Flat checkerbloom	SE	198201XX			
<i>Silene greenei</i> ssp. <i>angustifolia</i>	Red Mountain catchfly	SE	198204XX			Scientific name at time of listing: <i>Silene campanulata</i> ssp. <i>campanulata</i>
<i>Streptanthus albidus</i> ssp. <i>albidus</i>	Metcalf Canyon jewel-flower			FE	19950306	

State and Federally Listed Endangered, Threatened, and Rare Plants of California – April 2023

Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
<i>Streptanthus glandulosus</i> ssp. <i>niger</i>	Tiburon jewel-flower	SE	199002XX	FE	19950306	Scientific name at time of listing: <i>Streptanthus niger</i>
<i>Suaeda californica</i>	California seablite			FE	19950117	
<i>Swallenia alexandrae</i>	Eureka Valley dune grass	SR	198108XX	<del>FT</del> FE	20180329 19780527	FE on 19780527; reclassified as FT on 20180329.
<i>Taraxacum californicum</i>	California dandelion			FE	19981014	
<i>Thelypodium stenopetalum</i>	slender-petaled thelypodium	SE	198202XX	FE	19841001	
<i>Thermopsis macrophylla</i>	Santa Ynez false lupine	SR	198108XX			Scientific name at time of listing: <i>Thermopsis macrophylla</i> var. <i>agnina</i>
<i>Thysanocarpus conchuliferus</i>	Santa Cruz Island fringepod			FE	19970902	
<i>Trichostema austromontanum</i> ssp. <i>compactum</i>	Hidden Lake bluecurls			<del>FDR</del> FT	20180702 19981014	
<i>Trifolium amoenum</i>	showy rancheria clover			FE	19971121	
<i>Trifolium polyodon</i>	Pacific Grove clover	SR	197909XX			
<i>Trifolium trichocalyx</i>	Monterey clover	SE	197911XX	FE	19980911	
<i>Tuctoria greenei</i>	Greene's tuctoria	SR	197909XX	FE	19970425	
<i>Tuctoria mucronata</i>	Crampton's tuctoria or Solano grass	SE	197907XX	FE	19781029	Scientific name at time of listing: <i>Orcuttia mucronata</i>
<i>Verbena californica</i>	Red Hills vervain	ST	199408XX	FT	19981014	
<i>Verbesina dissita</i>	big-leaved crownbeard	ST	199001XX	FT	19961106	
<i>Yucca brevifolia</i>	western Joshua tree	SC	20200922			
<i>Zeltnera namophila</i>	spring-loving centaury			FT	19850619	Scientific name at time of listing: <i>Centaurium namophilum</i>

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**Appendix C**  
**California State and Federally Listed Animal Species**

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# **STATE AND FEDERALLY LISTED ENDANGERED AND THREATENED ANIMALS OF CALIFORNIA**

April 2023

State of California  
Natural Resources Agency  
Department of Fish and Wildlife  
Biogeographic Data Branch  
California Natural Diversity Database (CNDDDB)

Recommended Citation:

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## Overview

This document contains a list of animal taxa found within California or off the coast of the State that have been classified as endangered or threatened by the California Fish and Game Commission (FGC; state listed) or by the U.S. Secretary of the Interior or the U.S. Secretary of Commerce (federally listed). This list also includes taxa that are official candidates for state or federal listing, or have been officially proposed for federal listing, as well as taxa that were once listed but have since been delisted.

## Background

State listing is pursuant to the California Endangered Species Act of 1984 (CESA; California Code of Regulations, Title 14, Chapter 6, §§783.0-787.9; Fish and Game Code Chapter 1.5, §§ 2050-2115.5). The designations “Endangered” and “Rare” were first established in 1970 by the original California Endangered Species Act, and taxa with a state list date of June 27, 1971 were protected under this regulation. In 1984, CESA was amended, at which time the “Rare” designation was changed to “Threatened,” and on January 1, 1985, all animal species previously designated as “Rare” were reclassified as “Threatened.” The official California listing of Endangered and Threatened animals is contained in the California Code of Regulations, [Title 14, §670.5](#).

Federal listing is pursuant to the Federal Endangered Species Act of 1973, as amended (16 USC §§1531-1544; 50 CFR §§17.1-17.108). The federal agencies responsible for listing are the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Prior federal regulations include the Endangered Species Conservation Act of 1969, and the Endangered Species Preservation Act of 1966, under which all species with a federal list date of March 11, 1967 were listed. The official federal listing of Endangered and Threatened animals is published in the Federal Register, [50 CFR §17.11](#).

## Listing Status Summary Table

Totals include subspecies, Distinct Population Segments, and Ecologically Significant Units when listed separately.

<b>Abbreviation</b>	<b>Designation</b>	<b>Totals</b>
SE	State Listed - Endangered	54
ST	State Listed - Threatened	43
SC	State Candidate for Listing	12
SDR	State Delisted (Recovered)	2
SDE	State Delisted (Extinct)	2
FE	Federally Listed - Endangered	89
FT	Federally Listed - Threatened	46
FPE	Federally Proposed - Endangered	5
FPT	Federally Proposed - Threatened	5
FC	Federal Candidate for Listing	2
FDR	Federally Delisted (Recovered)	14
FDE	Federally Delisted (Extinct)	2
	<b># Animal Taxa State Listed Only</b>	<b>43</b>
	<b># Animal Taxa Federally Listed Only</b>	<b>81</b>
	<b># Animal Taxa State AND Federally Listed</b>	<b>54</b>
	<b>Total # State Listed Taxa (SE, ST)</b>	<b>97</b>
	<b>Total # Federally Listed Taxa (FE, FT)</b>	<b>135</b>
	<b>Total # Listed Animal Taxa</b>	<b>178</b>

## List Content

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Common and scientific names are shown as they are in current usage, typically based standards used by the [NatureServe Natural Heritage Network](#), unless otherwise noted. If current nomenclature differs from that in state and federal listing documents, the nomenclature at the time of listing is provided in the notes. Synonyms, name changes, and other clarifying points are also noted. Where state and federal listings apply to different ranges, subspecies, or populations, each taxa will be listed separately, and statuses that apply to only a portion of the taxon, or that also encompass other taxa, will be shown in parentheses. Where state and federal listings differ in name, but represent the same biological unit, the common name will be listed using the California state listing; the federal name will be listed in the notes.

The “List Date” for final federal listing is the date the listing became effective. This is typically not the date of publication of the rule in the Federal Register; it is usually about 30 days after publication, but may be longer.

If an animal was previously listed and no longer has any listing status, the entry text is grey. If an animal was previously proposed or a candidate for listing, but the listing was not warranted or was revoked, the record has been removed from the table.

For taxa having more than one status entry, the current status is in bold and underlined. All dates are in the “YYYYMMDD” format.

