Ambient Communities LLC
Orcutt Area Specific Plan Project
Jones and Imel Properties,
San Luis Obispo County, California

# **Biological Resources Assessment**



August 2014

# **BIOLOGICAL RESOURCES ASSESSMENT**

# ORCUTT AREA SPECIFIC PLAN PROJECT JONES AND IMEL PROPERTIES, SAN LUIS OBISPO COUNTY, CALIFORNIA

### Prepared for:

Ambient Communities LLC 979 Osos Street, Suite E San Luis Obispo, CA 93401

# Prepared by:

Rincon Consultants, Inc. 1530 Monterey Street, Suite D San Luis Obispo, CA 93401

August 2014



# **Table of Contents**

		Page
Executi	ive Summary	1
Section	1 - Introduction	2
1.1	Project Location	2
1.2	Project Description	2
Section	2 - Methodology	6
2.1	Regulatory Overview	6
2.2	Database and Literature Review	6
2.3	Field Surveys	6
Section	3 - Existing Conditions	8
3.1	Physical Characteristics	8
	3.1.1 Watershed and Drainages	8
	3.1.2 Soils	8
3.2	Vegetation	9
3.3	General Wildlife	13
Section	4 - Sensitive Biological Resources	13
4.1	Special Status Species	13
	4.1.1 Special Status Plant Species	13
	4.1.2 Special Status Wildlife Species	15
4.2	Sensitive Plant Communities	15
4.3	Jurisdictional Areas	15
4.4	Wildlife Movement	16
4.5	Resources Protected by Local Policies	16
Section	5 - Impact Analysis and Mitigation Measures	16
5.1	Special Status Species	17
	5.1.1 Special Status Birds	17
5.2	Sensitive Plant Communities	17
5.3	Jurisdictional Waters and Streambeds	19
5.4	Wildlife Movement	20
5.5	Resources Protected by Local Policies	20
5.6	Conservation Plans	20

i

Section 6 - Limitations, Assumptions, and User Reliance	20
Section 7 - References	21
Section 8 – List of Preparers	22
FIGURES	
Figure 1 - Regional Location	3
Figure 2 - Jones Study Area	
Figure 3 - Imel Study Area	
Figure 4 - Natural Communities - Jones Study Area	11
Figure 5 - Natural Communities - Imel Study Area	12
Figure 6 - Sensitive Elements Reported by the California Natural Diversity Database and Federally Designated Critical Habitat	14
TABLES	
Table 1 - Vegetation Communities	9
Table 2 - Summary of Potentially Jurisdictional Wetlands, Waters and Riparian Habitats	16

### **APPENDICES**

Appendix A: Regulatory Setting Appendix B: Site Photographs

Appendix C: Floral and Fauna Compendia

Appendix D: Special Status Species Evaluation Tables

#### **EXECUTIVE SUMMARY**

The Jones and Imel properties are located in west-central San Luis Obispo County approximately 15 miles due west of the Pacific Ocean. The Jones and Imel properties consist of Assessor's Parcel Numbers 076-481-011 and 076-491-003, which are located near the intersection of Orcutt Road and Tiburon Way, on the west side of Orcutt Road.

The proposed project on the Jones property would combine residential development and open space on 11.6 acres. The proposed residential development would occupy approximately 80 percent of the total project area and open space would be approximately 20 percent. Residential development would include a variety of residential densities including low density detached single family residences, medium density with duplex and triplex homes, and mixed use condominiums with commercial space. There would be approximately 62 dwelling units and 10,000 square feet of commercial area. The area within the creek jurisdictional setbacks will be dedicated to the City to be preserved as open space (except areas of impact specifically described in Section 5). No residential development is proposed on the Imel property at this time. However, two infrastructure improvements are proposed on this property to provide access for residents. These two improvements are described below as Imel Property – "B" Street Culvert and Imel Property – "B" Street at Orcutt.

The properties are situated within a predominantly rural, residential, and agricultural landscape that is adjacent to open space, rural residences, agricultural lands, and other industrial and suburban parcels. Not including the creeks and drainages, four habitat types or vegetation communities were observed within the properties: non-native annual grassland; ruderal/developed, eucalyptus, and riparian woodland. The site contains potentially suitable habitat for 17 special status plants and animal. However, no special status species were observed within the project site during the focused botanical, protocol burrowing owl and wildlife surveys. Jurisdictional wetlands, other waters of the U.S., and riparian habitats were delineated within the project site. Impacts to these areas will require regulatory permits from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. Implementation of avoidance, minimization, and mitigation measures are discussed in Section 5.

#### **SECTION 1 - INTRODUCTION**

Rincon Consultants, Inc. (Rincon) has prepared this biological resources assessment to document existing conditions and evaluate the potential for impacts to special status and sensitive biological resources during implementation of the Jones and Imel properties of Orcutt Area Specific Plan (OASP) located in the City of San Luis Obispo (City), San Luis Obispo County, California.

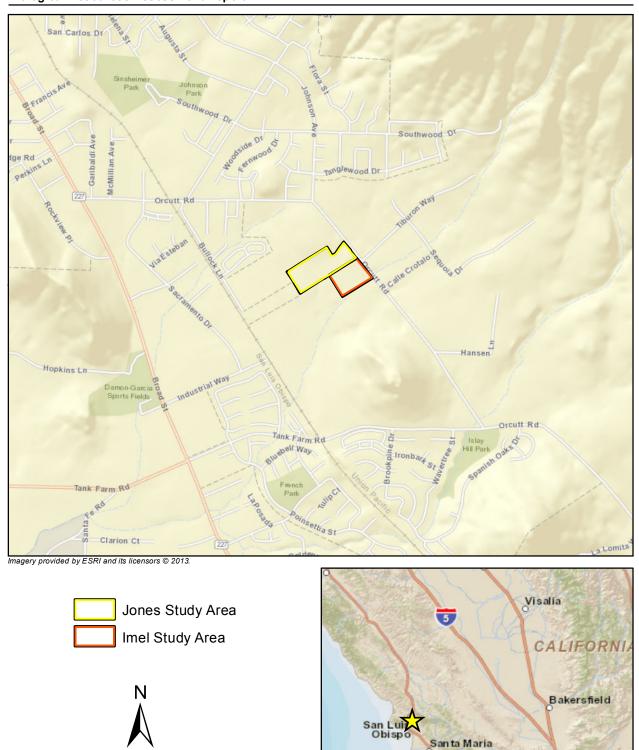
### 1.1 PROJECT LOCATION

The Jones and Imel properties are approximately 11.5 acres and 6.5 acres, respectively. The properties are located in west-central San Luis Obispo County approximately 15 miles due west of the Pacific Ocean, as shown in Figure 1. The Jones and Imel properties consist of Assessor's Parcel Numbers (APNs) 076-481-011 and 076-491-003, which are located near the intersection of Orcutt Road and Tiburon Way, on the west side of Orcutt Road as shown on Figures 2 and 3. The parcels are depicted on the *San Luis Obispo, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle within *Meridian Mount Diablo*, Sections 1 and 6, Township 31 South and Ranges 12 and 13 East.

