











CNPS Rare Plant Inventory





Search Results

42 matches found. Click on scientific name for details





Search Criteria: Quad is one of [3812135:3812136:3812127:3812125:3812117:3812116:3812115]


▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	CA RARE PLANT RANK	GENERAL HABITATS	MICROHABITATS	LOWEST ELEVATION (FT)	HIGHEST ELEVATION (FT)	PHOTO
<u><i>Astragalus tener</i></u> <u><i>var. tener</i></u>	alkali milk- vetch	Fabaceae	annual herb	Mar-Jun	None	None	1B.2	Playas, Valley and foothill grassland (adobe clay), Vernal pools	Alkaline	5	195	No Photo Available
<u><i>Atriplex</i></u> <u><i>cordulata</i></u> <u><i>var.</i></u> <u><i>cordulata</i></u>	heartscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland (sandy)	Alkaline (sometimes)	0	1835	 © 1994 Robert E. Preston, Ph.D.
<u><i>Atriplex</i></u> <u><i>coronata</i></u> <u><i>var.</i></u> <u><i>coronata</i></u>	crownscale	Chenopodiaceae	annual herb	Mar-Oct	None	None	4.2	Chenopod scrub, Valley and foothill grassland, Vernal pools	Alkaline, Clay (often)	5	1935	 © 1994 Robert E. Preston, Ph.D.
<u><i>Blepharizonia</i></u> <u><i>plumosa</i></u>	big tarplant	Asteraceae	annual herb	Jul-Oct	None	None	1B.1	Valley and foothill grassland	Clay (usually)	100	1655	No Photo Available
<u><i>Brasenia</i></u> <u><i>schreberi</i></u>	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	Jun-Sep	None	None	2B.3	Marshes and swamps (freshwater)		0	7220	 ©2014 Kirsten Bovee
<u><i>Carex comosa</i></u>	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	2B.1	Coastal prairie, Marshes and swamps (lake margins), Valley and foothill grassland		0	2050	 Dean Wm. Taylor 1997

<u><i>Centromadia parryi</i></u> ssp. <u><i>parryi</i></u>	pappose tarplant	Asteraceae	annual herb	May-Nov	None	None	1B.2	Chaparral, Coastal prairie, Marshes and swamps (coastal salt), Meadows and seeps, Valley and foothill grassland (vernally mesic)	Alkaline (often)	0	1380	 © 2016 John Doyen
<u><i>Centromadia parryi</i></u> ssp. <u><i>rudis</i></u>	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	None	None	4.2	Valley and foothill grassland, Vernal pools	Alkaline, Roadsides (sometimes), Seeps, Vernally Mesic	0	330	 © 2019 John Doyen
<u><i>Chloropyron molle</i></u> ssp. <u><i>molle</i></u>	soft salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Nov	FE	CR	1B.2	Marshes and swamps (coastal salt)		0	10	 © 2014 John Doyen
<u><i>Cicuta maculata</i></u> var. <u><i>bolanderi</i></u>	Bolander's water-hemlock	Apiaceae	perennial herb	Jul-Sep	None	None	2B.1	Marshes and swamps (brackish, coastal, freshwater)		0	655	 © 2007 Doreen L Smith
<u><i>Convolvulus simulans</i></u>	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	4.2	Chaparral (openings), Coastal scrub, Valley and foothill grassland	Clay, Seeps, Serpentine	100	2430	No Photo Available
<u><i>Cryptantha hooveri</i></u>	Hoover's cryptantha	Boraginaceae	annual herb	Apr-May	None	None	1A	Inland dunes, Valley and foothill grassland (sandy)		30	490	No Photo Available
<u><i>Downingia pusilla</i></u>	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	2B.2	Valley and foothill grassland (mesic), Vernal pools		5	1460	 © 2013 Aaron Arthur
<u><i>Eleocharis parvula</i></u>	small spikerush	Cyperaceae	perennial herb	(Apr)Jun-Aug(Sep)	None	None	4.3	Marshes and swamps		5	9910	 © 2018 Ron Vanderhoff