## Abbreviations

- CCR: California Code of Regulations
- CDFW: California Department of Fish and Wildlife (previously Department of Fish and Game (DFG))
- CESA: California Endangered Species Act
- DPS: Distinct population segment
- ESA: Endangered Species Act (Federal)
- ESU: Evolutionarily significant unit
- FGC: California Fish and Game Commission
- NMFS: National Marine Fisheries Service
- NOAA: National Oceanic and Atmospheric Administration
- USFWS: United States Fish and Wildlife Service

## Additional Resources

- The [California Fish and Game Commission](#) publishes notices relating to changes to Title 14 of the California Code of Regulations
- Title 14 of the California Code of Regulations can be accessed through The [Office of Administrative Law](#)
- The [U.S. Fish and Wildlife Service](#) is responsible for protecting endangered and threatened species, and conserving candidate and at-risk species so that ESA listing is not necessary
- The National Marine Fisheries Service (a.k.a. NOAA Fisheries) [Office of Protected Resources](#) is responsible for protecting marine mammals and endangered and threatened marine life

## Invertebrates

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Gastropoda (snails, slugs, and abalone)	<i>Haliotis cracherodii</i>	black abalone			FE	20090213	Listed by NMFS in 2009 and by USFWS in 2011.
Gastropoda (snails, slugs, and abalone)	<i>Haliotis sorenseni</i>	white abalone			FE	20010628	Listed by NMFS in 2001 and by USFWS in 2005.
Gastropoda (snails, slugs, and abalone)	<i>Helminthoglypta walkeriana</i>	Morro shoulderband			<b>FT</b> FE	20220307 19950117	Downlisted by USFWS to Threatened on 20220307.
Gastropoda (snails, slugs, and abalone)	<i>Monadenia infumata setosa</i>	Trinity bristle snail	ST	19801002			Listed by the State of California as <i>Monadenia setosa</i> .
Crustacea - Anostraca (fairy shrimp)	<i>Branchinecta conservatio</i>	Conservancy fairy shrimp			FE	19940919	
Crustacea - Anostraca (fairy shrimp)	<i>Branchinecta longiantenna</i>	longhorn fairy shrimp			FE	19940919	
Crustacea - Anostraca (fairy shrimp)	<i>Branchinecta lynchi</i>	vernal pool fairy shrimp			FT	19940919	
Crustacea - Anostraca (fairy shrimp)	<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp			FE	19970203	
Crustacea - Anostraca (fairy shrimp)	<i>Streptocephalus woottoni</i>	Riverside fairy shrimp			FE	19930803	
Crustacea - Notostraca (tadpole shrimp)	<i>Lepidurus packardii</i>	vernal pool tadpole shrimp			FE	19940919	



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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Crustacea - Decapoda (crayfish and shrimp)	<i>Pacifastacus fortis</i>	Shasta crayfish	<u>SE</u> ST	19880226 19801002	FE	19881031	
Crustacea - Decapoda (crayfish and shrimp)	<i>Syncaris pacifica</i>	California freshwater shrimp	SE	19801002	FE	19881130	
Insecta - Orthoptera (grasshoppers, katydids, and crickets)	<i>Trimerotropis infantilis</i>	Zayante band-winged grasshopper			FE	19970224	
Insecta - Coleoptera (beetles)	<i>Cicindela ohlone</i>	Ohlone tiger beetle			FE	20011003	
Insecta - Coleoptera (beetles)	<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle			FT	19800915	
Insecta - Coleoptera (beetles)	<i>Dinacoma caseyi</i>	Casey's June beetle			FE	20111024	
Insecta - Coleoptera (beetles)	<i>Elaphrus viridis</i>	Delta green ground beetle			FT	19800915	
Insecta - Coleoptera (beetles)	<i>Polyphylla barbata</i>	Mount Hermon (=barbate) June beetle			FE	19970224	
Insecta - Diptera (flies)	<i>Rhaphiomidas terminatus abdominalis</i>	Delhi Sands flower-loving fly			FE	19930922	

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Insecta - Lepidoptera (butterflies and moths)	<i>Apodemia mormo langei</i>	Lange's metalmark butterfly			FE	19760608	
Insecta - Lepidoptera (butterflies and moths)	<i>Callophrys mossii bayensis</i>	San Bruno elfin butterfly			FE	19760608	Synonymous with <i>Incisalia fotis bayensis</i> and <i>Callophrys fotis bayensis</i> .
Insecta - Lepidoptera (butterflies and moths)	<i>Danaus plexippus plexippus</i> pop. 1	monarch - California overwintering population			FC	20201217	
Insecta - Lepidoptera (butterflies and moths)	<i>Euphilotes battoides allyni</i>	El Segundo blue butterfly			FE	19760608	
Insecta - Lepidoptera (butterflies and moths)	<i>Euphilotes enoptes smithi</i>	Smith's blue butterfly			FE	19760608	Synonymous with <i>Philotes enoptes smithi</i> and <i>Shijimiaeoides enoptes smithi</i> .
Insecta - Lepidoptera (butterflies and moths)	<i>Euphydryas editha bayensis</i>	Bay checkerspot butterfly			FT	19871019	
Insecta - Lepidoptera (butterflies and moths)	<i>Euphydryas editha quino</i>	quino checkerspot butterfly			FE	19970116	Synonymous with <i>Euphydryas editha wrighti</i>
Insecta - Lepidoptera (butterflies and moths)	<i>Euproserpinus euterpe</i>	Kern primrose sphinx moth			FT	19800509	

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Insecta - Lepidoptera (butterflies and moths)	<i>Glaucopsyche lygdamus palosverdesensis</i>	Palos Verdes blue butterfly			FE	19800801	
Insecta - Lepidoptera (butterflies and moths)	<i>Lycaena hermes</i>	Hermes copper butterfly			FT	20220120	
Insecta - Lepidoptera (butterflies and moths)	<i>Icaricia icarioides missionensis</i>	Mission blue butterfly			FE	19760608	
Insecta - Lepidoptera (butterflies and moths)	<i>Plebejus anna lotis</i>	lotis blue butterfly			FE	19760608	Synonymous with <i>Lycaeides argyrognomon lotis</i> .
Insecta - Lepidoptera (butterflies and moths)	<i>Pseudocopaeodes eunus obscurus</i>	Carson wandering skipper			FE	20020807	
Insecta - Lepidoptera (butterflies and moths)	<i>Pyrgus ruralis lagunae</i>	Laguna Mountains skipper			FE	19970116	
Insecta - Lepidoptera (butterflies and moths)	<i>Speyeria callippe callippe</i>	callippe silverspot butterfly			FE	19971205	
Insecta - Lepidoptera (butterflies and moths)	<i>Speyeria zerene behrensii</i>	Behren's silverspot butterfly			FE	19971205	

State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Insecta - Lepidoptera (butterflies and moths)	<i>Speyeria zerene hippolyta</i>	Oregon silverspot butterfly			FT	19801015	
Insecta - Lepidoptera (butterflies and moths)	<i>Speyeria zerene myrtleae</i>	Myrtle's silverspot butterfly			FE	19920622	The USFWS and others have not yet determined if the taxonomic expansion by Emmel and Emmel (1998) into <i>S. z. myrtleae</i> and <i>S. z. puntareyes</i> is warranted. <i>Speyereia zerene</i> along the coast of Marin and Sonoma counties are Federally Endangered under the subspecies concept in the 1992 listing.
Insecta - Hymenoptera (ants, bees, and wasps)	<i>Bombus crotchii</i>	Crotch bumble bee	SC	20220930 20190618			Originally advanced to candidacy by the Fish and Game Commission on 20190618. The candidacy determination was challenged in court. Candidacy was temporarily stayed beginning February 2021 following an adverse trial court judgment. The Third District Court of Appeal reversed the trial court judgment. Candidacy was reinstated on 20220930.
Insecta - Hymenoptera (ants, bees, and wasps)	<i>Bombus franklini</i>	Franklin's bumble bee	SC	20220930 20190618	FE	20210923	Originally advanced to candidacy by the Fish and Game Commission on 20190618. The candidacy determination was challenged in court. Candidacy was temporarily stayed beginning February 2021 following an adverse trial court judgment. The Third District Court of Appeal reversed the trial court judgment. Candidacy was reinstated on 20220930.

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Insecta - Hymenoptera (ants, bees, and wasps)	<i>Bombus occidentalis</i>	western bumble bee	SC	20220930 20190618			Originally advanced to candidacy by the Fish and Game Commission on 20190618. The candidacy determination was challenged in court. Candidacy was temporarily stayed beginning February 2021 following an adverse trial court judgment. The Third District Court of Appeal reversed the trial court judgment. Candidacy was reinstated on 20220930.
Insecta - Hymenoptera (ants, bees, and wasps)	<i>Bombus suckleyi</i>	Suckley's cuckoo bumble bee	SC	20220930 20190618			Originally advanced to candidacy by the Fish and Game Commission on 20190618. The candidacy determination was challenged in court. Candidacy was temporarily stayed beginning February 2021 following an adverse trial court judgment. The Third District Court of Appeal reversed the trial court judgment. Candidacy was reinstated on 20220930.

