Appendix B
Biological & Wetland Report Argonaut

BIOLOGICAL RESOURCE ASSESSMENT

TRACT 6352

5524 E. LAURITE AVENUE

FRESNO, CA 93727

APN 481-346-01; 481-100-14; 481-100-16

Prepared For:

Vang, Inc. Consulting Engineers

October 2021

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ARGONAUT ECOLOGICAL CONSULTING, INC.

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October 2021

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1.0 EXECUTIVE SUMMARY AND INTRODUCTION

EXECUTIVE SUMMARY

Argonaut Ecological, Inc. conducted a biological evaluation of a proposed development of a 2.15-acre parcel located along Laurite Avenue, just west of S. Clovis Avenue and just north of Jensen Avenue in Fresno, California. The Study Area is within an existing subdivision. The biological evaluation focused on mapping existing habitat types based on a field review and reviewing public and commercial databases, aerial photographs (current and historical), and other published information and available data. The evaluation included assessing the types of habitats present and sensitive species associated with those habitats.

The Study Area lies in parts of Section 17, Township. 14S, Range 21 East (Figure 1). The property is 2.15 acres and bounded by residential housing on the north and west, Clovis Avenue to the East, and Jensen Avenue to the South.

The Study Area does not support habitat for special status species or suitable habitat for special status species. There are no waters of the U.S. or wetlands within the Study Area.

1.1 INTRODUCTION

The Study Area will be subdivided into 17 residential lots, each roughly 5300 square feet.

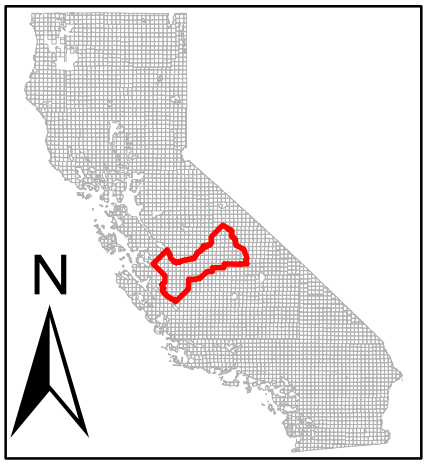
1.2 STUDY OBJECTIVES

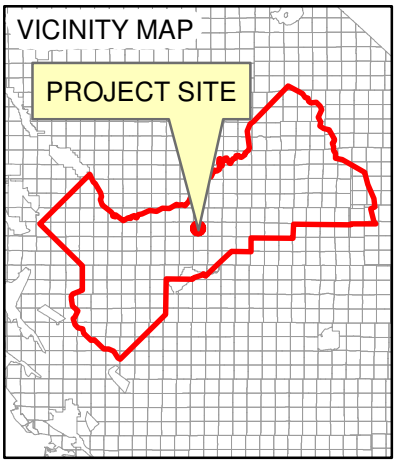
This report provides an overall assessment of the biological resources present within and adjacent to the Study Area, describes the area's biological characteristics, and evaluates the Study Area's likelihood to support sensitive biological resources (such as wetlands, creeks/drainages, and special status species). This evaluation used available literature, aerial photography, historic topographic and aerial maps, and multiple site visits. For purposes of this study, wetland habitat includes those areas possibly considered to be "waters of the U.S." as defined by the U.S. Army Corps of Engineers (Army Corps) and/or Waters of the State of California. As described in Section 1.2.1, wetlands are a subset of "Waters of the U.S." under the Federal Clean Water Act.

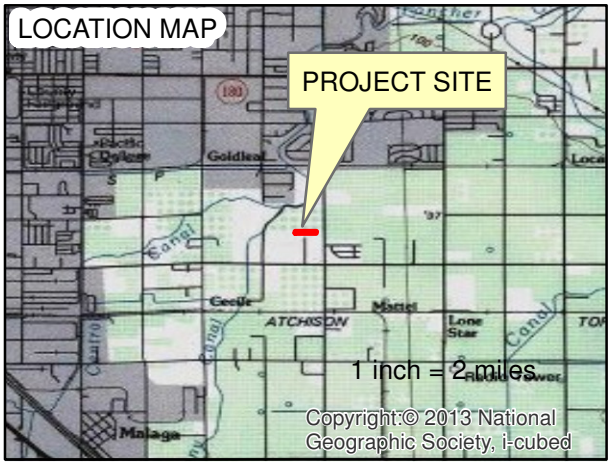
VICINITY AND LOCATION MAP

PROJECT NAME:TM6352

PROJECT LOCATION: Part of Sections 17, T. 14S., R.21E., Mount Diablo Base and Meridian
Fresno County California,







Legend

APPROXIMATE BOUNDARY (2.15AC.)