<u><i>Eriogonum nudum</i></u> var. <u><i>psychicola</i></u>	Antioch Dunes buckwheat	Polygonaceae	perennial herb	Jul-Oct	None	None	1B.1	Inland dunes		0	65	No Photo Available
<u><i>Eriogonum truncatum</i></u>	Mt. Diablo buckwheat	Polygonaceae	annual herb	Apr-Sep(Nov-Dec)	None	None	1B.1	Chaparral, Coastal scrub, Valley and foothill grassland	Sandy	10	1150	No Photo Available
<u><i>Erysimum capitatum</i></u> var. <u><i>angustatum</i></u>	Contra Costa wallflower	Brassicaceae	perennial herb	Mar-Jul	FE	CE	1B.1	Inland dunes		10	65	No Photo Available
<u><i>Eschscholzia rhombipetala</i></u>	diamond-petaled California poppy	Papaveraceae	annual herb	Mar-Apr	None	None	1B.1	Valley and foothill grassland (alkaline, clay)		0	3200	No Photo Available
<u><i>Extriplex joaquinana</i></u>	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	1B.2	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland	Alkaline	5	2740	No Photo Available
<u><i>Fritillaria agrestis</i></u>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	4.2	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland	Clay, Serpentine (sometimes)	35	5100	 © 2016 Aaron Schusteff
<u><i>Fritillaria liliacea</i></u>	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	1B.2	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland	Serpentine (often)	10	1345	 © 2004 Carol W. Witham
<u><i>Hesperis matronalis</i></u>	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	None	None	4.2	Valley and foothill grassland (mesic clay), Vernal pools (shallow)	Alkaline (sometimes)	0	1655	 © 2017 John Doyen
<u><i>Hibiscus lasiocarpus</i></u> var. <u><i>occidentalis</i></u>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	1B.2	Marshes and swamps (freshwater)		0	395	 © 2020 Steven Perry

<u><i>Isocoma arguta</i></u>	Carquinez goldenbush	Asteraceae	perennial shrub	Aug-Dec	None	None	1B.1	Valley and foothill grassland (alkaline)		5	65	No Photo Available
<u><i>Lasthenia conjugens</i></u>	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	FE	None	1B.1	Cismontane woodland, Playas (alkaline), Valley and foothill grassland, Vernal pools	Mesic	0	1540	 © 2013 Neal Kramer
<u><i>Lathyrus jepsonii</i></u> <u>var. jepsonii</u>	Delta tule pea	Fabaceae	perennial herb	May-Jul(Aug-Sep)	None	None	1B.2	Marshes and swamps (brackish, freshwater)		0	15	 © 2003 Mark Fogiel
<u><i>Lepidium latipes</i></u> <u>var. heckardii</u>	Heckard's pepper-grass	Brassicaceae	annual herb	Mar-May	None	None	1B.2	Valley and foothill grassland (alkaline flats)		5	655	 2018 Jennifer Buck
<u><i>Lilaeopsis masonii</i></u>	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	None	CR	1B.1	Marshes and swamps (brackish, freshwater), Riparian scrub		0	35	No Photo Available
<u><i>Limosella australis</i></u>	Delta mudwort	Scrophulariaceae	perennial stoloniferous herb	May-Aug	None	None	2B.1	Marshes and swamps (brackish, freshwater), Riparian scrub	Streambanks (usually)	0	10	 © 2020 Richard Sage
<u><i>Lupinus albifrons</i></u> var. <u><i>abramsii</i></u>	Abrams' lupine	Fabaceae	perennial herb	Apr-Jun	None	None	3.2	Broadleaved upland forest, Chaparral, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	Serpentine (sometimes)	410	6560	No Photo Available
<u><i>Myosurus minimus</i></u> ssp. <u><i>apus</i></u>	little mousetail	Ranunculaceae	annual herb	Mar-Jun	None	None	3.1	Valley and foothill grassland, Vernal pools (alkaline)		65	2100	No Photo Available

<u><i>Navarretia leucocephala</i></u> <u><i>ssp. bakeri</i></u>	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	1B.1	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools	Mesic	15	5710	 © 2018 Barry Rice
<u><i>Oenothera deltoides</i></u> ssp. <u><i>howellii</i></u>	Antioch Dunes evening-primrose	Onagraceae	perennial herb	Mar-Sep	FE	CE	1B.1	Inland dunes		0	100	No Photo Available
<u><i>Plagiobothrys hystriculus</i></u>	bearded popcornflower	Boraginaceae	annual herb	Apr-May	None	None	1B.1	Valley and foothill grassland (mesic), Vernal pools (margins)		0	900	No Photo Available
<u><i>Potamogeton zosteriformis</i></u>	eel-grass pondweed	Potamogetonaceae	annual herb (aquatic)	Jun-Jul	None	None	2B.2	Marshes and swamps (freshwater)		0	6105	No Photo Available
<u><i>Sagittaria sanfordii</i></u>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	1B.2	Marshes and swamps (shallow freshwater)		0	2135	 ©2013 Debra L. Cook
<u><i>Scutellaria galericulata</i></u>	marsh skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Sep	None	None	2B.2	Lower montane coniferous forest, Marshes and swamps, Meadows and seeps (mesic)		0	6890	 © 2021 Scot Loring
<u><i>Scutellaria lateriflora</i></u>	side-flowering skullcap	Lamiaceae	perennial rhizomatous herb	Jul-Sep	None	None	2B.2	Marshes and swamps, Meadows and seeps (mesic)		0	1640	No Photo Available
<u><i>Senecio hydrophiloides</i></u>	sweet marsh ragwort	Asteraceae	perennial herb	May-Aug	None	None	4.2	Lower montane coniferous forest, Meadows and seeps	Mesic	0	9185	 © 2021 Scot Loring