## Fishes

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Acipenseridae (sturgeon)	<i>Acipenser medirostris</i> pop. 1	green sturgeon - southern DPS			FT	20060606	Includes all spawning populations south of the Eel River.
Cyprinidae (minnows and carp)	<i>Gila crassicauda</i>	thicktail chub	<u>SDE</u> SE	19801002 19740110			Extinct
Cyprinidae (minnows and carp)	<i>Gila elegans</i>	bonytail	<u>SE</u> ST	19740110 19710627	FE	19800523	Federal common name: bonytail chub.

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Cyprinidae (minnows and carp)	<i>Lavinia exilicauda chi</i>	Clear Lake hitch	ST	20140806			
Cyprinidae (minnows and carp)	<i>Ptychocheilus lucius</i>	Colorado pikeminnow	SE	19710627	FE	19670311	
Cyprinidae (minnows and carp)	<i>Siphateles bicolor mohavensis</i>	Mohave tui chub	SE	19710627	FE	19701013	Listed by the USFWS as <i>Siphateles mohavensis</i> and the State of California as <i>Gila bicolor mohavensis</i> .
Cyprinidae (minnows and carp)	<i>Siphateles bicolor snyderi</i>	Owens tui chub	SE	19740110	FE	19850904	Listed by the State of California and the USFWS as <i>Gila bicolor snyderi</i> .
Catostomidae (suckers)	<i>Catostomus microps</i>	Modoc sucker	<u>SE</u> ST	19801002 19740110	<u>FDR</u> FE	20160107 19850711	Recovered
Catostomidae (suckers)	<i>Catostomus santaanae</i>	Santa Ana sucker			FT	20000512	Populations in the Los Angeles, San Gabriel, and Santa Ana River basins.
Catostomidae (suckers)	<i>Chasmistes brevirostris</i>	shortnose sucker	<u>SE</u> ST	19740110 19710627	FE	19880817	
Catostomidae (suckers)	<i>Deltistes luxatus</i>	Lost River sucker	<u>SE</u> ST	19740110 19710627	FE	19880817	
Catostomidae (suckers)	<i>Xyrauchen texanus</i>	razorback sucker	<u>SE</u> ST	19740110 19710627	FE	19911122	
Osmeridae (smelt)	<i>Hypomesus transpacificus</i>	Delta smelt	<u>SE</u> ST	20100120 19931209	FT	19930405	20161202 USFWS Annual Notification of Findings indicates uplisting to Federally Endangered (original uplisting petition received 20060308) is "warranted-but-precluded," with a Listing Priority Number of 2.
Osmeridae (smelt)	<i>Spirinchus thaleichthys</i>	longfin smelt	ST	20090405	FPE	20221007	Federal Proposed status is only for San Francisco Bay-Delta distinct population segment.

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Osmeridae (smelt)	<i>Thaleichthys pacificus</i>	eulachon			FT	20110413 20100517	The southern DPS of Pacific eulachon was listed as Threatened by NMFS in 2010 and by USFWS in 2011.
Salmonidae (trout and salmon)	<i>Oncorhynchus clarkii henshawi</i>	Lahontan cutthroat trout			<u>FT</u> FE	19750716 19701013	Listed by the USFWS as <i>Salmo clarkii henshawi</i> .
Salmonidae (trout and salmon)	<i>Oncorhynchus clarkii seleniris</i>	Paiute cutthroat trout			<u>FT</u> FE	19750716 19670311	Listed by the USFWS as <i>Salmo clarkii seleniris</i> .
Salmonidae (trout and salmon)	<i>Oncorhynchus kisutch</i> pop. 2	coho salmon - southern Oregon / northern California ESU	ST	20050330	FT	19970506	The Federal listing is for the Southern Oregon-Northern California Coast ESU, and includes populations in coastal streams between Cape Blanco, Oregon and Punta Gorda, California. The Fish and Game Commission determined that coho from Punta Gorda to the Oregon border should be listed as Threatened on 20040225. This determination was finalized by the Office of Administrative Law on 20050330. NMFS completed a comprehensive status review 20050829 reaffirming the status.

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Salmonidae (trout and salmon)	<i>Oncorhynchus kisutch</i> pop. 4	coho salmon - central California coast ESU	SE	20050330	<u>FE</u> FT	20050829 19961130	The Federal listing is for the Central California Coast Coho ESU and includes populations from Punta Gorda south to, and including, the San Lorenzo River as well as populations in tributaries to San Francisco Bay, excluding the Sacramento-San Joaquin River system. Coho south of San Francisco Bay were state listed in 1995. In February 2004 the Fish and Game Commission determined that coho from San Francisco to Punta Gorda should also be listed as Endangered. This change was finalized by the Office of Administrative Law on 20050330. NMFS completed a comprehensive status review in 2005 reaffirming the status, and uplisting the Central Coast ESU from threatened to endangered. NMFS reaffirmed the FE status again 20140723.
Salmonidae (trout and salmon)	<i>Oncorhynchus mykiss irideus</i> pop. 8	steelhead - central California coast DPS			<u>FT</u> FT	20060206 19971017	Coastal streams from the Russian River (inclusive) to Aptos Creek (inclusive), and the drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers; and tributary streams to Suisun Marsh including Suisun Creek, Green Valley Creek, and an unnamed tributary to Cordelia Slough (commonly referred to as Red Top Creek), exclusive of the Sacramento-San Joaquin River Basin of the California Central Valley. NMFS completed a comprehensive status review 20060206 reaffirming the status.



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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Salmonidae (trout and salmon)	<i>Oncorhynchus mykiss irideus</i> pop. 9	steelhead - south-central California coast DPS			<u>FT</u> FT	20060206 19971017	Coastal basins from the Pajaro River (inclusive) south to, but not including, the Santa Maria River. NMFS completed a comprehensive status review 20060206 reaffirming the status.
Salmonidae (trout and salmon)	<i>Oncorhynchus mykiss irideus</i> pop. 10	steelhead - southern California DPS	SC	20220511	<u>FE</u> FE	20060206 19971017	Coastal basins from the Santa Maria River (inclusive), south to the U.S.-Mexico Border. NMFS completed a comprehensive status review 20060206 reaffirming the status.
Salmonidae (trout and salmon)	<i>Oncorhynchus mykiss irideus</i> pop. 11	steelhead - Central Valley DPS			<u>FT</u> FT	20060206 19980319	The Sacramento and San Joaquin Rivers and their tributaries. NMFS completed a comprehensive status review 20060206 reaffirming the status.
Salmonidae (trout and salmon)	<i>Oncorhynchus mykiss irideus</i> pop. 48	steelhead - northern California DPS summer-run	SE	20220503	<u>FT</u> FT	20060206 20000807	Naturally spawning population of the stream-maturing summer-run ecotype. From Redwood Creek watershed south to and inclusive of Gualala River watershed. Distribution within range more limited. NMFS completed a comprehensive status review 20060206 reaffirming the status.
Salmonidae (trout and salmon)	<i>Oncorhynchus mykiss irideus</i> pop. 49	steelhead - northern California DPS winter-run			<u>FT</u> FT	20060206 20000807	Naturally spawning population of the ocean-maturing winter-run ecotype. From Redwood Creek watershed south to and inclusive of Gualala River watershed. Distribution throughout range. NMFS completed a comprehensive status review 20060206 reaffirming the status.