200 100 0 200 Feet

1 in = 200 ft

ARGONAUT ECOLOGICAL CONSULTING, INC.

Date: 10/28/2021

This report assesses the Project's potential effects on biological resources and evaluates whether any associated regulatory approvals or permits are required. This report also assesses any potential impacts site development may have on protected habitat, species protected by the Federal Endangered Species Act, or those protected under the California Environmental Quality Act or California Endangered Species Act.

1.3 REGULATORY JURISDICTION AND BACKGROUND

Several agencies share regulatory jurisdiction over biological resources. The following is a brief description of the primary agencies and their respective jurisdiction.

Wetland Protection

U.S. Army Corps of Engineers

Wetlands are a type of Waters of the U.S. The U.S. Army Corps of Engineers (Army Corps) and the U.S. Environmental Protection Agency regulate the placement of fill into the Waters of the U.S. under Section 404 of the Federal Clean Water Act and Section 10 of the Rivers and Harbor Act. For this purpose, the term "Waters of the U.S." is legally defined under Section 404 of the Federal Clean Water Act and includes interstate streams, creeks, and adjacent wetlands. The Army Corps defines wetlands as "*those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions*" (Environmental Laboratory 1987). In California, seasonally inundated areas that meet the criteria of all three wetland parameters (soils, hydrology, and vegetation), as defined in the recently issued Wetland Delineation Manual for the Arid West (USACE 2006), are also considered jurisdictional wetlands.

California State Water Resources Control Board

Since 1993, California has had a Wetlands Conservation Policy (a.k.a., the Executive Order W-51 59-93) and is commonly referred to as the *No Net Loss policy* for wetlands. This order establishes a state mandate for developing and adopting a policy framework and strategy to protect the state's wetland ecosystems. The policy was to be implemented voluntarily and was expressly not to be implemented on a "project-by-project" basis (See EO W-59-93, Section III).

In 2020 California adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. The State definition of wetland differs from the Federal definition in that the state definition includes areas with no vegetation, assuming the other criteria are met. Wetlands of the State include 1) natural wetlands, 2) wetlands created by modification of water of the state (at any point in history), and 3) artificial wetlands that meet specific criteria. The State definition only exempts a few types of waters. Examples of water features excluded from the state's definition include industrial or municipal wastewater, certain stormwater treatment

facilities, agricultural crop irrigation, industrial processing or cooling, and fields flooded for rice growing.

Listed Protected Species and Habitat Protection

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711), Bald and Golden Eagle Protection Act (16 United States Code [USC] Section 668), and Federal Endangered Species Act (FESA; 16 USC § 153 *et seq.)*.

The **Migratory Bird Treaty Act (MBTA**) was first enacted in 1918 to protect migratory birds between the United States and Great Britain (acting on behalf of Canada). The MBTA makes it illegal for anyone to take, possess, import, transport, purchase, barter, or offer for sale or purchase any migratory birds, nests, or eggs unless a federal agency has issued a permit. The USFWS has statutory authority and responsibility for enforcing the MBTA. The MBTA was reformed in 2004 to include all species native to the U.S. or its territories due to natural biological or ecological processes (70 FR 12710, March 15, 2005). The Act does not include non-native species whose occurrences in the U.S. are solely the result of intentional or unintentional human introduction. The USFWS maintains a list of bird species not protected under the MBTA.

In January 2021, the USFWS published a new rule in the Federal Register. Under the rule change, the unintentional killing of migratory birds does not violate the MBTA. Only the intentional "pursuing, hunting, taking, capturing, killing, or attempting to do the same ... directed at migratory birds, their nests, or their eggs" would be illegal under the changes.

The **Federal Endangered Species Act** prohibits "take" "of any federally listed wildlife species (the destruction of federally listed plants on private property is not prohibited and does not require a permit)**.** "Take" under the federal definition means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. "Incidental take" is harm or death that may occur during the implementation of an otherwise lawful activity. "Candidate species" do not have the full protection of FESA. However, the USFWS advises project applicants that it is prudent to address these species since they could be elevated to "listed status" before completion of projects with long planning or development schedules.