# 1.2 PROJECT DESCRIPTION

The proposed project on the Jones property would combine residential development and open space on 11.6 acres. The proposed residential development would occupy approximately 80 percent of the total project area and open space would be approximately 20 percent. Residential development would include a variety of residential densities including low density detached single family residences, medium density with duplex and triplex homes, and mixed use condominiums with commercial space. There would be approximately 62 dwelling units and 10,000 square feet of commercial area. The area within the creek jurisdictional setbacks will be dedicated to the City to be preserved as open space (except areas of impact described below).

No residential development is proposed on the Imel property at this time. However, two infrastructure improvements are proposed on this property to provide access for residents. These two improvements are described below as Imel Property – "B" Street Culvert and Imel Property – "B" Street at Orcutt.



**Regional Location** 

1,750

Feet

Palmdale

210

Oxnard

Santa Barbara

Lompoc

101



Jones Study Area

#### **Biological Resources Assessment Report**



Imel Study Area

# **SECTION 2 - METHODOLOGY**

#### 2.1 REGULATORY OVERVIEW

Regulated or sensitive resources studied and analyzed herein include special status plant and wildlife species, raptors and other nesting birds, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees.

For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes (see Appendix A):

- Federal Endangered Species Act (FESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act

#### 2.2 DATABASE AND LITERATURE REVIEW

Rincon reviewed literature for baseline information on biological resources potentially occurring at the project site and in the surrounding area. The literature review included information available in peer reviewed journals, standard reference materials (e.g., Bowers et al. 2004; Burt and Grossenheider, 1980; Holland, 1986; Baldwin et al., 2012; Sawyer et al. 2009; Stebbins, 2003; American Ornithologists Union, 2010; United States Army Corps of Engineers, 2008).

Rincon also conducted a review of relevant databases of sensitive resource occurrences from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB) (California Department of Fish and Wildlife, 2014a) and Biogeographic Information and Observation System (BIOS) (California Department of Fish and Wildlife, 2014b); the California Native Plant Society Online Inventory of Rare Plants (California Native Plant Society Rare Plant Program, 2014); the U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (United States Fish and Wildlife Service, 2014a) and National Wetlands Inventory Wetlands Mapper (United States Fish and Wildlife Service, 2014b); and the United States Department of Agriculture, Natural Resource Conservation Service Web Soil Survey (United States Department of Agricultural, Natural Resources Conservation Service, 2014a). Other sources of information about the site included aerial photographs, topographic maps, geologic maps, climatic data, and project plans.

#### 2.3 FIELD SURVEYS

Rincon Project Manager/Regulatory Specialist Karen Holmes and Botanist Kristie Haydu conducted a reconnaissance field visit and a jurisdictional delineation within the Jones and Imel

properties on October 22, 2013. In addition, Rincon Principal/Senior Ecologist Colby J. Boggs, Senior Biologist/Botanist Meg Perry, and Associate Planner Christina McAdams conducted botanical surveys on both properties on March 25, May 2, and June 11, 2014. Finally, Karen Holmes conducted protocol-level burrowing owl surveys April 8, April 29, May 20, and June 17 2014.

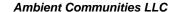
Methodology for the reconnaissance field visit and botanical surveys consisted of meandering transects were walked such that 100% visual inspection of the site was achieved. The jurisdictional delineation was also performed and site photographs were acquired. Plant species nomenclature and taxonomy followed The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al., 2012).

The burrowing owl surveys were conducted in accordance with Appendix D of the CDFW Staff Report on Burrowing Owl Mitigation (Staff Report) (California Department of Fish and Game, 2012). The Staff Report requires one site visit between 15 February and 15 April and three additional survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June. Survey methodology included walking line transects approximately 65 feet apart within areas of potential habitat, adjusting for extreme topography and vegetation height and density. At the start of each transect and, at least, every 300 feet, biologists scanned the entire visible project area for burrowing owls using binoculars. Surveys were generally conducted during conditions most suitable for detection, as specific in the Staff Report.

Jurisdictional Waters of the United States (U.S.) were delineated in accordance with the following:

- Wetlands Delineation Manual (Environmental Laboratory 1987);
- *Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest* (United States Army Corps of Engineers 2001);
- Regulatory Guidance Letter No. 05-05: Ordinary High Water Mark Identification (United States Army Corps of Engineers 2005);
- Distribution of Ordinary High Water Mark (OHWM) Indicators and Their Reliability in Identifying the Limits of "Waters of the United States" in Arid Southwestern Channels (United States Army Corps of Engineers 2006);
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (United States Army Corps of Engineers 2008a);
- A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (United States Army Corps of Engineers 2008b)
- Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (United States Army Corps of Engineers 2010); and
- Code of Federal Regulations sections that pertain to factors constituting the OHWM for non-wetland waters ("other waters") (33 CFR 328.3 and 33 CFR 328.4).

RWQCB jurisdiction was determined in accordance with the previously listed methodologies to identify waters of the U.S. and thus, mirrors the jurisdictional limits of federal jurisdiction pursuant to Section 401 of the CWA. The determination of RWQCB jurisdiction will follow such methods until the State Water Resources Control Board's Wetland and Riparian Area Protection Policy is fully developed and officially implemented. CDFW jurisdiction was



delineated in accordance with Section 1602(a) of the California Fish and Game Code. Final jurisdictional determinations of the boundaries of waters and riparian habitats are made by each agency, typically at the time that authorizations to impact such features are requested.

#### **SECTION 3 - EXISTING CONDITIONS**

This section provides a brief discussion of the existing conditions observed within the project area. Site photographs are located in Appendix B and a list of plant species observed is located in Appendix C.

#### 3.1 PHYSICAL CHARACTERISTICS

The study areas consist of the Jones and Imel properties, which are approximately 11.5 and 6.5 acres respectively (shown in Figures 2 and 3). The Jones property is mix of undeveloped land, rural residences, and storage units. The Imel property is mostly undeveloped with active cattle grazing. Residential structures exist on the east side of the property adjacent to Orcutt Road. The elevation of both properties ranges from approximately 241 feet to 284 feet above mean sea level. The study areas consist of generally flat topography with site drainage to the southwest. The Jones property has evidence of regular vegetation management and the Imel property is currently being used for cattle grazing. Properties in the vicinity of the site include residential/ranch properties to the south and east and mixed residential/commercial followed by Bullock Lane/UPRR and mixed commercial/industrial to the west and northwest.

#### 3.1.1 Watershed and Drainages

Two creeks flow through the Jones property in a southerly direction: an unnamed creek and one locally known as Barrandca creek. The unnamed creek joins Barrandca creek near the center of the Jones property and Barrandca creek exits the property at the southern end. There are also two creeks on the Imel property: locally known as Tanglewood creek and Crotalo creek. All creeks on both properties eventually connect to the East Fork of San Luis Obispo Creek. At the time of the site visit, no water was present within the creeks. According to the property owners, these creeks typically only have surface flows during and immediately following precipitation events. The creeks occupy a total of approximately 1,870 and 1,458 linear feet within the Jones and Imel properties respectively.

#### **3.1.2** Soils

Based on the *Soil Survey of San Luis Obispo County, California* (United States Department of Agriculture, Soil Conservation Service 1978), the Jones and Imel properties both contain two soil map units: Cropley clay, 2 to 9 percent slopes and Los Osos loam, 5 to 9 percent slopes (United States Department of Agriculture, Natural Resources Conservation Service, 2014).