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Salmonidae (trout and salmon)	<i>Oncorhynchus mykiss whitei</i>	Little Kern golden trout			FT	19780515	Originally listed as <i>Salmo aguabonita whitei</i> . The genus <i>Salmo</i> was reclassified as <i>Oncorhynchus</i> changing the name to <i>Oncorhynchus aguabonita whitei</i> . However, recent studies indicate this is a subspecies of rainbow trout, therefore <i>Oncorhynchus mykiss whitei</i> .
Salmonidae (trout and salmon)	<i>Oncorhynchus tshawytscha</i> pop. 7	chinook salmon - Sacramento River winter-run ESU	SE	19890922	<u>FE</u> FT	19940104 19901130	The federal designation is for the Sacramento River winter-run ESU, and described as winter-run populations in the Sacramento River and its tributaries in California. NMFS completed a comprehensive status review 20050829 reaffirming the status.
Salmonidae (trout and salmon)	<i>Oncorhynchus tshawytscha</i> pop. 11	chinook salmon - Central Valley spring-run ESU	ST	19990205	FT	19990916	The State listing is for “Spring-run chinook salmon ( <i>Oncorhynchus tshawytscha</i> ) of the Sacramento River drainage.” The Federal listing is for the Central Valley spring-run ESU, and includes populations of spring-run Chinook salmon in the Sacramento River and its tributaries including the Feather River. NMFS completed a comprehensive status review 20050829 reaffirming the status.
Salmonidae (trout and salmon)	<i>Oncorhynchus tshawytscha</i> pop. 17	chinook salmon - California coastal ESU			FT	19990916	Rivers and streams south of the Klamath River to the Russian River. NMFS completed a comprehensive status review 20050829 reaffirming the status.
Salmonidae (trout and salmon)	<i>Oncorhynchus tshawytscha</i> pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	ST	20220124	FC	20180227	Spring-run Chinook salmon in the Trinity River and the Klamath River upstream of the mouth of the Trinity River.

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Salmonidae (trout and salmon)	<i>Salvelinus confluentus</i>	bull trout	SE	19801002	FT	19991201	Considered to be extirpated in California.
Cyprinodontidae (killifishes)	<i>Cyprinodon macularius</i>	desert pupfish	SE	19801002	FE	19860430	
Cyprinodontidae (killifishes)	<i>Cyprinodon nevadensis calidae</i>	Tecopa pupfish	<u>SDE</u> SE	19870609 19710627	<u>FDE</u> FE	19820216 19701013	Extinct
Cyprinodontidae (killifishes)	<i>Cyprinodon radiosus</i>	Owens pupfish	SE	19710627	FE	19670311	
Cyprinodontidae (killifishes)	<i>Cyprinodon salinus milleri</i>	Cottonball Marsh pupfish	ST	19740110			
Gasterosteidae (sticklebacks)	<i>Gasterosteus aculeatus williamsoni</i>	unarmored threespine stickleback	SE	19710627	FE	19701013	
Cottidae (sculpins)	<i>Cottus asperimus</i>	rough sculpin	ST	19740110			
Gobiidae (gobies)	<i>Eucyclogobius newberryi</i>	tidewater goby			FE	19940307	See Federal Register 79(49):14340-14362, 20140313, for down-listing proposed rule.

## Amphibians

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Ambystomatidae (mole salamanders)	<i>Ambystoma californiense</i>	California tiger salamander	ST	20100819	(FE), (FT)		The State listing applies to the species as a whole throughout its range; federal statuses apply to Distinct Population Segments (see below).
Ambystomatidae (mole salamanders)	<i>Ambystoma californiense</i> pop. 1	California tiger salamander - central California DPS	(ST)		FT	20040903	The 2004 federal Threatened status originally applied to the species throughout its range; subsequent legal action resulted in reclassification of other DPSs to Endangered; the central California DPS remained listed as Threatened.

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Ambystomatidae (mole salamanders)	<i>Ambystoma californiense</i> pop. 2	California tiger salamander - Santa Barbara County DPS	(ST)		FE	20000915	In 2004 the California tiger salamander was federally listed as Threatened statewide. The Santa Barbara County and Sonoma County Distinct Vertebrate Population Segments (DPS), formerly listed as Endangered, were reclassified to Threatened. On 20050819 U.S. District court vacated the down-listing of the Sonoma and Santa Barbara populations from Endangered to Threatened. Therefore, the Sonoma & Santa Barbara populations were once again listed as Endangered.
Ambystomatidae (mole salamanders)	<i>Ambystoma californiense</i> pop. 3	California tiger salamander - Sonoma County DPS	(ST)		FE	20030319	In 2004 the California tiger salamander was federally listed as Threatened statewide. The Santa Barbara County and Sonoma County Distinct Vertebrate Population Segments (DPS), formerly listed as Endangered, were reclassified to Threatened. On 20050819 U.S. District court vacated the down-listing of the Sonoma and Santa Barbara populations from Endangered to Threatened. Therefore, the Sonoma & Santa Barbara populations were once again listed as Endangered.
Ambystomatidae (mole salamanders)	<i>Ambystoma macrodactylum croceum</i>	Santa Cruz long-toed salamander	SE	19710627	FE	19670311	
Plethodontidae (lungless salamanders)	<i>Batrachoseps major aridus</i>	desert slender salamander	SE	19710627	FE	19730604	Listed by the State of California as <i>Batrachoseps aridus</i> and originally listed by the USFWS as <i>B. aridus</i> . USFWS 5-year review refers to <i>B. major aridus</i> .

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Plethodontidae (lungless salamanders)	<i>Batrachoseps simatus</i>	Kern Canyon slender salamander	ST	19710627	FPT	20221018	
Plethodontidae (lungless salamanders)	<i>Batrachoseps relictus</i>	Relictual slender salamander			FPE	20221018	
Plethodontidae (lungless salamanders)	<i>Batrachoseps stebbinsi</i>	Tehachapi slender salamander	ST	19710627			
Plethodontidae (lungless salamanders)	<i>Hydromantes shastae</i>	Shasta salamander	ST	19710627			<i>Hydromantes shastae</i> has been proposed to consist of cryptic genetic structuring that may warrant recognition of additional species named as <i>Hydromantes samweli</i> and <i>Hydromantes wintu</i> (Bingham et al. 2018, Bull. Mus. Comp. Zool. 161(10):403-427). Until formally reviewed by the Fish and Game Commission, all populations in the Shasta salamander complex are legally state threatened.
Plethodontidae (lungless salamanders)	<i>Hydromantes brunus</i>	limestone salamander	ST	19710627			
Plethodontidae (lungless salamanders)	<i>Plethodon asupak</i>	Scott Bar salamander	ST	19710627			As recognized by the FGC, the Scott Bar salamander is currently protected under the CESA as a sub-population of the Siskiyou Mountains salamander ( <i>Plethodon stormi</i> ) (Calif. Regulatory Notice Register, No. 21-Z, p. 916, 20070525).

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Plethodontidae (lungless salamanders)	<i>Plethodon stormi</i>	Siskiyou Mountains salamander	ST	19710627			The common name is spelled incorrectly in Title 14 of the CCR as “Siskiyou mountain salamander.” Was a State Candidate for Delisting on 20050930. No action was taken by the FGC after the CDFW presented a Department report on 20061103; SMS was tabled at the 20070503 FGC meeting, and there was nothing to report regarding the Department’s environmental documents at the 20071011 meeting. Therefore, with respect to Fish & Game Code 2075, it is assumed that this is no longer a candidate for delisting.
Bufonidae (true toads)	<i>Anaxyrus californicus</i>	arroyo toad			FE	19950117	At the time of listing, arroyo toad was known as <i>Bufo microscaphus californicus</i> , a subspecies of southwestern toad. In 2001, it was determined to be its own species, <i>Bufo californicus</i> . Since then, many species in the genus <i>Bufo</i> were changed to the genus <i>Anaxyrus</i> , and now arroyo toad is known as <i>Anaxyrus californicus</i> .
Bufonidae (true toads)	<i>Anaxyrus canorus</i>	Yosemite toad			FT	20140630	
Bufonidae (true toads)	<i>Anaxyrus exsul</i>	black toad	ST	19710627			Listed by the State of California as <i>Bufo exsul</i> .
Ranidae (true frogs)	<i>Rana boylei</i> pop. 2	foothill yellow-legged frog - Feather River DPS	ST	20200320	FPT	20211228	CESA listing status varies by clade; listing of the Northwest/North Coast clade is not warranted.