An Incidental Take Permit or Take Permit is required when an activity would either kill, harm, harass, or interrupt a listed species' breeding or nesting. The ESA definition of "harm" is somewhat less definitive since it includes ubiquitous activities. In 1999 the USFWS published a clarification of the term "harm" as it applies to the ESA in the Federal Register. As stated, the final rule defined the term "harm" "to include any act which causes actual harm (kills or injures fish or wildlife) and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) is a Trustee Agency responsible under CEQA to review and provide recommendations on projects that could impact plant and wildlife resources. Under the Fish and Game Code Section 1802, the CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations. The California Fish and Game Code also provides authority for the CDFW to regulate projects that could result in the "take" of any species listed by the state as threatened or endangered (Section 2081). CDFW also has authority over all state streams, as described below.

Perennial and intermittent streams also fall under the jurisdiction of CDFW according to Sections 1601-1603 of the Fish and Game Code (Streambed Alteration Agreements). CDFW's jurisdictional extent includes work within the stream zone, including the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream, or lake. Before issuing a 1601 or 1603 Streambed Alteration Agreement, the CDFW must demonstrate compliance with CEQA. In most cases, CDFW relies on the CEQA review performed by the local lead agency. However, in cases where no CEQA review was required for the project, CDFW would act as the lead agency under CEQA.

California Endangered Species Act

The California Endangered Species Act (CESA) protects candidate plants and animal species and those listed under CESA as rare, threatened, or endangered. This Act prohibits the take of any such species unless authorized. Section 2081 authorizes the state to issue incidental take permits. The state definition of taking applies only to acts that result in death or adverse impacts to protected species. The CAESA mirrors the federal regulation as it relates to "take"; however, there is no state equivalent definition of "harm" or "harass." Incidental take is also not defined by the CAESA statute or regulation. Unlike the federal ESA, CAESA does qualify that incidental take" "is not prohibited "if it is the result of an act that occurs on a farm or ranch in the course of an otherwise lawful routine and ongoing agricultural activity." Where disagreement occurs (and in some cases, this has been the subject of court cases) is in the common understanding of "routine and ongoing agricultural activity."

California Environmental Quality Act

The CEQA Guidelines require a review of projects to determine their environmental effects and identify mitigation for significant effects. The Guidelines state that an effect may be significant if it affects rare and endangered species. Section 15380 of the Guidelines defines *rare* to include listed species and allows agencies to consider rare species other than those designated as State or Federal threatened or endangered, but that meet the standards for rare under the Federal or State endangered species acts. On this basis, plants designated as rare by non-regulatory organizations (e.g., California Native Plant Society), species of special concern as defined by CDFW, candidate species as defined by USFWS, and other designations need to be considered in CEQA analyses.

Land Use Entitlements

City of Fresno

The Study Area falls within the City of Fresno. The City is responsible for all local land-use decisions within its jurisdiction and CEQA compliance. As the lead agency under CEQA, the City will consider other responsible agencies' recommendations during the CEQA review.

2.0 RESOURCES CONSULTED AND METHODS

The following section describes the methods used to assess the Study Area and includes data review and evaluation, field studies, and aerial photograph interpretations.

2.1 DATA AND LITERATURE REVIEW

Documents and sources of information used to prepare this evaluation include the following:

- U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey of Fresno Area (Soils mapper).
- Aerial photography (Google Earth®, Bing®, and historic aerials).
- California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB/RareFind - Recent version with updates)
- U.S. Fish and Wildlife Service, National Wetland Inventory Map

Before conducting a site review, the California Natural Diversity Database/ RareFind (CNDDB) and the USFWS IPAC were consulted to determine the species potentially present within the Study Area based on location. The purpose of the review was to determine the likelihood of special status species being present on the site based on the site's distance from documented species occurrences and the presence or absence of habitat types utilized by such species. The CNDDB includes records of reported observations for special status plant and animal species and is queried based on a search radius of USGS quadrangle maps. Before conducting the fieldwork, high-resolution aerial photographs were also reviewed to determine if any areas on the site appear to support the presence of Waters of the U.S.