<u><i>Sidalcea keckii</i></u>	Keck's checkerbloom	Malvaceae	annual herb	Apr-May(Jun)	FE	None	1B.1	Cismontane Clay, woodland, Valley and foothill grassland	245	2135	No Photo Available
<u><i>Symphotrichum lentum</i></u>	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	1B.2	Marshes and swamps (brackish, freshwater)	0	10	No Photo Available
<u><i>Trifolium hydrophilum</i></u>	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	1B.2	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools	0	985	 © 2005 Dean Wm Taylor

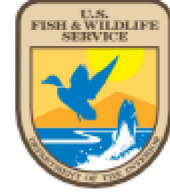
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Suggested Citation:

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United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Project Code: 2024-0007927
Project Name: Cache Slough

03/22/2024 20:52:44 UTC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Note: IPaC has provided all available attachments because this project is in multiple field office jurisdictions.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

This project's location is within the jurisdiction of multiple offices. However, only one species list document will be provided for all offices. The species and critical habitats in this document reflect the aggregation of those that fall in each of the affiliated office's jurisdiction. Other offices affiliated with the project:

San Francisco Bay-Delta Fish And Wildlife

650 Capitol Mall
Suite 8-300
Sacramento, CA 95814
(916) 930-5603

PROJECT SUMMARY

Project Code: 2024-0007927

Project Name: Cache Slough

Project Type: Mitigation Development/Review - Mitigation or Conservation Bank

Project Description: Mitigation Site

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.180776699999996,-121.67404170985728,14z>



Counties: Solano County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [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.

BIRDS

NAME	STATUS
California Ridgway's Rail <i>Rallus obsoletus obsoletus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4240	Endangered

REPTILES

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened
Northwestern Pond Turtle <i>Actinemys marmorata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot <i>Spea hammondi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

FISHES

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened
Longfin Smelt <i>Spirinchus thaleichthys</i> Population: San Francisco Bay-Delta DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9011	Proposed Endangered
Longfin Smelt <i>Spirinchus thaleichthys</i> Population: San Francisco Bay-Delta DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9011	Proposed Endangered

INSECTS

NAME	STATUS
Delta Green Ground Beetle <i>Elaphrus viridis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2319	Threatened
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> https://ecos.fws.gov/ecp/species/321#crithab	Final

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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 OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#)

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

NAME	BREEDING SEASON
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

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 ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

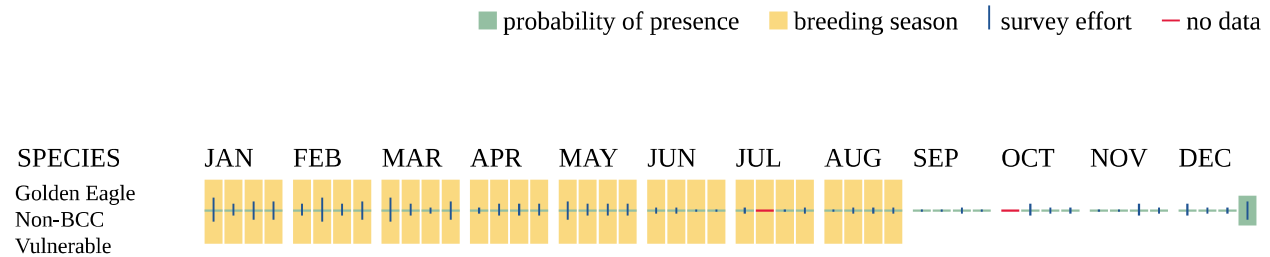
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

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



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- 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>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

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1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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

NAME	BREEDING SEASON
Belding's Savannah Sparrow <i>Passerculus sandwichensis beldingi</i> 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/8	Breeds Apr 1 to Aug 15
Bullock's Oriole <i>Icterus bullockii</i> 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/9458	Breeds Mar 21 to Jul 25
California Gull <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10955	Breeds Mar 1 to Jul 31
Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10575	Breeds Jun 1 to Aug 31
Common Yellowthroat <i>Geothlypis trichas sinuosa</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Northern Harrier <i>Circus hudsonius</i> 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/8350	Breeds Apr 1 to Sep 15
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Tricolored Blackbird <i>Agelaius tricolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10

NAME	BREEDING SEASON
Western Grebe <i>aechmophorus occidentalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Western Gull <i>Larus occidentalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/11969	Breeds Apr 21 to Aug 25

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 "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