#### Cropley clay, 2 to 9 percent slopes

Cropley clay soils are moderately well drained, clay soils originating from alluvium derived from sedimentary rock with 2 to 9 percent slopes. Cropley soils are typically used for irrigated row and truck crops, irrigated and dry pasture, apricots, prunes and for urban development.

Vegetation in uncultivated or undeveloped areas is annual grasses and forbs with some scattered live oak. This soil map unit is not included on the *National Hydric Soils List by State* (*April 2012*): *California* (United States Department of Agriculture, Natural Resources Conservation Service, 2012).

#### Los Osos loam, 5 to 9 percent slopes

Los Osos loam soils are well drained, loamy soils originating from residuum weathered from sandstone and shale with 5 to 9 percent slopes. Los Osos soils are typically used mostly for range, limited areas are cropped to grain and grass pasture. Vegetation is mostly annual grasses and forbs with some perennial grasses, coastal sagebrush, and live oak. This soil map unit is not included on the *National Hydric Soils List by State (April 2012): California* (United States Department of Agriculture, Natural Resources Conservation Service, 2012.

#### 3.2 **VEGETATION**

Vegetation classifications are based on the classification systems provided in *A Manual of California Vegetation, Second Edition* (Sawyer *et al.* 2009) and *Preliminary Descriptions of the Terrestrial Communities of California* (Holland 1986); but have been modified to reflect the existing site conditions. Not including the creeks and drainages, four habitat types or vegetation communities were observed within the study areas during the biological field surveys:

- Non-native annual grassland;
- Ruderal/developed;
- Eucalyptus; and
- Riparian woodland

The approximate acreages of each habitat type on each property are provided in Table 1 and shown on Figures 4 and 5.

Vegetation Community	Jones Property Area Onsite (acre)	Imel Property Area Onsite (acre)
Non-native annual grassland	6.63	4.49
Ruderal/developed	3.30	0.45
Eucalyptus	0.32	0.88
Riparian woodland	1.31	0.69
TOTAL	11.56	6.51

**Table 1 - Vegetation Communities** 

#### Non-native Annual Grassland

This habitat type is composed primarily of non-native grasses and forbs and lacks shrub or tree cover. This habitat type most closely resembles element #42200 Non-native grassland in the Holland system (Holland, 1986) and to the Annual Brome Grasslands, Semi-Natural Stands in the Manual of California Vegetation system (Sawyer *et al.*, 2009). Dominant species observed within this habitat type include: common wild oat (*Avena fatua*), false brome (*Brachypodium distachyon*), ripgut brome (*Bromus diandrus*), soft chess (*B. hordeaceus*), and wall barley (*Hordeum* 

murinum). Some isolated ornamental trees and shrubs are also scattered throughout this community on both properties. Within the Jones property, there are some areas of valley needlegrass grassland habitat scattered throughout the non-native annual grassland within this property. Approximately 6.63 and 4.49 acres of this vegetation community was mapped onsite on the Jones and Imel properties respectively. Trees and shrubs are absent within this habitat type and the perennial purple needlegrass (*Stipa pulchra*) is the dominant species observed within it. With the exception of purple needlegrass, the species composition of this vegetation community is similar to what was observed within the non-native annual grassland stands. The delineation of this habitat type was based on the presence of intact and readily visible purple needlegrass inflorescences. The MCV defines purple needlegrass grassland as stands that have at least 10 percent relative cover of this species within the herbaceous vegetation layer (Sawyer *et al.*, 2009). This habitat type most closely corresponds to element #42110, Valley Needlegrass Grassland in the Holland (1986) classification system and to the Purple Needlegrass Grassland Alliance in the MCV (Sawyer *et al.*, 2009). This habitat type is recognized as a sensitive natural community by the CDFW.

#### Ruderal/Developed

Given that this community type is not naturally occurring, it is not described in either the Holland (1986) or Sawyer *et al.* (2009) classification systems. Non-native grasses such as rip-gut brome, and wild oat occur in this area, however cover by plant species is generally low and there is a high percentage of bare soil along with residential and storage unit developments. Some areas comprised of ornamental trees and shrubs also occur in association with the rural residences on both properties. Approximately 3.30 and 0.45 acres of this vegetation community was mapped onsite on the Jones and Imel properties respectively.

#### **Eucalyptus**

Eucalyptus is a woodland habitat type that has become naturalized in California since eucalyptus trees (*Eucalyptus* sp.) were first introduced to the state in the mid to late 1800's. Stands of eucalyptus habitat were observed on both properties. In some areas, eucalyptus woodland surrounds the creeks and appears to have replaced the riparian woodland that is typically associated with these aquatic features. This habitat type is dominated by mature eucalyptus trees and lacks under-story species within the shrub or herbaceous layers of this community. The eucalyptus stands observed within the properties do not correspond to any of the recognized elements in the Holland (1986) classification system and they most closely correspond to Eucalyptus Groves, Semi-Natural Woodland Stands in the MCV (Sawyer *et al.*, 2009). Approximately 0.32 and 0.88 acres of this vegetation community was mapped onsite on the Jones and Imel properties respectively.

#### Riparian Woodland

Riparian woodland habitat surrounds portions of the creeks that occur within both properties. This habitat type is dominated by western sycamore (*Platanus racemosa*), California bay (*Umbellularia californica*), and arroyo willow (*Salix lasiolepis*) in many areas. However, some areas within the riparian woodland community type have become invaded by non-native trees including eucalyptus, Peruvian pepper tree (*Schinus molle*), and Chilean pepper tree (*S. polygamous*), particularly on the Imel property and the southern end of the Jones property. The understory of this community varied widely but was generally dominated by western poison



Natural Communities - Jones Study Area



Natural Communities - Imel Study Area

oak (*Toxicodendron diversilobum*) on the Jones property, while the riparian woodland habitat on the Imel property generally lacked an understory. The riparian woodland habitat type onsite does not closely correspond to any of the elements presented in the Holland (1986) classification system; although it is similar to element #61210, Central Coast Cottonwood – Sycamore Riparian Forest due to the presence of western sycamore and to element #61230, Central Coast Arroyo Willow Riparian Forest due to the presence of arroyo willow. Similarly, this habitat type does not closely correspond to an alliance or other recognized stand in the Sawyer *et al.* (2009) classification system; but it is related to the California Sycamore Woodland Alliance and to the Red Willow Woodland Alliance on the basis of western sycamore and arroyo willow being two of the dominant species observed, respectively. Approximately 1.31 and 0.69 acres of this vegetation community was mapped onsite on the Jones and Imel properties respectively.

#### 3.3 GENERAL WILDLIFE

Wildlife activity within the project area during surveys was relatively low, although vegetation onsite likely supports a suite of passerine species. Appropriately timed focused avian surveys would likely reveal additional bird species utilizing scrub habitats. Wildlife species observed within the project site during surveys for this report were mostly limited to common avian species. A complete list of species observed can found in Appendix C. Special status species are discussed below in Section 4.

#### SECTION 4 - SENSITIVE BIOLOGICAL RESOURCES

This section discusses special status or sensitive biological resources observed on the project site, and evaluates the potential for the project site to support other sensitive or special status biological resources. Figure 6 shows sensitive elements tracked by the CNDDB within five miles of the project site. The project area was evaluated for the potential support these resources.