2.2 AERIAL PHOTOGRAPHY AND WETLAND MAPPING

Historical aerial photographs dating back to the 1980s of the Study Area were reviewed to identify site features and determine land-use changes over time. Also reviewed were wetland mapping and aerial photographs to determine if the Study Area recently supported wetlands.

2.3 FIELD INVESTIGATION

A site investigation was performed in September, 2021. The entire Study Area was walked. Soils, vegetation, and drainage patterns within the Study Area were inspected to determine the habitat present and suitability for species of concern. Photographs are included in Appendix A.

3.0 RESULTS AND CONCLUSIONS

Section 3.1, below, describes the physical features (i.e., land use, soils, vegetation, hydrology, etc.) and the study area's biological features. The physical components and land use strongly influence the types of plants and animals present. This section also describes the habitats present and the specific biological resources observed during the site review.

Section 3.2 presents our conclusions, and Section 3.3 contains recommended avoidance and minimization measures to avoid potential impacts.

The following is not an exhaustive inventory of plants and animals present. Instead, the discussion provides sufficient information to identify biological resources that are considered unique, sensitive, or protected by current law and the potential impacts on those resources due to site development**.**

3.1 PHYSICAL RESOURCES AND ELEMENTS

Climate

The Study Area climate is typical of the central San Joaquin Valley, with long, hot, and dry summers and winters that are cool and mild. In the winter, rainfall averages approximately 10.9 inches per year, falling mainly between November and April (Western Regional Climate Center, 2004). During the 2019/2020 rainy season (Oct-May), the total rainfall was below average at 8.9 inches, as recorded at Fresno State University, Fresno. The rainfall for the 2020/2021 rainy season (Oct-May 2021) is 6.52 inches, with most of the rainfall occurring in January 2021.

Topography

The property lies within the San Joaquin Valley and is relatively flat, remaining around 325 feet above sea level throughout the site. The construction of the adjacent subdivision has modified the site topography.

Land Use

The Study Area was historically in agricultural production (orchard and dryland crops), and the land to the north (now a developed subdivision) was converted from orchards to residential starting around 2003. The land to the west (also now a residential subdivision) was converted around 1998. The western half of the Study Area was part of an orchard in the late 1990s and ranch. The eastern half appears to have remained either dry land farmed or fallow since the early 2000s. The Study Area appears to be periodically disced for fire suppression. Although not reflected in recent aerial photography, the property to the south is not developed with a storage facility.

Habitat

There are several California habitat classification systems. Most of these classification systems describe natural communities and do not have established classifications for disturbed or agricultural habitats. The California Guide to Wildlife Habitat Relationship System (CWHR) was developed to support habitat conservation and management, land use planning, impact assessment, education, and research involving terrestrial vertebrates in California and is used within California CNDDB Biogeographic Information and Observation System (BIOS). This evaluation generally uses the CWHR/BIOS habitat classification and includes a description of the ruderal habitat commonly used in environmental evaluations performed under CEQA.

As previously stated, the Study Area comprises former orchards and dryland crop fields that were removed around 2000, and the site appears to be periodically disked and used as an illicit disposal area over the years. The site has been reestablished with a mixture of non-native forbs and weedy species (wild oats, dove weed, storks-bill, mustard, star-thistle, etc.).

Waters/Wetland

According to the National Wetland Inventory (NWI) mapping, there are no wetlands or drainage features within or immediately adjacent to the Study Area, nor were there any waters or wetland historically present. A review of historical aerial photography and the field review confirmed the accuracy of the NWI mapping.