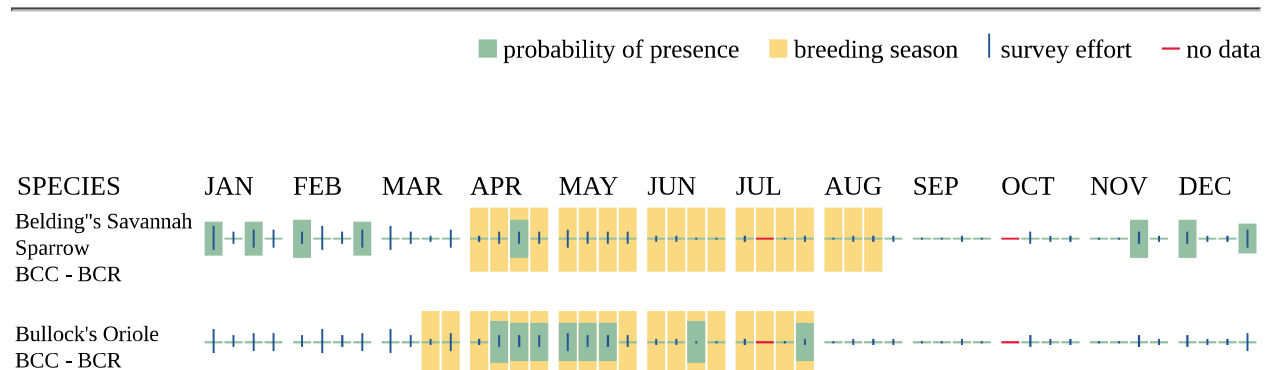
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

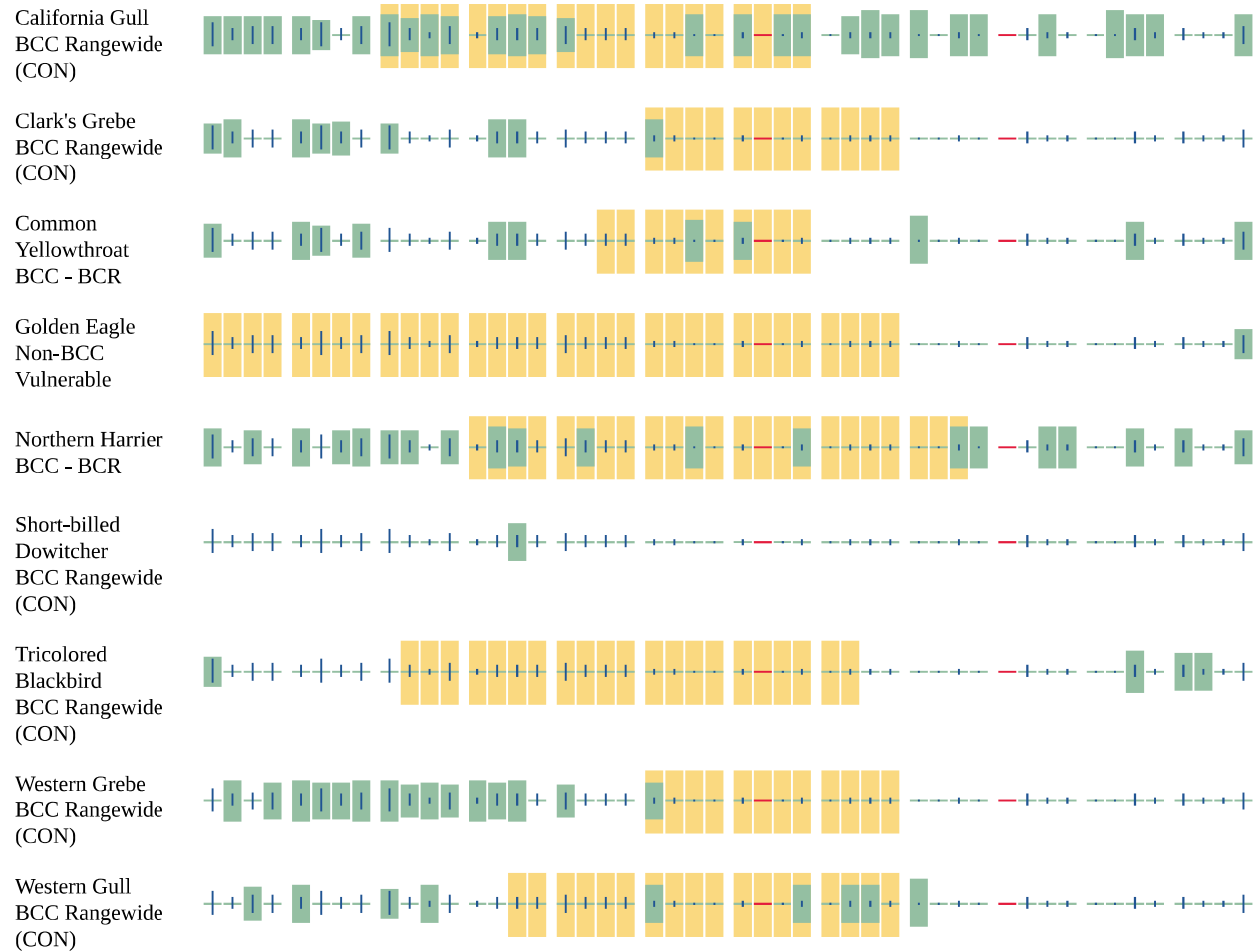
Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