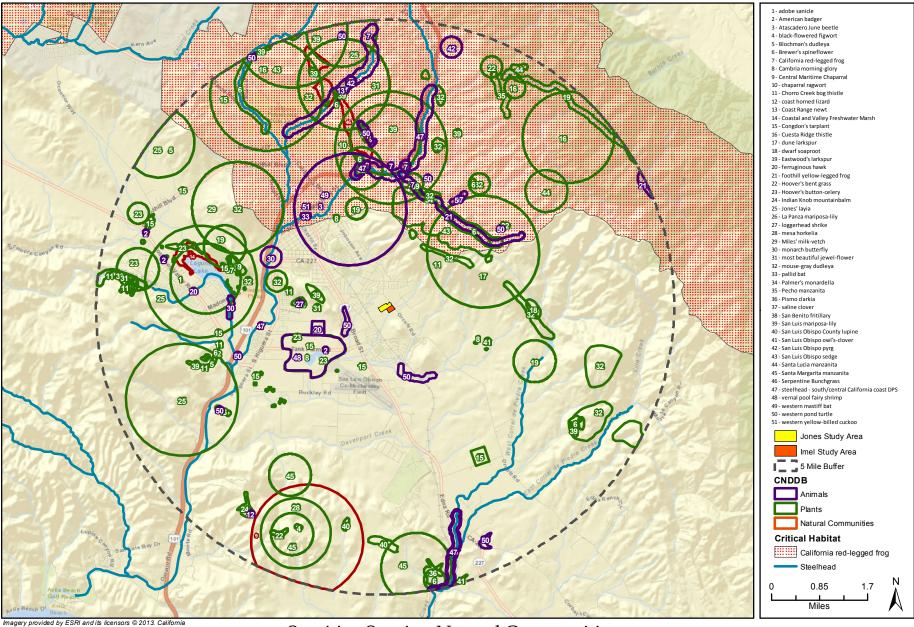
#### 4.1 SPECIAL STATUS SPECIES

#### 4.1.1 Special Status Plant Species

Based on the database and literature review, there are numerous special status plant species known to or have the potential to occur within the vicinity (within five miles) of the project site (Appendix D). Of these, only nine special status plant species may occur onsite based on the presence of suitable habitat:

- Hoover's bent grass (Agrostis hooveri), California Rare Plant Rank (CRPR List 1B.2);
- San Luis mariposa-lily (Calochortus obispoensis), CRPR List 1B.2;
- Cambria morning-glory (Calystegia subacaulis ssp. episcopalis), CRPR List 4.2;
- San Luis Obispo sedge (Carex obispoensis), CRPR List 1B.2;
- San Luis Obispo owl's-clover (Castilleja densiflora ssp. obispoensis), CRPR List 1B.2;
- Congdon's tarplant (Centromadia parryi ssp. congdonii), CRPR List 1B.1;
- Pappose tarplant (Centromadia parryi ssp. parryi), CRPR List 1B.2;
- Black-flowered figwort (*Scrophularia atrata*), CRPR List 1B.2;

#### **Biological Resources Assessment Report**



Imagery provided by ESRI and its licensors © 2013. California Natural Diversity Database. December, 2013. Additional suppressed records reported by the CNNDB known to occur or potentially occur within this search radius include: Prairie Falcon U.S. Fish and Wildlife Service, November 2013.

Sensitive Species, Natural Communities, and Designated Critical Habitats

• Chaparral ragwort (Senecio aphanactis), CRPR List 2.2;

However, botanical surveys were conducted during the bloom period of all species known to occur within the vicinity and no special status species were observed, with the exception of Cambria morning-glory, which was observed on both properties. Cambria morning-glory is a plant species that has a limited distribution and CRPR List 4 is regarded as a 'watch list.' CRPR List 3 and List 4 plant species are typically not considered rare or endangered pursuant to the California Environmental Quality Act (CEQA).

#### 4.1.2 Special Status Wildlife Species

No special status animal species were observed during the site reconnaissance visit. Based on the database and literature review, there are numerous special status wildlife species known or have the potential to occur within the vicinity of the project site (Appendix D). Of these, eight species may occur onsite based on the presence of suitable habitat:

- Cooper's hawk (Accipiter cooperii), CSSC;
- Sharp shinned hawk (Accipiter striatus), CSSC;
- burrowing owl (Athene cunicularia), CSSC;
- Ferruginous hawk (Buteo regalis), CSSC;
- White-tailed kite (*Elanus leucurus*), FSC/FP;
- California horned lark (Eremophila alpestris actia), CSSC;
- Merlin (Falco columbarius), CSSC;
- Loggerhead shrike (Lanius ludovicianus), FSC/CSSC;

None of these species were observed during surveys on either property and neither property is within any federally designated critical habitat areas.

#### 4.2 SENSITIVE PLANT COMMUNITIES

According to the CNDDB, three sensitive plant communities have been previously documented within a five-mile radius the project site (Figure 6). These include: Central Maritime Chaparral, Coastal and Valley Freshwater Marsh, and Serpentine Bunchgrass. No sensitive plant communities have been previously documented within the project site and none of these three previously documented sensitive plant communities were observed onsite during the spring 2013 biological field surveys. However, the valley needlegrass grassland, the seasonal wetland, and the riparian woodland habitat types observed onsite are considered sensitive natural communities by CDFW.

# 4.3 JURISDICTIONAL AREAS

Based upon the analysis of Rincon's jurisdictional delineation, there are other waters of the U.S. considered to be subject to USACE and RWQCB jurisdictions on both properties. In addition, streambeds and riparian habitats subject to CDFW jurisdiction were also identified within both properties. Note the final jurisdictional determinations of the boundaries of wetlands, waters, and riparian habitat are made by each agency, typically at the time that authorizations to impact

such features are requested. Table 2 summarizes the total area and length of each type of jurisdictional feature onsite.

Table 2 - Summary of Potentially Jurisdictional Wetlands, Waters and Riparian Habitats

Jurisdictional Type	Jones Property Area On-site (acre)	Imel Property Area On-site (acre)
USACE/RWQCB Jurisdiction	0.14 acre	0.17 acre
Other Waters and Drainages	1,870 linear feet	1,458 linear feet
CDFW Jurisdiction	1.36 acres	1.04 acres
Streambed and Riparian Habitats	1,870 linear feet	1,458 linear feet

The unnamed creek and Barrandca creek on the Jones property and Tanglewood creek and Crotalo creek on the Imel property are considered other waters of the U.S. and subject to USACE and RWQCB jurisdiction within the project. OHWM physical characteristics documented include a change in sediment texture, change in vegetation cover, a break in bank slope, presence of bed and bank, soil development, and surface relief. The creeks also have clear bed and banks and provide potential habitat for various aquatic, semi-aquatic and terrestrial wildlife species, and therefore fall under the jurisdiction of CDFW. The riparian woodland adjacent to the creeks also provide habitat for wildlife species and is also under the jurisdiction of CDFW.

#### 4.4 WILDLIFE MOVEMENT

Ephemeral creeks and open grasslands can provide wildlife movement corridors and are important in linking non-contiguous or fragmented wildlife habitats. The creeks within the project area are minor features with minimal contribution to wildlife movement due to the limited and fragmented riparian habitat. There are no existing barriers to wildlife movement within the project area.