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Ranidae (true frogs)	<i>Rana boylei</i> pop. 3	foothill yellow-legged frog - north Sierra DPS	ST	20200320			CESA listing status varies by clade; listing of the Northwest/North Coast clade is not warranted.
Ranidae (true frogs)	<i>Rana boylei</i> pop. 4	foothill yellow-legged frog - central coast DPS	SE	20200320	FPT	20211228	CESA listing status varies by clade; listing of the Northwest/North Coast clade is not warranted.
Ranidae (true frogs)	<i>Rana boylei</i> pop. 5	foothill yellow-legged frog - south Sierra DPS	SE	20200320	FPE	20211228	CESA listing status varies by clade; listing of the Northwest/North Coast clade is not warranted.
Ranidae (true frogs)	<i>Rana boylei</i> pop. 6	foothill yellow-legged frog - south coast DPS	SE	20200320	FPE	20211228	CESA listing status varies by clade; listing of the Northwest/North Coast clade is not warranted.
Ranidae (true frogs)	<i>Rana cascadae</i>	Cascades frog	SC	20171017			Date of FGC vote to advance to candidacy was 20171011.
Ranidae (true frogs)	<i>Rana draytonii</i>	California red-legged frog			FT	19960624	Synonymous with <i>Rana aurora draytonii</i> .
Ranidae (true frogs)	<i>Rana muscosa</i>	southern mountain yellow-legged frog	SE	20130401	(FE)		Though the scientific name <i>Rana muscosa</i> is not disputed, the State uses this common name, whereas the USFWS listing refers to two distinct population segments. This species is also known by the common name Sierra Madre yellow-legged frog (Vredenburg et al. 2007).
Ranidae (true frogs)	<i>Rana muscosa</i>	mountain yellow-legged frog [Southern California DPS]	(SE)		FE	20020801	San Gabriel, San Jacinto, and San Bernardino Mountains only.

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Ranidae (true frogs)	<i>Rana muscosa</i>	mountain yellow-legged frog [Northern California DPS]	(SE)		FE	20140630	North of the Tehachapi Mountains from the Monarch Divide to portions of the Kern River drainage.
Ranidae (true frogs)	<i>Rana pretiosa</i>	Oregon spotted frog			FT	20140929	
Ranidae (true frogs)	<i>Rana sierrae</i>	Sierra Nevada yellow-legged frog	ST	20130401	FE	20140630	

## Reptiles

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Cheloniidae (sea turtles)	<i>Caretta caretta</i>	loggerhead sea turtle [North Pacific DPS]			<u>FE</u> FT	20111024 19780728	The 1978 listing was for the worldwide range of the species. The 20111024 final rule is for the North Pacific DPS (north of the equator & south of 60 degrees north latitude).
Cheloniidae (sea turtles)	<i>Chelonia mydas</i>	green turtle			<u>FT</u> FT	20160506 19780728	Also known as green sea turtle. Originally listed as Federally Threatened in 1978. In 2016, Distinct Population Segments were detailed and the East Pacific DPS was confirmed as Federally Threatened.
Cheloniidae (sea turtles)	<i>Lepidochelys olivacea</i>	olive (=Pacific) ridley sea turtle			FT	19780728	
Dermochelyidae (leatherback turtles)	<i>Dermochelys coriacea</i>	leatherback sea turtle	SE	20221220	FE	19700603	
Testudinidae (land tortoises)	<i>Gopherus agassizii</i>	desert tortoise	<u>SCE</u> ST	20201019 19890803	FT	19900402	
Gekkonidae (geckos)	<i>Coleonyx switaki</i>	barefoot banded gecko	ST	19801002			Alternate common names: Switak's banded gecko, barefoot gecko.



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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Crotaphytidae (collared and leopard lizards)	<i>Gambelia sila</i>	blunt-nosed leopard lizard	SE	19710627	FE	19670311	Synonymous with <i>Gambelia silus</i> . Originally listed under the ESA as <i>Crotaphytus wislizenii silus</i> .
Phrynosomatidae (spiny lizards)	<i>Uma inornata</i>	Coachella Valley fringe-toed lizard	SE	19801002	FT	19801027	
Xantusiidae (night lizards)	<i>Xantusia riversiana</i>	island night lizard			<u>FDR</u> FT	20140501 19770912	Recovered
Anniellidae (legless lizards)	<i>Anniella alexanderae</i>	Temblor legless lizard	SC	20220701	-		
Boidae (boas)	<i>Charina umbratica</i>	southern rubber boa	ST	19710627			Synonymous with <i>Charina bottae umbratica</i> .
Colubridae (egg-laying snakes)	<i>Masticophis lateralis euryxanthus</i>	Alameda whipsnake	ST	19710627	FT	19971205	Synonymous with <i>Coluber lateralis euryxanthus</i> .
Natricidae (live-bearing snakes)	<i>Thamnophis gigas</i>	giant gartersnake	ST	19710627	FT	19931119	Listed by State of California as <i>Thamnophis couchi gigas</i> .
Natricidae (live-bearing snakes)	<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	SE	19710627	FE	19670311	

**Birds**

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Anatidae (ducks, geese, and swans)	<i>Branta hutchinsii leucopareia</i>	cackling (=Aleutian Canada) goose			<u>FDR</u> FT FE	20010320 19910111 19670311	Recovered. At time of federal listing, known as <i>Branta canadensis leucopareia</i> .

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Diomedeidae (albatrosses)	<i>Phoebastria albatrus</i>	short-tailed albatross			<u>FE</u> FE	20000830 19700603	Synonymous with <i>Diomedea albatrus</i> . First appeared on the 19700603 list of Endangered foreign species, but was not noted to occur in the United States. It was left off the 19701013 list of Endangered native species. This was an oversight that wasn't corrected until the USFWS specifically listed it on 20000830.
Pelecaniidae (pelicans)	<i>Pelecanus occidentalis californicus</i>	California brown pelican	<u>SDR</u> SE	20090603 19710627	<u>FDR</u> FE	20091217 19700603	Recovered. Federal nomenclature: Brown pelican ( <i>Pelecanus occidentalis</i> ).
Cathartidae (New World vultures)	<i>Gymnogyps californianus</i>	California condor	SE	19710627	FE	19670311	
Accipitridae (hawks, kites, harriers, and eagles)	<i>Buteo swainsoni</i>	Swainson's hawk	ST	19830417			
Accipitridae (hawks, kites, harriers, and eagles)	<i>Haliaeetus leucocephalus</i>	bald eagle	<u>SE</u> (rev) SE	19801002 19710627	<u>FDR</u> FT FE (rev) FE	20070808 19950811 19780316 19670311	The Post-delisting Monitoring Plan will monitor the status of the bald eagle over a 20 year period with sampling events held once every 5 years.
Falconidae (falcons)	<i>Falco peregrinus anatum</i>	American peregrine falcon	<u>SDR</u> SE	20091104 19710627	<u>FDR</u> FE	19990825 19700603	Recovered
Falconidae (falcons)	<i>Falco peregrinus tundrius</i>	Arctic peregrine falcon			<u>FDR</u> FT FE	19941005 19840419 19700603	Recovered
Rallidae (rails, coots, and gallinules)	<i>Laterallus jamaicensis coturniculus</i>	California black rail	ST	19710627			