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





Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- 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>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

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

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

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

FRESHWATER FORESTED/SHRUB WETLAND

- PSSR
- PSSC

FRESHWATER EMERGENT WETLAND

- PEM1T

RIVERINE

- R1UBV
- R2UBHx
- R5UBFx

OTHER

- Pf

IPAC USER CONTACT INFORMATION

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Name: Kelly Bayne

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Quad Name **Rio Vista**

Quad Number **38121-B6**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) - **X**

SRWR Chinook Salmon ESU (E) - **X**

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) - **X**

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat - **X**

SRWR Chinook Salmon Critical Habitat - **X**

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat - **X**

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat - **X**

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH - **X**

Groundfish EFH - **X**

Coastal Pelagics EFH -

Highly Migratory Species EFH -

CALIFORNIA DEPARTMENT OF
FISH and WILDLIFE RareFind

Query Summary:

Quad IS (Liberty Island (3812136) OR Courtland (3812135) OR Birds Landing (3812127) OR Isleton (3812125) OR Antioch North (3812117) OR Jersey Island (3812116) OR Bouldin Island (3812115))

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Acipenser medirostris pop. 1	green sturgeon - southern DPS	Fish	AFCAA01031	14	4	Threatened	None	G2T1	S1	null	AFS_VU-Vulnerable, IUCN_EN-Endangered	Aquatic, Estuary, Marine bay, Sacramento/San Joaquin flowing waters
Ambystoma californiense pop. 1	California tiger salamander - central California DPS	Amphibians	AAAAA01181	1326	7	Threatened	Threatened	G2G3T3	S3	null	CDFW_WL-Watch List, IUCN_VU-Vulnerable	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool, Wetland
Anniella pulchra	Northern California legless lizard	Reptiles	ARACC01020	386	3	None	None	G3	S2S3	null	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Chaparral, Coastal dunes, Coastal scrub
Anthicus antiochensis	Antioch Dunes anthicid beetle	Insects	IICOL49020	6	1	None	None	G3	S3	null	null	Interior dunes
Anthicus sacramento	Sacramento anthicid beetle	Insects	IICOL49010	13	1	None	None	G4	S4	null	IUCN_EN-Endangered	Interior dunes
Apodemia mormo langei	Lange's metalmark butterfly	Insects	IILEPH7012	1	1	Endangered	None	G5T1	S1	null	null	Interior dunes
Aquila chrysaetos	golden eagle	Birds	ABNKC22010	332	5	None	None	G5	S3	null	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, CDFW_WL-Watch List, IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland
Archoplites interruptus	Sacramento perch	Fish	AFCQB07010	5	1	None	None	G1	S1	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered	Aquatic, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters
Ardea herodias	great blue heron	Birds	ABNGA04010	156	2	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
Arizona elegans occidentalis	California glossy snake	Reptiles	ARADB01017	260	1	None	None	G5T2	S2	null	CDFW_SSC-Species of Special Concern	null
Astragalus tener var. tener	alkali milk-vetch	Dicots	PDFAB0F8R1	65	1	None	None	G2T1	S1	1B.2	SB_UCSC-UC Santa Cruz	Alkali playa, Valley & foothill grassland, Vernal pool, Wetland