#### 4.5 RESOURCES PROTECTED BY LOCAL POLICIES

The City regulates tree removal within its jurisdiction. Implementation of the proposed project may require removal of several trees onsite. If tree removal is required, a tree removal permit must be obtained from the City prior to the onset of these activities. Once the project plans have been finalized, the exact number, type, and locations of trees within the project site to be removed can be determined and the associated tree removal permit may be obtained, if needed.

# SECTION 5 - IMPACT ANALYSIS AND MITIGATION MEASURES

The criteria used to evaluate potential project-related impacts to biological resources are presented in Section 2.1. This section discusses the possible adverse impacts to biological resources that may occur from implementation of the proposed project and suggests appropriate avoidance, minimization, and mitigation measures.

#### 5.1 SPECIAL STATUS SPECIES

The proposed project would not result in any adverse impacts to special status plant species, based on negative findings of site surveys (Section 4.1.1). Implementation of the proposed project does, however, have the potential to result in direct and/or indirect, adverse impacts to special status birds and nesting birds, if present (Section 4.1.2). Accordingly, potential impacts to and recommended mitigation measures for special status animals are presented below.

#### 5.1.1 Special Status Birds

The proposed project has potential to result in direct impacts to nesting birds, including specialstatus birds, if they are nesting within the project site and/or immediate vicinity during construction activities.

#### **Recommended Avoidance and Minimization Measures**

- To avoid take of nesting birds, and raptor nests at any time of year (including inactive nests), vegetation disturbance, site access, and initial ground disturbance shall occur outside the nesting season, which is approximately February 1 through September 15. If construction must begin within the bird breeding season, then no more than two weeks prior to initiation of ground disturbance and/or vegetation removal, a nesting bird preconstruction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer. Pre-construction nesting bird surveys shall be conducted during the time of day when birds are active and shall be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors onsite and within the designated vicinity. If no nests are observed no further mitigation is required.
- If nests are found, their locations shall be flagged and then mapped onto an aerial photograph of the project site at a scale no less than 1"=200' and/or recorded with the use of a Global Positioning System (GPS) unit. An appropriate avoidance buffer ranging in size from 300 to 500 feet from the nest, depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other high-visibility delineators. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed and all the young have fledged. If buffer zones are determined to be infeasible, a full-time qualified biological monitor must be onsite to monitoring construction within the buffer zones to ensure active nests and nesting birds are not impacted.

Implementation of these recommended measures would avoid and/or minimize potential impacts to nesting birds, including special-status birds.

#### 5.2 SENSITIVE PLANT COMMUNITIES

The proposed project has potential to result in direct impacts to two sensitive habitat types: valley needlegrass grassland and riparian woodland. Potential project-related impacts to riparian woodland are addressed under Section 5.3 below. Valley needlegrass grassland is

recognized as a sensitive natural community by the CDFW. Potential impacts to valley needlegrass grassland resulting from implementation of the proposed project are potentially significant. Mitigation measures are needed to reduce these potential impacts to less than significant levels and are recommended below.

#### **Recommended Mitigation Measures**

- To the maximum extent feasible, the project site plans shall be modified and reconfigured to avoid valley needlegrass grassland habitat. If valley needlegrass grassland habitat areas cannot be avoided, and are less than 0.5 acre in size, then purple needlegrass shall be incorporated into the landscaping plant palette and the erosion control plan to functionally replace the impacted habitat. However, if valley needlegrass grassland habitat areas cannot be avoided, and are greater than 0.5 acre in size, then an equivalent amount of this habitat type must be created within a City-designated and approved valley needlegrass grassland habitat mitigation area onsite.
- Pertinent and logistic details regarding the creation of valley needlegrass grassland habitat shall be outlined in a Habitat Mitigation and Monitoring Plan for this sensitive resource. This Plan will be approved by the City prior to its implementation and shall include the following:
  - o Overall goals and measurable plan objectives,
  - o Identification of specific areas for mitigation,
  - Specific habitat management and protection concepts that will be used to ensure the long term maintenance and continued protection of valley needlegrass grassland habitat,
  - o Success criteria to be met,
  - o An education program for residents,
  - o Reporting requirements, and
  - o Identification of funding mechanisms.
- The valley needlegrass grassland habitat mitigation areas shall be monitored annually for at least five years to ensure successful establishment and that no-net-loss of this sensitive habitat has been achieved.
- To ensure no-net-loss of valley needlegrass grassland habitat, the applicant shall create one acre of mitigation habitat for every one acre of valley needlegrass grassland habitat impacted by implementation of the project.
- A copy of all permits, or other correspondence stating that no permit is necessary, shall
  be filed with the City prior to project implementation. The City shall ensure that all the
  required documentation is received prior to initiation of construction activities and shall
  oversee implementation of the Valley Needlegrass Grassland Habitat Mitigation and
  Monitoring Plan. Likewise, the City shall ensure that all the avoidance, minimization,
  and/or mitigation measures prescribed are fully implemented.

Implementation of these recommended mitigation measures would reduce potential impacts to valley needlegrass grassland habitat to less than significant levels.

### 5.3 JURISDICTIONAL WATERS AND STREAMBEDS

The proposed project has potential to result in direct impacts to jurisdictional areas, including other waters and riparian habitats. Approximately 0.14 acre and 0.17 acre of other waters and 1.36 acres and 1.04 acres of streambed/riparian habitat were delineated on the Jones and Imel properties respectively.

Note the final jurisdictional determinations of the boundaries of wetlands, waters, and riparian habitat are made by each agency, typically at the time that authorizations to impact such features are requested. The exact location and size of impact is unknown, but the project is likely to impact some portions of these jurisdictional features. However, the project has been designed to avoid impacts to the majority of the waters and streambed/riparian habitat. Impacts to jurisdictional areas resulting from implementation of the proposed project are potentially significant. Mitigation measures are necessary to reduce these potential impacts to less than significant levels and are recommended below.

#### **Recommended Mitigation Measures**

- Trails shall be setback out of riparian habitat and out of the buffer area. The trail shall be a minimum distance of 20 feet from top of bank or from the edge of riparian canopy, whichever is farther. Trails shall be setback from wetland habitat at a minimum distance of 30 feet and shall not be within the buffer. Native plant species that will deter human disturbance shall be planted in the area between the trail and the wetland/riparian habitat including plants such as California rose (*Rosa californica*) and California blackberry (*Rubus ursinus*). No passive recreational use shall be allowed in the riparian or wetland habitats or drainage corridors.
- Development that abuts riparian and wetland mitigation areas shall also be setback at least 20 feet, and be buffered by an appropriately-sized fence and/or plants that deter human entry.
- Jurisdictional areas that cannot be avoided shall require for all applicable regulatory permits. Compensatory mitigation will be implemented onsite at a minimum ratio of 2:1 to offset unavoidable permanent impacts to jurisdictional areas. Note the resource agencies may require a higher mitigation ratio. A Mitigation and Monitoring Plan shall be prepared by a biologist familiar with restoration and mitigation techniques. The plan shall include, but not be limited to the following components:
  - o Description of the project/impact site,
  - o Goal(s) of the compensatory mitigation project,
  - o Description of the proposed compensatory mitigation-site,
  - o Implementation plan for the compensatory mitigation-site,
  - Maintenance activities during the monitoring period,
  - o Monitoring plan for the compensatory mitigation-site,
  - o Success criteria and performance standards,
  - Reporting requirements, and
  - o Contingency measures and funding mechanisms.
- In addition, erosion control and landscaping specifications included in the mitigation plan shall allow only natural-fiber, biodegradable meshes and coir rolls, to prevent impacts to the environment and to fish and terrestrial wildlife.