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Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Rallidae (rails, coots, and gallinules)	<i>Rallus obsoletus levipes</i>	light-footed Ridgway's rail	SE	19710627	FE	19701013	Formerly light-footed clapper rail, <i>Rallus longirostris levipes</i>
Rallidae (rails, coots, and gallinules)	<i>Rallus obsoletus obsoletus</i>	California Ridgway's rail	SE	19710627	FE	19701013	Formerly California clapper rail, <i>Rallus longirostris obsoletus</i>
Rallidae (rails, coots, and gallinules)	<i>Rallus obsoletus yumanensis</i>	Yuma Ridgway's rail	<b>ST</b> SE	19780222 19710627	FE	19670311	Formerly Yuma clapper rail, <i>Rallus longirostris yumanensis</i>
Gruidae (cranes)	<i>Grus canadensis tabida</i>	greater sandhill crane	ST	19830417			
Charadriidae (plovers and relatives)	<i>Charadrius nivosus nivosus</i>	western snowy plover			FT	19930405	Federal status applies only to the Pacific coastal population.
Laridae (gulls and terns)	<i>Sternula antillarum browni</i>	California least tern	SE	19710627	FE	19700603	Listed by the USFWS as <i>Sterna albifrons browni</i> and the State of California as <i>Sterna antillarum browni</i> .
Alcidae (auklets, puffins, and relatives)	<i>Brachyramphus marmoratus</i>	marbled murrelet	SE	19920312	FT	19920928	
Alcidae (auklets, puffins, and relatives)	<i>Synthliboramphus scrippsi</i>	Scripps's murrelet	ST	20041222			At the time of listing, this species was known as the Xantus's Murrelet ( <i>Synthliboramphus hypoleucus</i> , with California breeding populations ascribed to <i>Synthliboramphus hypoleucus subsp. scrippsi</i> ).
Alcidae (auklets, puffins, and relatives)	<i>Synthliboramphus hypoleucus</i>	Guadalupe murrelet	ST	20041222			At the time of listing, this species was known as the Xantus's Murrelet ( <i>Synthliboramphus hypoleucus</i> , with breeding populations from Baja California ascribed to <i>Synthliboramphus hypoleucus subsp. hypoleucus</i> ).

## State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Cuculidae (cuckoos and relatives)	<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	SE ST	19880326 19710627	FT	20141103	Federal listing is for the Western DPS of <i>Coccyzus americanus</i> .
Strigidae (owls)	<i>Micrathene whitneyi</i>	elf owl	SE	19801002			
Strigidae (owls)	<i>Strix nebulosa</i>	great gray owl	SE	19801002			
Strigidae (owls)	<i>Strix occidentalis caurina</i>	northern spotted owl	ST	20190318	FT	19900723	
Strigidae (owls)	<i>Strix occidentalis occidentalis</i>	California spotted owl - coastal-southern California DPS			FPE	20230223	
Strigidae (owls)	<i>Strix occidentalis occidentalis</i>	California spotted owl - Sierra Nevada DPS			FPT	20230223	
Picidae (woodpeckers)	<i>Colaptes chrysoides</i>	gilded flicker	SE	19880317			Listed by the State of California as <i>Colaptes auratus chrysoides</i> , gilded northern flicker.
Picidae (woodpeckers)	<i>Melanerpes uropygialis</i>	Gila woodpecker	SE	19880317			
Tyrannidae (tyrant flycatchers)	<i>Empidonax traillii</i>	willow flycatcher	SE	19910102			State listing includes all subspecies.
Tyrannidae (tyrant flycatchers)	<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	(SE)		FE	19950329	
Laniidae (shrikes)	<i>Lanius ludovicianus mearnsi</i>	San Clemente loggerhead shrike			FE	19770912	
Vireonidae (vireos)	<i>Vireo bellii arizonae</i>	Arizona Bell's vireo	SE	19880317			

State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Vireonidae (vireos)	<i>Vireo bellii pusillus</i>	least Bell's vireo	SE	19801002	FE	19860602	
Hirundinidae (swallows)	<i>Riparia riparia</i>	bank swallow	ST	19890611			
Poliopitilidae (gnatcatchers)	<i>Poliopitila californica californica</i>	coastal California gnatcatcher			FT	19930325	
Emberizidae (sparrows, buntings, warblers, and relatives)	<i>Artemisiospiza belli clementeae</i>	San Clemente sage sparrow			<u>FDR</u> FT	20230224 19770912	Federal nomenclature at time of listing: <i>Amphispiza belli clementeae</i> .
Emberizidae (sparrows, buntings, warblers, and relatives)	<i>Melospiza melodia graminea</i>	Santa Barbara song sparrow			<u>FDE</u> FE	19831012 19730604	Extinct. This status refers specifically to the Santa Barbara song sparrow, which was later reclassified as a subspecies (Channel Islands song sparrow) with the same scientific name, but which also combined two additional groups formerly classified as their own subspecies.
Emberizidae (sparrows, buntings, warblers, and relatives)	<i>Melozone crissalis eremophilus</i>	Inyo California towhee	SE	19801002	<u>FT</u>	19870902	Listed by the State of California as <i>Pipilo crissalis eremophilus</i> and the USFWS as <i>Pipilo fuscus eremophilus</i> .
Emberizidae (sparrows, buntings, warblers, and relatives)	<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	SE	19740110			Listed by the State of California as <i>Passerculus sandwichensis beldingii</i>
Icteridae (blackbirds)	<i>Agelaius tricolor</i>	tricolored blackbird	ST	20190318			

## Mammals

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Soricidae (shrews)	<i>Sorex ornatus relictus</i>	Buena Vista Lake ornate shrew			FE	20020405	
Phyllostomidae (leaf-nosed bats)	<i>Leptonycteris yerbabuena</i>	lesser long-nosed bat			<u>FDR</u> FE	20180518 19881031	Recovered. Originally listed by USFWS as <i>Leptonycteris sanborni</i> .
Leporidae (rabbits and hares)	<i>Sylvilagus bachmani riparius</i>	riparian brush rabbit	SE	19940529	FE	20000324	
Aplodontidae (mountain beavers)	<i>Aplodontia rufa nigra</i>	Point Arena mountain beaver			FE	19911212	
Sciuridae (squirrels and relatives)	<i>Ammospermophilus nelsoni</i>	Nelson's (=San Joaquin) antelope squirrel	ST	19801002			
Sciuridae (squirrels and relatives)	<i>Xerospermophilus mohavensis</i>	Mohave ground squirrel	ST	19710627			Listed by the State of California as <i>Spermophilus mohavensis</i> .
Heteromyidae (kangaroo rats, pocket mice, and kangaroo mice)	<i>Dipodomys heermanni morroensis</i>	Morro Bay kangaroo rat	SE	19710627	FE	19701013	
Heteromyidae (kangaroo rats, pocket mice, and kangaroo mice)	<i>Dipodomys ingens</i>	giant kangaroo rat	SE	19801002	FE	19870105	
Heteromyidae (kangaroo rats, pocket mice, and kangaroo mice)	<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	SC	20190813	FE	19980924	Federal nomenclature: San Bernardino Merriam's kangaroo rat.

## State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Heteromyidae (kangaroo rats, pocket mice, and kangaroo mice)	<i>Dipodomys nitratoides exilis</i>	Fresno kangaroo rat	<u>SE</u> ST	19801002 19710627	FE	19850301	
Heteromyidae (kangaroo rats, pocket mice, and kangaroo mice)	<i>Dipodomys nitratoides nitratoides</i>	Tipton kangaroo rat	SE	19890611	FE	19880808	
Heteromyidae (kangaroo rats, pocket mice, and kangaroo mice)	<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	ST	19710627	<u>FT</u> FE	20220321 19881031	
Heteromyidae (kangaroo rats, pocket mice, and kangaroo mice)	<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse			FE	19940926	
Cricetidae (New World mice, rats, and voles)	<i>Microtus californicus scirpensis</i>	Amargosa vole	SE	19801002	FE	19841217	
Cricetidae (New World mice, rats, and voles)	<i>Neotoma fuscipes riparia</i>	Riparian (=San Joaquin Valley) woodrat			FE	20000324	
Cricetidae (New World mice, rats, and voles)	<i>Reithrodontomys raviventris</i>	salt-marsh harvest mouse	SE	19710627	FE	19701013	