Athene cunicularia	burrowing owl	Birds	ABNSB10010	2057	36	None	None	G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Atriplex cordulata var. cordulata	heartscale	Dicots	PDCHE040B0	66	4	None	None	G3T2	S2	1B.2	BLM_S-Sensitive	Chenopod scrub, Meadow & seep, Valley & foothill grassland
Blepharizonia plumosa	big tarplant	Dicots	PDAST1C011	53	3	None	None	G1G2	S1S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Valley & foothill grassland
Bombus crotchii	Crotch's bumble bee	Insects	IIHYM24480	437	1	None	Candidate Endangered	G2	S2	null	IUCN_EN-Endangered	null
Bombus occidentalis	western bumble bee	Insects	IIHYM24252	306	2	None	Candidate Endangered	G3	S1	null	IUCN_VU-Vulnerable, USFS_S-Sensitive	null
Bombus pensylvanicus	American bumble bee	Insects	IIHYM24260	365	6	None	None	G3G4	S2	null	IUCN_VU-Vulnerable	Coastal prairie, Great Basin grassland, Valley & foothill grassland
Branchinecta conservatio	Conservancy fairy shrimp	Crustaceans	ICBRA03010	57	1	Endangered	None	G2	S2	null	IUCN_EN-Endangered	Valley & foothill grassland, Vernal pool, Wetland
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	804	7	Threatened	None	G3	S3	null	IUCN_VU-Vulnerable	Valley & foothill grassland, Vernal pool, Wetland
Branchinecta mesoallensis	midvalley fairy shrimp	Crustaceans	ICBRA03150	147	3	None	None	G2	S2S3	null	null	Vernal pool, Wetland
Brasenia schreberi	watershield	Dicots	PDCAB01010	43	2	None	None	G5	S3	2B.3	IUCN_LC-Least Concern	Marsh & swamp, Wetland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2576	81	None	Threatened	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Carex comosa	bristly sedge	Monocots	PMCYP032Y0	31	8	None	None	G5	S2	2B.1	IUCN_LC-Least Concern	Coastal prairie, Freshwater marsh, Marsh & swamp, Valley & foothill grassland, Wetland
Centromadia parryi ssp. parryi	pappose tarplant	Dicots	PDAST4R0P2	39	4	None	None	G3T2	S2	1B.2	BLM_S-Sensitive	Chaparral, Coastal prairie, Marsh & swamp, Meadow & seep, Valley & foothill grassland
Charadrius montanus	mountain plover	Birds	ABNNB03100	94	6	None	None	G3	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFWS_BCC-Birds of Conservation Concern	Chenopod scrub, Valley & foothill grassland
Charadrius nivosus nivosus	western snowy plover	Birds	ABNNB03031	140	1	Threatened	None	G3T3	S3	null	CDFW_SSC-Species of Special Concern	Great Basin standing waters, Sand shore, Wetland
Chloropyron molle ssp. molle	soft salty bird's-beak	Dicots	PDSCR0J0D2	27	1	Endangered	Rare	G2T1	S1	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Marsh & swamp, Salt marsh, Wetland
Cicuta maculata var. bolanderi	Bolander's water-hemlock	Dicots	PDAP10M051	17	5	None	None	G5T4T5	S2?	2B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Marsh & swamp, Salt marsh, Wetland
Circus hudsonius	northern harrier	Birds	ABNKC11011	82	10	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-	Coastal scrub, Great Basin grassland,

											Least Concern, USFWS_BCC-Birds of Conservation Concern	Marsh & swamp, Riparian scrub, Valley & foothill grassland, Wetland
Coastal Brackish Marsh	Coastal Brackish Marsh	Marsh	CTT52200CA	30	2	None	None	G2	S2.1	null	null	Marsh & swamp, Wetland
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	Marsh	CTT52410CA	60	5	None	None	G3	S2.1	null	null	Marsh & swamp, Wetland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	165	1	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, USFS_S-Sensitive	Riparian forest
Coelus gracilis	San Joaquin dune beetle	Insects	IICOL4A020	11	1	None	None	G1	S1	null	BLM_S-Sensitive, IUCN_VU-Vulnerable	Interior dunes
Cophura hurdi	Antioch cophuran robberfly	Insects	IIDIP06010	1	1	None	None	GX	SX	null	null	Desert dunes, Interior dunes
Cryptantha hooveri	Hoover's cryptantha	Dicots	PDBOR0A190	4	1	None	None	GH	SH	1A	null	Interior dunes, Valley & foothill grassland
Downingia pusilla	dwarf downingia	Dicots	PDCAM060C0	132	2	None	None	GU	S2	2B.2	null	Valley & foothill grassland, Vernal pool, Wetland
Efferia antiochi	Antioch efferian robberfly	Insects	IIDIP07010	4	1	None	None	G1G2	S1S2	null	null	Interior dunes
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	190	4	None	None	G5	S3S4	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland
Elaphrus viridis	Delta green ground beetle	Insects	IICOL36010	13	1	Threatened	None	G1	S1	null	IUCN_CR-Critically Endangered	Vernal pool, Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1559	35	Proposed Threatened	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Eriogonum nudum var. psychicola	Antioch Dunes buckwheat	Dicots	PDPGN0849Q	1	1	None	None	G5T1	S1	1B.1	null	Interior dunes
Eriogonum truncatum	Mt. Diablo buckwheat	Dicots	PDPGN085Z0	7	1	None	None	G1	S1	1B.1	SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Coastal scrub, Valley & foothill grassland
Erysimum capitatum var. angustatum	Contra Costa wallflower	Dicots	PDBRA16052	4	4	Endangered	Endangered	G5T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Interior dunes
Eschscholzia rhombipetala	diamond-petaled California poppy	Dicots	PDPAP0A0D0	12	1	None	None	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Valley & foothill grassland
Eucerceris ruficeps	redheaded sphecid wasp	Insects	IIHYM18010	4	2	None	None	G1G3	S2	null	null	Interior dunes
Extriplex joaquinana	San Joaquin spearscale	Dicots	PDCHE041F3	127	2	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho	Alkali playa, Chenopod scrub, Meadow & seep, Valley &