Implementation of these recommended mitigation measures would reduce potential impacts to special status plants to less than significant levels.

#### 5.4 WILDLIFE MOVEMENT

The proposed project is not located within any known regional wildlife movement corridors (Section 4.4), and would not affect movement of aquatic and semi-aquatic species. Therefore, no avoidance, minimization or mitigation measures are required.

#### 5.5 RESOURCES PROTECTED BY LOCAL POLICIES

As previously mentioned, the City regulates tree removal within its jurisdiction. If tree removal is required, a tree removal permit must be obtained from the City prior to the onset of these activities to ensure the project is consistent with local policies.

#### 5.6 CONSERVATION PLANS

The Proposed Project would not conflict with existing conservation plans. Therefore, no avoidance, minimization, or mitigation measures are required.

# SECTION 6 - LIMITATIONS, ASSUMPTIONS, AND USER RELIANCE

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Biological surveys for the presence or absence of certain taxa have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis, or reestablish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

# **SECTION 7 - REFERENCES**

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. *The Jepson Manual: Vascular Plants of California, second edition*. University of California Press, Berkeley, CA.
- California Department of Fish and Wildlife. 2010. *List of Vegetation Alliances and Associations*. Vegetation Classification and Mapping Program, Sacramento, CA. September 2010.
- California Department of Fish and Wildlife. 2011. *Special Animals List*. Biogeographic Data Branch, California Natural Diversity Database. January 2011.
- California Department of Fish and Wildlife. 2014a. California Natural Diversity Database (CNDDB), Rarefind 5 (online). Commercial Version. Accessed April 22, 2014.
- California Department of Fish and Wildlife. 2014b. Biogeographic Information and Observation System (BIOS). Accessed March 14, 2014 from http://bios.dfg.ca.gov
- California Invasive Plant Council. 2014. California Invasive Plant Inventory Database (online edition). Accessed April 22, 2014 from http://www.cal-ipc.org/paf/
- California Native Plant Society, Rare Plant Program. 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Accessed April 23,2014 from http://www.rareplants.cnps.org.
- Holland, Robert F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game, Nongame Heritage Program.
- Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, Second Edition*. California Native Plant Society, Sacramento, California.
- United States Department of Agricultural, Natural Resources Conservation Service. 2014a. *Web Soil Survey*. Accessed April 22, 2014. Available at: http://websoilsurvey.nrcs.usda.gov/app/.
- United States Department of Agriculture, Natural Resources Conservation Service. 2014b. *Lists of Hydric Soils*. National Cooperative Soil Survey, U.S. Department of Agriculture. Accessed April 22, 2014. Available at: http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/.
- United States Fish and Wildlife Service. 1973. *The Endangered Species Act of* 1973, as amended (16 U.S.C 1531 et seq.).
- United States Fish and Wildlife Service. 2014a. *Critical Habitat Portal*. Available at: http://criticalhabitat.fws.gov
- United States Fish and Wildlife Service. 2014b. *National Wetland Inventory*. Available at: http://www.fws.gov/wetlands/Data/Mapper.html.



# **SECTION 8 - LIST OF PREPARERS**

#### RINCON CONSULTANTS, INC.

- Primary Authors:
  - o Karen Holmes, Project Manager/Regulatory Specialist
- Technical Review:
  - o Colby J. Boggs, Principal/Senior Ecologist
- Graphics:
  - o Craig Huff, Program Manager Information Technology and Graphics Services
- Field Surveys:
  - Meg Perry, Senior Biologist/Botanist
  - o Karen Holmes, Project Manager/Regulatory Specialist
  - o Kristie Haydu, Botanist
  - o Colby J. Boggs, Principal/Senior Ecologist
  - o Christina McAdams, Associate Planner

# Appendix A Regulatory Setting

#### **REGULATORY SETTING**

Special-status habitats are vegetation types, associations, or sub-associations that support concentrations of special-status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g. U.S. Fish and Wildlife Service [USFWS]), pursuant to the Federal Endangered Species Act (FESA) or as endangered, threatened, or rare (for plants only) by the State of California (i.e. California Fish and Game Commission), pursuant to the California Endangered Species Act or the California Native Plant Protection Act. Some species are considered rare (but not formally listed) by resource agencies, organizations with biological interests/expertise (e.g. Audubon Society, CNPS, The Wildlife Society), and the scientific community.

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States);
- Regional Water Quality Control Board (waters of the State);
- U.S. Fish and Wildlife Service (federally listed species and migratory birds);
- California Department Fish and Wildlife (riparian areas and other waters of the State, state-listed species);

<u>U.S. Army Corps of Engineers.</u> Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that could discharge fill of material or otherwise adversely modify wetlands or other "waters of the United States." Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters. The USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetland value or acres. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any fill or adverse modification of wetlands that are hydrologically connected to jurisdictional waters would require a permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through compensatory mitigation involving creation or enhancement of similar habitats.

Regional Water Quality Control Board. The State Water Resources Control Board (SWRCB) and the local Central Coast Regional Water Quality Control Board (RWQCB) have jurisdiction over "waters of the State," pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to "isolated" waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction).

The Central Coast RWQCB enforces actions under this general order for isolated waters not subject to federal jurisdiction, and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

<u>United States Fish and Wildlife Service</u>. The USFWS implements the Migratory Bird Treaty Act (16 United States Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the Federal Endangered Species Act (FESA) (16 USC § 153 et seq.). The USFWS generally implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any federally listed threatened or endangered species are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of FESA, depending on the involvement by the federal government in permitting and/or funding of the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of FESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

<u>California Department of Fish and Wildlife.</u> The CDFW derives its authority from the Fish and Game Code of California. The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 *et. seq.*) prohibits take of state listed threatened, endangered or fully protected species. Take under CESA is restricted to direct mortality of a listed species and does not prohibit indirect harm by way of habitat modification. The CDFW also prohibits take for species designated as Fully Protected under the Code.

California Fish and Game Code sections 3503, 3503.5, and 3511 describe unlawful take, possession, or destruction of birds, nests, and eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Species of Special Concern (SSC) is a category used by the CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that which may be afforded by the Fish and Game Code as noted above. The SSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands.

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 *et seq.*). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the department at least 10 days in advance of changing the land

use to allow for salvage of plant. Special status plant species are given a California Rare Plant Rank (CRPR) code. The code definitions are:

- List 1A = Plants presumed extinct in California;
- List 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- List 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);
- List 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known);
- List 2 = Rare, threatened or endangered in California, but more common elsewhere;
- List 3 = Plants needing more information (most are species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA);
- List 4.2 = Plants of limited distribution (watch list), fairly endangered in California (20-80% occurrences threatened); and
- List 4.4= Plants of limited distribution (watch list), not very endangered in California (<20% occurrences threatened or no current threats known).