State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Canidae (foxes, wolves, and coyotes)	<i>Canis lupus</i>	gray wolf	SE	20170101	<u>FE</u>	19780410	USFWS had delisted <i>Canis lupus</i> on 20210104, but a court ruling on 20220210 reinstated the Endangered status for all gray wolves in the lower 48 states, except for Minnesota where they are Threatened.
Canidae (foxes, wolves, and coyotes)	<i>Urocyon littoralis</i>	island fox	ST	19710627	(FT)		State listing includes all 6 subspecies on all 6 islands. Federal listing is for only 4 subspecies on 4 islands.
Canidae (foxes, wolves, and coyotes)	<i>Urocyon littoralis catalinae</i>	Santa Catalina Island Fox	(ST)		<u>FT</u> FE	20160912 20040405	
Canidae (foxes, wolves, and coyotes)	<i>Urocyon littoralis littoralis</i>	San Miguel Island Fox	(ST)		<u>FDR</u> FE	20160912 20040405	
Canidae (foxes, wolves, and coyotes)	<i>Urocyon littoralis santacruzae</i>	Santa Cruz Island Fox	(ST)		<u>FDR</u> FE	20160912 20040405	
Canidae (foxes, wolves, and coyotes)	<i>Urocyon littoralis santarosae</i>	Santa Rosa Island Fox	(ST)		<u>FDR</u> FE	20160912 20040405	
Canidae (foxes, wolves, and coyotes)	<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	ST	19710627	FE	19670311	
Canidae (foxes, wolves, and coyotes)	<i>Vulpes vulpes necator</i> pop. 1	Sierra Nevada red fox - southern Cascades DPS	ST	19801002			
Canidae (foxes, wolves, and coyotes)	<i>Vulpes vulpes necator</i> pop. 2	Sierra Nevada red fox - Sierra Nevada DPS	ST	19801002	FE	20210902	



State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Mustelidae (weasels and relatives)	<i>Enhydra lutris nereis</i>	southern sea otter			FT	19770211	
Mustelidae (weasels and relatives)	<i>Gulo gulo</i>	wolverine	ST	19710627	FPT	20221123	Listed by the State of California as <i>Gulo gulo</i> . The distinct population segment of the North American wolverine ( <i>Gulo gulo luscus</i> ) occurring in the contiguous U.S. was proposed for listing on 20130204 and was withdrawn on 20201013. The court remanded the withdrawal, and the USFWS re-issued a proposal for listing on 20221123.
Mustelidae (weasels and relatives)	<i>Martes caurina humboldtensis</i>	Humboldt marten	SE	20190318	FT	20201109	USFWS listed <i>Martes caurina</i> coastal DPS on 20201109, which includes coastal populations in Oregon and northern coastal California. USFWS noted that recent genetic analyses indicated that the DPS likely represent a subspecies, <i>M. c. humboldtensis</i> .

State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Mustelidae (weasels and relatives)	<i>Pekania pennanti</i> pop. 2	Fisher - southern Sierra Nevada ESU	ST	20190318	FE	20200615	California listing is under <i>Martes pennanti</i> and common name Pacific fisher, whereas the USFWS refers to <i>Pekania pennanti</i> and common name fisher. Previous USFWS candidacy referred to the West Coast DPS in California, Oregon, and Washington. On 20190318, the California Fish and Game Commission officially listed the southern Sierra ESU (defined as south of the Merced River) as State Threatened; the Southern Sierra Nevada DPS was listed as Federally Endangered 20200615.
Felidae (cats and relatives)	<i>Puma concolor</i>	mountain lion (Southern California/Central Coast ESU)	SC	20200421			Not currently tracked by the CNDDDB.
Otariidae (sea lions and fur seals)	<i>Arctocephalus townsendi</i>	Guadalupe fur seal	ST	19710627	<b>FT</b> FE	19860115 19670311	Not currently tracked by the CNDDDB.

State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Otariidae (sea lions and fur seals)	<i>Eumetopias jubatus</i>	Steller sea lion [Eastern DPS]			<u>FDR</u> FT	20131204 19970604	Recovered. Delisted by NMFS. On 19901204, the Steller sea lion was listed as federally Threatened throughout its entire range. In 1997, NMFS reclassified Steller sea lions into two distinct population segments: the Western DPS (west of 144 degrees longitude) was listed as Endangered; the Eastern DPS (east of 144 degrees longitude) was listed as Threatened, and subsequently delisted in 2013.
Antilocapridae (pronghorn)	<i>Antilocapra americana sonoriensis</i>	Sonoran pronghorn			FE	19670311	
Bovidae (sheep and relatives)	<i>Ovis canadensis nelsoni</i> pop. 2	Peninsular bighorn sheep DPS	ST	19710627	FE	19980318	Listed by the State of California as <i>Ovis canadensis cremnobates</i> . The subspecies <i>O.c. cremnobates</i> has been synonymized with <i>O.c. nelsoni</i> . The desert bighorn sheep in the Peninsular Ranges, the Peninsular bighorn sheep, is now considered to be a Distinct Population Segment of <i>O.c. nelsoni</i> .
Bovidae (sheep and relatives)	<i>Ovis canadensis sierrae</i>	Sierra Nevada bighorn sheep	<u>SE</u> ST	19990827 19710627	FE	20000103	Listed by the State of California as California bighorn sheep ( <i>Ovis canadensis californiana</i> ).
Cetacea (whales and dolphins)	<i>Balaenoptera borealis</i>	sei whale			FE	19700603	Not currently tracked by the CNDDDB.

State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Cetacea (whales and dolphins)	<i>Balaenoptera musculus</i>	blue whale			FE	19700603	Not currently tracked by the CNDDDB.
Cetacea (whales and dolphins)	<i>Balaenoptera physalus</i>	fin whale			FE	19700603	Not currently tracked by the CNDDDB.
Cetacea (whales and dolphins)	<i>Eubalaena japonica</i>	North Pacific right whale			<u>FE</u> FE	20080407 19700603	Originally listed as part of the northern right whale ( <i>Eubalaena glacialis</i> ) species concept under the federal ESA. Taxonomy and nomenclature were updated and clarified in the Federal Register Vol. 68, No. 69, 20030410. In 2006, NMFS completed a status review of right whales in the N. Pacific and N. Atlantic Oceans and in 2008, reclassified the previously Endangered northern right whale ( <i>Eubalaena</i> spp.) as two separate Endangered species: North Pacific right whale ( <i>E. japonica</i> ) and North Atlantic right whale ( <i>E. glacialis</i> ). Not currently tracked by the CNDDDB.
Cetacea (whales and dolphins)	<i>Eschrichtius robustus</i>	gray whale [Eastern North Pacific DPS]			<u>FDR</u> FE	19940616 19700603	Recovered. NMFS delisted the California population (Eastern North Pacific DPS), while keeping the Western North Pacific DPS as Endangered.

State and Federally Listed Endangered and Threatened Animals of California – April 2023

Taxa Subgroup	Taxon	Common Name	State Status	State List Date	Federal Status	Federal List Date	Notes
Cetacea (whales and dolphins)	<i>Megaptera novaeangliae</i>	humpback whale [Central America DPS]			<u>FE</u> FE	20161011 19700603	Also known as Hump-backed whale. 2016 ruling by NMFS established 14 Distinct Population Segments, and revised listing status by DPS. Both the Mexico DPS and Central America DPS feed and travel off the coast of California. Not currently tracked by the CNDDDB.
Cetacea (whales and dolphins)	<i>Megaptera novaeangliae</i>	humpback whale [Mexico DPS]			<u>FT</u> FE	20161011 19700603	Also known as Hump-backed whale. 2016 ruling by NMFS established 14 Distinct Population Segments, and revised listing status by DPS. Both the Mexico DPS and Central America DPS feed and travel off the coast of California. Not currently tracked by the CNDDDB.
Cetacea (whales and dolphins)	<i>Orcinus orca</i>	killer whale [Southern Resident DPS]			FE	20070404 20060216	The Southern Resident DPS of killer whale was listed as Endangered by NMFS on 20060216 and by USFWS on 20070404. Not currently tracked by the CNDDDB.
Cetacea (whales and dolphins)	<i>Physeter macrocephalus</i>	sperm whale			FE	19700603	Federal nomenclature at time of listing: <i>Physeter catodon</i> . Not currently tracked by the CNDDDB.