											Santa Ana Botanic Garden	foothill grassland
<i>Falco peregrinus anatum</i>	American peregrine falcon	Birds	ABNKD06071	75	2	Delisted	Delisted	G4T4	S3S4	null	CDF_S-Sensitive	null
<i>Fritillaria liliacea</i>	fragrant fritillary	Monocots	PMLILOV0C0	82	2	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Cismontane woodland, Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland
<i>Geothlypis trichas sinuosa</i>	saltmarsh common yellowthroat	Birds	ABPBX1201A	114	5	None	None	G5T3	S3	null	CDFW_SSC-Species of Special Concern, USFWS_BCC-Birds of Conservation Concern	Marsh & swamp
<i>Gonidea angulata</i>	western ridged mussel	Mollusks	IMBIV19010	158	1	None	None	G3	S2	null	IUCN_VU-Vulnerable	Aquatic
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	Dicots	PDMAL0H0R3	173	42	None	None	G5T3	S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Freshwater marsh, Marsh & swamp, Wetland
<i>Hygrotus curvipes</i>	curved-foot hygrotus diving beetle	Insects	IICOL38030	21	1	None	None	G2	S2	null	null	Aquatic
<i>Hypomesus transpacificus</i>	Delta smelt	Fish	AFCHB01040	29	14	Threatened	Endangered	G1	S1	null	AFS_TH-Threatened, IUCN_CR-Critically Endangered	Aquatic, Estuary
<i>Idiostatus middlekauffi</i>	Middlekauff's shieldback katydid	Insects	IORT31010	1	1	None	None	G1G2	S1	null	IUCN_CR-Critically Endangered	Interior dunes
<i>Isocoma arguta</i>	Carquinez goldenbush	Dicots	PDAST57050	14	3	None	None	G1	S1	1B.1	SB_UCBG-UC Botanical Garden at Berkeley	Valley & foothill grassland
<i>Lasiurus cinereus</i>	hoary bat	Mammals	AMACC05032	238	1	None	None	G3G4	S4	null	IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest
<i>Lasiurus frantzii</i>	western red bat	Mammals	AMACC05080	128	4	None	None	G4	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland
<i>Lasthenia conjugens</i>	Contra Costa goldfields	Dicots	PDAST5L040	36	1	Endangered	None	G1	S1	1B.1	SB_UCBG-UC Botanical Garden at Berkeley	Alkali playa, Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland
<i>Laterallus jamaicensis coturniculus</i>	California black rail	Birds	ABNME03041	304	13	None	Threatened	G3T1	S2	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_EN-Endangered	Brackish marsh, Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Delta tule pea	Dicots	PDFAB250D2	133	39	None	None	G5T2	S2	1B.2	SB_BerrySB-Berry Seed Bank, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Freshwater marsh, Marsh & swamp, Wetland
<i>Lepidium latipes</i> var. <i>heckardii</i>	Heckard's pepper-grass	Dicots	PDBRA1M0K1	14	1	None	None	G4T1	S1	1B.2	null	Valley & foothill grassland, Vernal pool
<i>Lepidurus packardii</i>	vernal pool tadpole shrimp	Crustaceans	ICBRA10010	336	1	Endangered	None	G3	S3	null	IUCN_EN-Endangered	Valley & foothill grassland, Vernal pool, Wetland
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	Dicots	PDAPI19030	197	93	None	Rare	G2	S2	1B.1	null	Freshwater marsh, Marsh &