Perennial and intermittent streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 et seq. of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

# Appendix B Site Photographs

rincon



Photo 1. View of non-native annual grassland on the Jones property.



Photo 2. View of existing debris on the Jones property with eucalyptus in the background.



Photo 3. View of Crotalo creek and eucalyptus on the Imel property.



Photo 4. View of non-native grassland on the Imel property with mixed woodland in the background.

# Appendix C Floral and Fauna Compendia

rincon

	Botanicai Sur	veys Spring 20	14	T	1
Family	Scientific Name	Common Name	Jones	Imel	Communities
Agavaceae	Chlorogalum pomeridianum var. pomeridianum	soap root		X	Grassland
Amaranthaceae	Amaranthus albus*	Tumbleweed	Х		Ruderal
Anacardiaceae	Schinus molle**	Peruvian pepper tree	Х	Х	Mixed Riparian, Anthropogenic (Landscape)
Anacardiaceae	Schinus polygamus*	Chilean pepper tree	X	X	Mixed Riparian
Anacardiaceae	Schinus terebinthifolius**	Brazilian pepper tree	Х		Mixed Riparian
Anacardiaceae	Toxicodendron diversilobum	western poison oak	Х		Mixed Riparian
Apiaceae	Foeniculum vulgare**	fennel	Х		Grassland
Apiaceae	Lomatium utriculatum	biscuit root	Х	Х	Grassland
Apiaceae	Torilis arvensis**	hedge parsley	Х		Mixed Riparian
Apocynaceae	Asclepias fascicularis	narrow-leaf milkweed	Х	Х	Grassland
Apocynaceae	Vinca major**	periwinkle		Х	Mixed Riparian
Arecaceae	Phoenix canariensis**	Canary Island palm	Х		Mixed Riparian
Arecaceae	Washingtonia robusta**	Mexican fan palm	Х		Mixed Riparian
Asparagaceae	Asparagus asparagoides**	florist's smilax	X		Mixed Riparian
Asteraceae	Ambrosia psilostachya	western ragweed	Х		Ruderal, Grassland
Asteraceae	Anthemis cotula*	mayweed		Х	Ruderal, Grassland
Asteraceae	Artemisia californica	California sagebrush	Х		Mixed Riparian, Grassland
Asteraceae	Artemisia douglasiana	Mugwort		Х	Mixed Riparian
Asteraceae	Baccharis pilularis	coyote brush	Х		Ruderal, Grassland
Asteraceae	Carduus pycnocephalus**	Italian thistle		Х	Grassland
Asteraceae	Helminthotheca echioides**	bristly ox- tongue	Х		Grassland
Asteraceae	Hemizonia congesta ssp. luzulifolia	hayfield tarweed	Х	X	Grassland
Asteraceae	Hypochaeris glabra**	smooth cat's ear		Х	Grassland
Asteraceae	Lactuca serriola*	prickly lettuce	Х	Χ	Grassland
Asteraceae	Logfia gallica*	Herba impia		Х	Grassland
Asteraceae	Matricaria discoidea*	pineapple weed	Х	Х	Ruderal, Grassland
Asteraceae	Pseudognaphalium luteoalbum*	cudweed	Х		Grassland
Asteraceae	Silybum marianum**	milk thistle		X	Mixed Riparian
Asteraceae	Sonchus asper*	prickly sow thistle	Х		Grassland
Asteraceae	Sonchus oleraceus*	common sow thistle	Х	Х	Grassland
Asteraceae	Tragopogon porrifolius*	salsify	Х		Grassland

	Botanical Surveys Spring 2014								
Family	Scientific Name	Common Name	Jones	Imel	Communities				
Asteraceae	Xanthium strumarium	cocklebur	X		Grassland				
Brassicaceae	Hirschfeldia incana**	perennial mustard	Х		Ruderal				
Brassicaceae	Lepidium dictyotum	peppergrass	Х		Grassland				
Brassicaceae	Raphanus sativus**	Wild radish	Х	Х	Grassland, Mixed Riparian				
Cactaceae	Opuntia ficus-indica*	Prickly-pear	Х		Ruderal, Grassland				
Caprifoliaceae	Lonicera japonica*	honeysuckle	X		Mixed Riparian				
Caryophyllaceae	Polycarpon tetraphyllum*	fourleaf allseed	Х		Ruderal				
Caryophyllaceae	Silene gallica*	windmill pinks		Χ	Grassland				
Caryophyllaceae	Spergularia rubra*	sand spurrey	Х		Ruderal, Grassland				
Chenopodiaceae	Atriplex semibaccata**	Australian saltbush	Х		Grassland				
Chenopodiaceae	Chenopodium album*	lamb's quarters		Х	Grassland, Mixed Riparian				
Convolvulaceae	Calystegia macrostegia ssp. cyclostegia	morning glory	Х		Grassland, Mixed Riparian				
Convolvulaceae	Calystegia subacaulis ssp. episcopalis	Cambria morning glory	Х	Х	Grassland				
Convolvulaceae	Convolvulus arvensis*	bindweed	Х	Х	Ruderal, Grassland, Mixed Riparian				
Cyperaceae	Cyperus eragrostis	flat sedge	X		Mixed Riparian				
Cyperaceae	Cyperus involucratus*	umbrella sedge	Х		Mixed Riparian				
Cyperaceae	Eleocharis macrostachya	spikerush	Х		Mixed Riparian				
Dipsacaceae	Dipsacus sativus**	Fullers teasel	Х	Х	Grassland				
Euphorbiaceae	Croton setiger	dove weed		Х	Grassland				
Euphorbiaceae	Euphorbia maculata*	spotted spurge	Х		Ruderal, Grassland				
Euphorbiaceae	Euphorbia oblongata**	eggleaf spurge	Х	Х	Mixed Riparian				
Euphorbiaceae	Euphorbia peplus*	petty spurge	Х		Ruderal, Grassland				
Fabaceae	Acmispon americanus	Spanish clover	Х		Grassland				
Fabaceae	Genista monspessulana**	French broom	Х		Grassland, Mixed Riparian				
Fabaceae	Lathyrus tingitanus*	Tangier pea	Х		Grassland				
Fabaceae	Medicago polymorpha**	bur clover	Х	Х	Ruderal, Grassland				
Fabaceae	Trifolium fragiferum*	strawberry clover		Х	Grassland				
Fabaceae	Vicia sativa ssp. sativa*	winter vetch	Х		Grassland				
Fabaceae	Vicia villosa ssp. varia*	hairy vetch	Х		Grassland				
Fagaceae	Quercus agrifolia	Coast live oak	Х	Х	Mixed Riparian, Grassland				
Fagaceae	Quercus macrocarpa*	bur oak		Х	Anthropogenic (Landscape)				
Geraniaceae	Erodium botrys*	Storksbill	Х	Χ	Grassland				