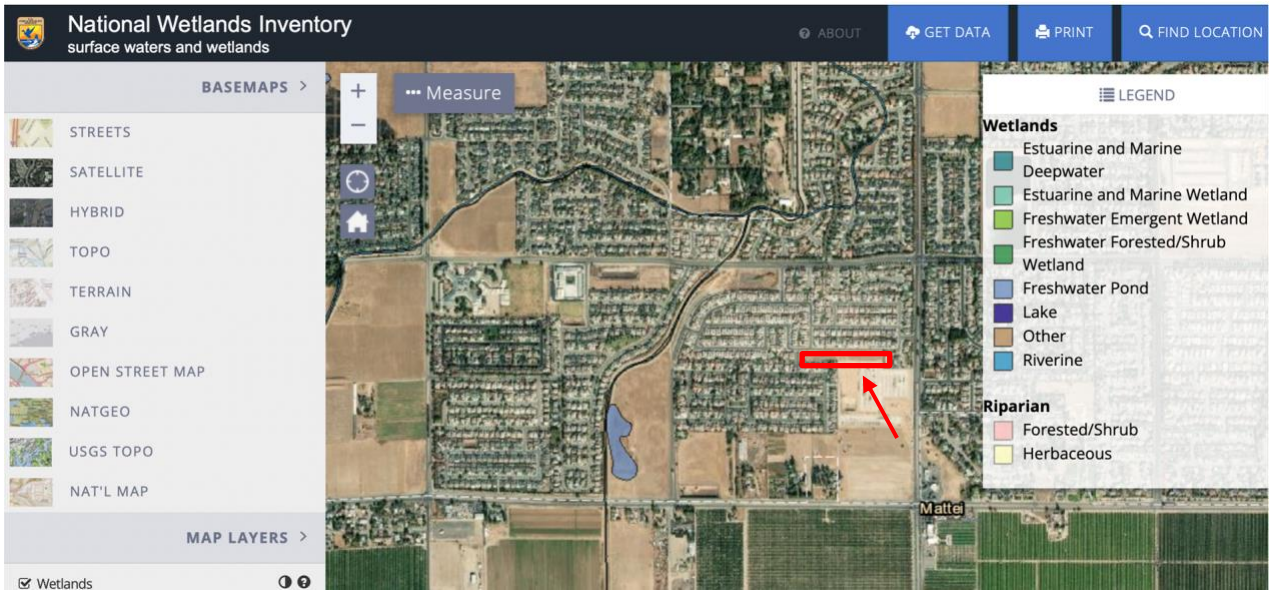


Figure 2 – National Wetland Inventory Map

Special Status Species

A search of the California Natural Diversity Database (CNDDB) database was reviewed to determine which special status species could be present within the Study Area. There is no critical habitat for any listed species within or in the vicinity of the Study Area. There is no adjacent or nearby aquatic habitat near the Study Area.

There are numerous species within the Malaga quadrangle; however, the Study Area does not support suitable habitats. Appendix B includes the results of the CNDDB search. The Study Area lacks aquatic or native, or non-native habitat that could support habitat for special status species. The Study Area is a small habitat until (2.15 acres) that does not support a habitat that could support special status plants or animals because of the low habitat value of the Study Area habitat and the lack of a prey base for wildlife. There are no potential nesting trees or shrubs within the Study Area to provide habitat for migratory birds or raptors.

Figure 5 shows the nearest records of recorded species.