												swamp, Riparian scrub, Wetland
<i>Limosella australis</i>	Delta mudwort	Dicots	PDSCR10030	59	38	None	None	G4G5	S2	2B.1	null	Brackish marsh, Freshwater marsh, Marsh & swamp, Riparian scrub, Wetland
<i>Linderiella occidentalis</i>	California linderiella	Crustaceans	ICBRA06010	508	7	None	None	G2G3	S2S3	null	IUCN_NT-Near Threatened	Vernal pool
<i>Melospiza melodia maxillaris</i>	Suisun song sparrow	Birds	ABPBXA301K	36	6	None	None	G5T3	S2	null	CDFW_SSC-Species of Special Concern	Marsh & swamp, Wetland
<i>Melospiza melodia</i> pop. 1	song sparrow ("Modesto" population)	Birds	ABPBXA3013	92	27	None	None	G5T3?Q	S3?	null	CDFW_SSC-Species of Special Concern	Artificial flowing waters, Freshwater marsh, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters
<i>Metapogon hurdi</i>	Hurd's metapogon robberfly	Insects	IIDIP08010	3	1	None	None	G1G2	S1S2	null	null	Interior dunes
<i>Myrmosula pacifica</i>	Antioch multilid wasp	Insects	IIHYM15010	4	1	None	None	GH	SH	null	null	Interior dunes
<i>Nannopterum auritum</i>	double-crested cormorant	Birds	ABNFD01020	39	1	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
<i>Navarretia leucocephala</i> ssp. bakeri	Baker's navarretia	Dicots	PDPLM0C0E1	64	1	None	None	G4T2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Cismontane woodland, Lower montane coniferous forest, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Northern Claypan Vernal Pool	Northern Claypan Vernal Pool	Herbaceous	CTT44120CA	21	1	None	None	G1	S1.1	null	null	Vernal pool, Wetland
<i>Oenothera deltoides</i> ssp. howellii	Antioch Dunes evening-primrose	Dicots	PDONA0C0B4	10	8	Endangered	Endangered	G5T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-JC Botanical Garden at Berkeley	Interior dunes
<i>Oncorhynchus mykiss</i> irideus pop. 11	steelhead - Central Valley DPS	Fish	AFCHA0209K	31	2	Threatened	None	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic, Sacramento/San Joaquin flowing waters
<i>Perdita hirticeps luteocincta</i>	yellow-banded andrenid bee	Insects	IIHYM01021	1	1	None	None	GNRTX	SX	null	null	Interior dunes
<i>Perdita scitula antiochensis</i>	Antioch andrenid bee	Insects	IIHYM01031	2	2	None	None	G1T1	S2	null	null	Interior dunes
<i>Philanthus nasalis</i>	Antioch spicid wasp	Insects	IIHYM20010	4	1	None	None	G2	S2	null	null	Interior dunes
<i>Plagiobothrys hystriculus</i>	bearded popcornflower	Dicots	PDBOR0V0H0	15	3	None	None	G2	S2	1B.1	null	Valley & foothill grassland, Vernal pool, Wetland
<i>Pogonichthys macrolepidotus</i>	Sacramento splittail	Fish	AFCJB34020	15	1	None	None	G3	S3	null	AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Aquatic, Estuary, Freshwater marsh, Sacramento/San Joaquin flowing waters
<i>Potamogeton zosteriformis</i>	eel-grass pondweed	Monocots	PMPOT03160	20	1	None	None	G5	S3	2B.2	null	Marsh & swamp, Wetland
<i>Reithrodontomys raviventris</i>	salt-marsh harvest mouse	Mammals	AMAFF02040	151	7	Endangered	Endangered	G1G2	S3	null	CDFW_FP-Fully Protected, IUCN_EN-Endangered	Marsh & swamp, Wetland

Rhaphiomidas trochilus	San Joaquin Valley giant flower-loving fly	Insects	IIDIP05010	6	1	None	None	G1	S1	null	null	Interior dunes
Riparia riparia	bank swallow	Birds	ABPAU08010	299	1	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Riparian scrub, Riparian woodland
Sagittaria sanfordii	Sanford's arrowhead	Monocots	PMALI040Q0	143	7	None	None	G3	S3	1B.2	BLM_S-Sensitive	Marsh & swamp, Wetland
Scutellaria galericulata	marsh skullcap	Dicots	PDLAM1U0J0	38	2	None	None	G5	S2	2B.2	null	Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Wetland
Scutellaria lateriflora	side-flowering skullcap	Dicots	PDLAM1U0Q0	13	3	None	None	G5	S1S2	2B.2	IUCN_LC-Least Concern	Marsh & swamp, Meadow & seep, Wetland
Sidalcea keckii	Keck's checkerbloom	Dicots	PDMAL110D0	50	2	Endangered	None	G2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Cismontane woodland, Ultramafic, Valley & foothill grassland
Sphecodogastra antiochensis	Antioch Dunes halcetid bee	Insects	IIHYM78010	1	1	None	None	G1	S1	null	null	Interior dunes
Spirinchus thaleichthys	longfin smelt	Fish	AFCHB03010	46	11	Proposed Endangered	Threatened	G5	S1	null	IUCN_LC-Least Concern	Aquatic, Estuary
Stabilized Interior Dunes	Stabilized Interior Dunes	Dune	CTT23100CA	2	1	None	None	G1	S1.1	null	null	Interior dunes
Sternula antillarum browni	California least tern	Birds	ABNNM08103	76	2	Endangered	Endangered	G4T2T3Q	S2	null	CDFW_FP-Fully Protected	Alkali playa, Wetland
Symphotrichum lentum	Suisun Marsh aster	Dicots	PDASTE8470	175	82	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture	Brackish marsh, Freshwater marsh, Marsh & swamp, Wetland
Taxidea taxus	American badger	Mammals	AMAJF04010	647	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, lone formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt

												marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Thamnophis gigas	giant gartersnake	Reptiles	ARADB36150	381	24	Threatened	Threatened	G2	S2	null	IUCN_VU-Vulnerable	Marsh & swamp, Riparian scrub, Wetland
Trifolium hydrophilum	saline clover	Dicots	PDFAB400R5	56	1	None	None	G2	S2	1B.2	null	Marsh & swamp, Valley & foothill grassland, Vernal pool, Wetland
Valley Needlegrass Grassland	Valley Needlegrass Grassland	Herbaceous	CTT42110CA	45	1	None	None	G3	S3.1	null	null	Valley & foothill grassland