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**Appendix D**  
**California-IPC – Plant List**

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**Appendix E**  
**California Invasive Animal List**

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# California's Invaders

The Invasive Species Program has identified numerous actual and potential invasive species from which we strive to protect California's wildlands and waterways. Many invaders have already established populations in various regions of California and occur in different stages of the invasion process. We aim to prevent the spread of these species by educating the public about the species, their impacts, how they spread, and how people can avoid spreading them. In addition, numerous other species that may already be invasive elsewhere in the U.S., but have not yet been introduced or established in California, have been identified as threats to the state's environment, economy, agricultural interests, and/or human health. By educating the public about these species, their likely impacts, the pathways of introduction, and what to do if they are encountered, we aim to prevent introductions and intercept populations before they are able to establish, spread, and cause harm.

Click on the profiles below to learn about each species' description, distribution, habitat preference, pathways of spread, impacts, and what to do if you find one. Please note: the list below is far from comprehensive, and we are constantly working to compile additional species fact sheets to add to the list below. If you are looking for information about an invasive species not listed below, email us at [Invasives@wildlife.ca.gov](mailto:Invasives@wildlife.ca.gov).



## Mammals

Scientific name	Common name	Currently present in California	Restricted species <sup>1</sup>	Printable version (PDF)
<i>Myocastor coypus</i>	Nutria	Yes	Yes	<a href="#">PDF</a>



## Birds

Scientific name	Common name	Currently present in California	Restricted species <sup>1</sup>	Printable version (PDF)
<i>Cygnus olor</i>	Mute swan	Yes	Yes	<a href="#">PDF</a>
<i>Molothrus ater</i>	Brown-headed cowbird	Yes	No	<a href="#">PDF</a>



## Reptiles

Scientific name	Common name	Currently present in California	Restricted species <sup>1</sup>	Printable version (PDF)
<i>Nerodia fasciata</i>	Southern watersnake	Yes	Yes	<a href="#">PDF</a>
<i>Nerodia sipedon</i>	Northern watersnake	Yes	Yes	<a href="#">PDF</a>
<i>Trachemys scripta elegans</i>	Red-eared slider	Yes	No	<a href="#">PDF</a>



## Amphibians

Scientific name	Common name	Currently present in California	Restricted species <sup>1</sup>	Printable version (PDF)
<i>Eleutherodactylus coqui</i>	Common coqui	Yes	Yes	<a href="#">PDF</a>
<i>Lithobates catesbeianus</i>	American bullfrog	Yes	No	<a href="#">PDF</a>

Scientific name	Common name	Currently present in California	Restricted species <sup>1</sup>	Printable version (PDF)
<i>Xenopus laevis</i>	African clawed frog	Yes	Yes	<a href="#">PDF</a>



## Fishes

Scientific name	Common name	Currently present in California	Restricted species <sup>1</sup>	Printable version (PDF)
Family <i>Channidae</i>	Snakeheads	No	Yes	<a href="#">PDF</a>
Family <i>Characidae</i>	Piranhas	No	Yes	<a href="#">PDF</a>
<i>Ctenopharyngodon idella</i>	Grass carp	Yes	Yes	<a href="#">PDF</a>
<i>Esox lucius</i>	Northern pike	No	Yes	<a href="#">PDF</a>
<i>Hypophthalmichthys molitrix</i>	Silver carp	No	Yes	<a href="#">PDF</a>
<i>Hypophthalmichthys nobilis</i>	Bighead carp	No	Yes	<a href="#">PDF</a>
Family <i>Lepisosteidae</i>	Gars	No	Yes	<a href="#">PDF</a>
<i>Mylopharyngodon piceus</i>	Black carp	No	Yes	<a href="#">PDF</a>



## Invertebrates

Scientific name	Common name	Currently present in California	Restricted species <sup>1</sup>	Printable version (PDF)
<a href="#">Dreissena spp.</a>	Quagga and zebra mussels	Yes	Yes	<a href="#">PDF</a>
<a href="#">Eriocheir senensis</a>	Chinese mitten crab	Yes	Yes	<a href="#">PDF</a>
<a href="#">Euwallacea spp.</a>	Polyphagous and Kuroshio shot hole borers	Yes	No	
<a href="#">Pomacea canaliculata</a>	Channeled apple snail	Yes	Yes	<a href="#">PDF</a>
<a href="#">Potamopyrgus antipodarum</a>	New Zealand mudsnail	Yes	Yes	<a href="#">PDF</a>

<sup>1</sup> Restricted species are on CDFW's List of Restricted Live Animals ([California Code of Regulations Title 14, Section 671](#)), and therefore may not be imported, transported, or possessed without a permit issued by CDFW. For more information on why these species are restricted, visit our [Laws and Regulations page](#).



**CDFW Invasive Species Program**

**P.O. Box 944209**

**Sacramento CA 94244-2090**

**[invasives@wildlife.ca.gov](mailto:invasives@wildlife.ca.gov)**

## Invasive Species Program

- [What are invasive species?](#)
- [Species profiles](#)
- [Nutria discovery in California](#)
- [Quagga / Zebra mussel management](#)

- [Quagga Mussel Observation Report Form](#)
- [2017 Quagga / Zebra Mussel Water Agency Summit](#)
- [Quagga / Zebra Mussels Incident Description](#)
- [Quagga / Zebra Mussel Prevention Program Resources](#)
  
- [New mussel infestations](#)
  
- [How can I help?](#)
  
- [Invasive Species Action Week](#)
  - [Youth Art and Video Contest](#)
  
- [Don't Let it Loose!](#)
  
- [Citizen science](#)
  
- [Report a sighting](#)
  
- [Eye on Invasives newsletter](#)
  
- [California Aquatic Invasive Species Management Plan](#)
  
- [Laws and regulations](#)
  
- [Marine Invasive Species Monitoring Program](#)

**Appendix F**  
**Photopoint Photographs**

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**Photograph 1. Photopoint 1 – Facing North.**



**Photograph 2. Photopoint 1 – Facing East.**



**Photograph 3. Photopoint 1 – Facing South.**



**Photograph 4. Photopoint 1 – Facing West.**



**Photograph 5. Photopoint 2 – Facing North.**



**Photograph 6. Photopoint 2 – Facing East.**



**Photograph 7. Photopoint 2 – Facing South.**



**Photograph 8. Photopoint 2 – Facing West.**





**Photograph 9. Photopoint 3 – Facing North.**



**Photograph 10. Photopoint 3 – Facing East.**



**Photograph 11. Photopoint 3 – Facing South.**



**Photograph 12. Photopoint 3 – Facing West.**



**Photograph 13. Photopoint 4 – Facing North.**



**Photograph 14. Photopoint 4 – Facing East.**



**Photograph 15. Photopoint 4 – Facing South.**



**Photograph 16. Photopoint 4 – Facing West.**





**Photograph 17. Photopoint 5 – Facing North.**



**Photograph 18. Photopoint 5 – Facing East.**



**Photograph 19. Photopoint 5 – Facing South.**



**Photograph 20. Photopoint 5 – Facing West.**



**Photograph 21. Photopoint 6 – Facing North.**



**Photograph 22. Photopoint 6 – Facing East.**



**Photograph 23. Photopoint 6 – Facing South.**



**Photograph 24. Photopoint 6 – Facing West.**





**Photograph 25. Photopoint 7 – Facing North.**



**Photograph 26. Photopoint 7 – Facing East.**



**Photograph 27. Photopoint 7 – Facing South.**



**Photograph 28. Photopoint 7 – Facing West.**