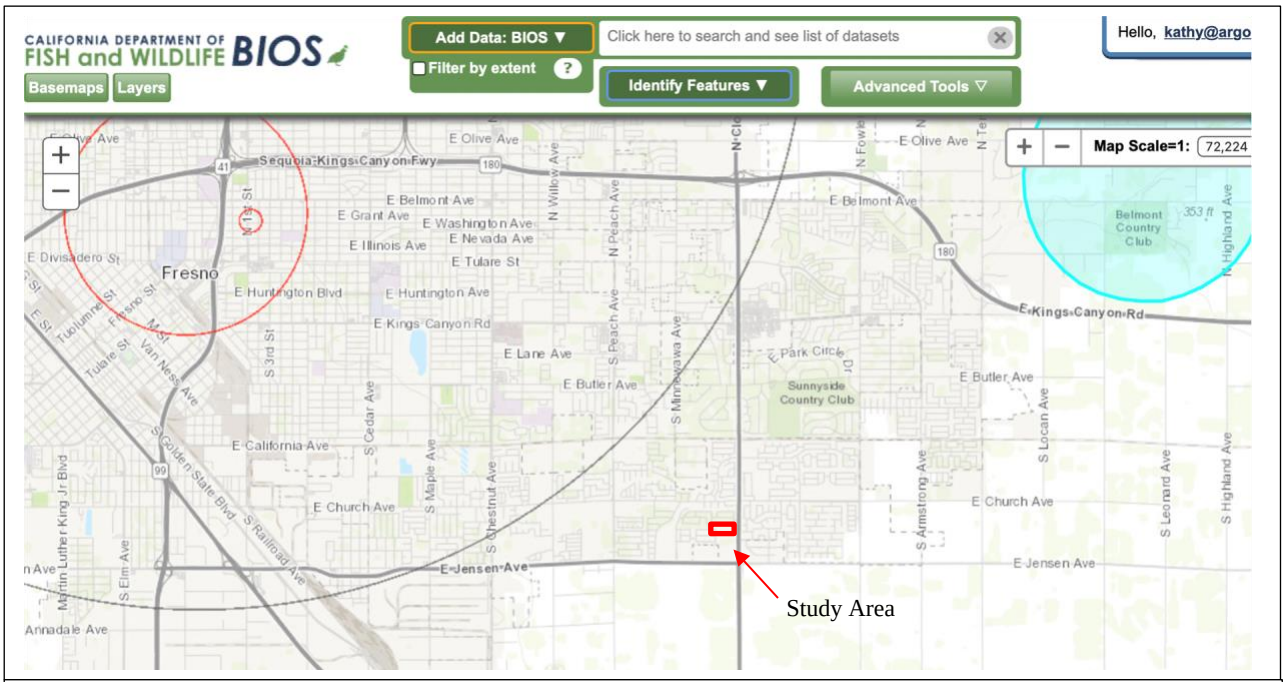


Figure 3
CNDDB BIOS Records In Vicinity of the Study Area

3.3 CONCLUSIONS AND RECOMMENDATIONS

- The Study Area was in agricultural production until the nearly 2000s. Since that time, the site has been routinely disced for fire suppression
- There are no waters of the U.S./waters of the State within the Study Area. There were no historic drainages/creeks within the Study Area.
- The Study Area is highly disturbed and only supports weedy species
- There are no potential raptor nesting trees (or many trees) or migratory birds nesting habitat within the Study Area.
- Development of the Study Area will not result in any significant impacts on biological resources.

RECOMMENDATIONS

No recommendations are made or necessary.

Appendix A: t rap s

ARGONAUT ECOLOGICAL CONSULTING, INC.

Photographs

Location: Tract 6352
Photograph Date: September, 2021

Photograph No. 1

Direction: East

Description: View of Study Area, looking east

Photograph No. 2

Direction: West

Description: View of Study Area's western end

Location: Tract 6352
Photograph Date: September, 2021

Photograph No. 3

Direction: Northeast

Description:
View of dirt piles and construction/utility debris

Photograph No. 4

Direction: Souteast

Description:
View of border wall between site and storage facility to the south

Appendix B: CNDDB Query Results

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Malaga (3611966))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	G2G3 S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	300 300	1261 S:1	0	0	0	0	1	0	1	0	0	0	1
Anniella pulchra Northern California legless lizard	G3 S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	300 300	378 S:1	0	0	0	0	0	1	1	0	1	0	0
Arizona elegans occidentalis California glossy snake	G5T2 S2	None None	CDFW_SSC-Species of Special Concern	300 300	260 S:1	0	0	0	0	0	1	1	0	1	0	0
Bombus crotchii Crotch bumble bee	G3G4 S1S2	None None		300 300	437 S:1	0	0	0	0	0	1	1	0	1	0	0
Buteo swainsoni Swainson's hawk	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	288 300	2541 S:2	0	0	1	0	0	1	1	1	2	0	0
Caulanthus californicus California jewelflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley		67 S:1	0	0	0	0	1	0	1	0	0	0	1
Coccyzus americanus occidentalis western yellow-billed cuckoo	G5T2T3 S1	Threatened Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	345 345	165 S:1	0	0	0	0	1	0	1	0	0	0	1
Efferia antiochi Antioch efferian robberfly	G1G2 S1S2	None None		300 300	4 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Imperata brevifolia California satintail	G4 S3	None None	Rare Plant Rank - 2B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden USFS_S-Sensitive	300 300	32 S:1	0	0	0	0	0	1	1	0	1	0	0
Leptosiphon serrulatus Madera leptosiphon	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive		27 S:1	0	0	0	0	0	1	1	0	1	0	0
Lytta molesta molestan blister beetle	G2 S2	None None		360 360	17 S:1	0	0	0	0	0	1	1	0	0	1	0
Metapogon hurdi Hurd's metapogon robberfly	G1G2 S1S2	None None		325 325	3 S:1	0	0	0	0	0	1	1	0	0	1	0
Phrynosoma blainvillii coast horned lizard	G3G4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	300 300	784 S:1	0	0	0	0	1	0	1	0	0	1	0