	Botanicai Sui	rveys Spring 20	14	1	1
Family	Scientific Name	Common Name	Jones	Imel	Communities
Geraniaceae	Erodium cicutarium**	redstem filaree	Х		Ruderal
Geraniaceae	Geranium dissectum**	cut-leaf geranium	Х	Х	Grassland
Iridaceae	Sisyrinchium bellum	blue-eyed grass	Х		Grassland
Juglandaceae	Juglans californica	Southern California black walnut	Х	Х	Mixed Riparian
Lamiaceae	Marrubium vulgare**	horehound	Х	X	Ruderal, Grassland
Lamiaceae	Trichostema lanceolatum	vinegar weed	Х		Grassland
Lauraceae	Umbellularia californica	California bay laurel		Х	Mixed Riparian
Lythraceae	Lythrum hyssopifolia**	loosestrife	Х		Mixed Riparian
Malvaceae	Malva nicaeensis*	bull mallow	Х		Ruderal, Grassland
Melanthiaceae	Toxicoscordion fremontii	death camas	Х		Grassland
Meliaceae	Melia azedarach*	Chinaberry	Х		Anthropogenic (Landscape)
Moraceae	Morus alba*	mulberry		Х	Mixed Riparian
Myrsinaceae	Anagallis arvensis*	scarlet pimpernel	Х	Х	Ruderal
Myrtaceae	Eucalyptus globulus*	blue gum	Х	Х	Mixed Riparian, Eucalyptus grove
Onagraceae	Epilobium brachycarpum	willow-herb	Х		Grassland
Oxalidaceae	Oxalis corniculata*	sorrel	0.5		Grassland
Oxalidaceae	Oxalis pes-caprae**	Bermuda buttercup	Х		Grassland, Mixed Riparian
Papaveraceae	Eschscholzia californica	California poppy	Х		Ruderal
Plantaginaceae	Kickxia elatine*	Kickxia	Х		Mixed Riparian
Plantaginaceae	Plantago coronopus*	plantain	Х		Mixed Riparian
Plantaginaceae	Plantago lanceolata**	English plantain	Х	Х	Ruderal, Grassland
Platanaceae	Platanus racemosa	sycamore	Х	Х	Mixed Riparian
Poaceae	Avena barbata**	slender wild oat	Х	Х	Ruderal, Grassland
Poaceae	Avena fatua**	wild oat	Х	Х	Grassland
Poaceae	Brachypodium distachyon**	false brome	Х	Х	Grassland
Poaceae	Bromus diandrus**	ripgut brome	Х	Х	Ruderal
Poaceae	Bromus hordeaceus**	soft chess	Х	Χ	Grassland
Poaceae	Bromus madritensis ssp. rubens**	red brome		Х	Ruderal
Poaceae	Cynodon dactylon**	Bermuda grass	Х		Grassland
Poaceae	Elymus triticoides	creeping wild	Х		Grassland
Poaceae	Festuca arundinacea**	tall fescue	Х		Mixed Riparian
Poaceae	Festuca myuros**	rattail fescue	Х	Х	Ruderal
Poaceae	Festuca perennis**	Ryegrass	Х	Х	Grassland, Mixed Riparian

- " Common								
Family	Scientific Name	Name	Jones	Imel	Communities			
Poaceae	Gastridium ventricosum*	nit grass		Х	Grassland			
Poaceae	Hordeum brachyantherum	meadow barley		Χ	Grassland			
Poaceae	Hordeum marinum**	seaside barley	Х		Grassland			
Poaceae	Hordeum murinum ssp. leporinum**	hare barley	Х	Х	Grassland			
Poaceae	Pennisetum clandestinum**	Kikuyu grass	Х		Mixed Riparian			
Poaceae	Phalaris aquatica**	Harding grass	Х		Grassland			
Poaceae	Polypogon interruptus*	beardgrass	Х		Mixed Riparian			
Poaceae	Polypogon monspeliensis**	rabbitsfoot grass	Х		Mixed Riparian			
Poaceae	Stipa miliacea**	smilo grass	Х	Χ	Grassland			
Poaceae	Stipa pulchra	purple needlegrass	Х	Х	Grassland			
Polygonaceae	Polygonum aviculare*	common knot weed	Х		Ruderal			
Polygonaceae	Rumex conglomeratus*	cluster dock	Х		Mixed Riparian			
Polygonaceae	Rumex crispus**	curly dock	Х		Grassland			
Polygonaceae	Rumex pulcher*	fiddle dock	Х	Χ	Grassland			
Ranunculaceae	Ranunculus californicus	California buttercup	Х		Grassland			
Rhamnaceae	Frangula californica	coffeeberry	Х		Mixed Riparian, Grassland			
Rosaceae	Cotoneaster lacteus**	Cotoneaster	Х		Mixed Riparian			
Rosaceae	Heteromeles arbutifolia	toyon	Х		Mixed Riparian			
Rosaceae	Prunus ilicifolia	holly-leaf cherry		Х	Anthropogenic (Landscape)			
Rosaceae	Rosa banksiae*	Lady Banks' rose	X		Mixed Riparian, Anthropogenic (Landscape)			
Salicaceae	Salix laevigata	red willow	Х	Χ	Mixed Riparian			
Salicaceae	Salix lasiolepis	arroyo willow	Х	Х	Mixed Riparian			
Scrophulariaceae	Myoporum laetum**	Lollipop tree		Х	Anthropogenic (Landscape)			
Tropaeolaceae	Tropaeolum majus*	garden nasturtium	Х		Mixed Riparian			
Ulmaceae	Ulmus sp.	elm	Х		Anthropogenic (Landscape)			
Zygophyllaceae	Tribulus terrestris**	puncture vine	X		Ruderal			

A complete inventory of all landscape plants in clearly maintained areas was not made; landscape/ornamental species inventoried occur at interfaces or within areas of natural vegetation.

<sup>\*</sup> Non-native

<sup>\*\*</sup> California Invasive Plant Council. http://www.cal-ipc.org/paf/

Wildlife Species Observed With in the Jones and Imel Properties Wildlife and Burrowing Owl Surveys Spring 2014

Scientific Name	Common Name	Jones	Imel
Corvus brachyrhynchos	American Crow	Х	Х
Turdus migratorius	American Robin	Х	Х
Calypte anna	Anna's Hummingbird	Х	Х
Sayornis nigricans	Black Phoebe	Х	Х
Euphagus cyanocephalus	Brewer's Blackbird		Х
Icterus bullockii	Bullock's oriole	X	
Psaltriparus minimus	Bushtit	X	Х
Melozone crissalis	California Towhee	Х	Х
Sturnus vulgaris	European Starling	Х	Х
Bubo virginianus	Great Horned Owl		Х
Haemorhous mexicanus	House Finch	X	Х
Spinus psaltria	Lesser Goldfinch		Х
Zenaida macroura	Mourning Dove	X	Х
Mimus polyglottos	Northern Mockingbird	X	Х
Picoides nuttallii	Nuttall's Woodpecker		Х
Contopus cooperi	Olive-sided Flycatcher		Х
Myiarchus panamensis	Panama Flycatcher	X	Х
Columba livia	Rock Pigeon		Х
Buteo jamaicensis	Red-tailed Hawk	X	Х
Aphelocoma californica	Western Scrub-Jay	Х	Х
Cathartes aura	Turkey Vulture	X	Х
Sialia mexicana	Western Bluebird	X	Х
Tyrannus verticalis	Western Kingbird	X	Х
Melospiza melodia	Song Sparrow	X	
Sturnella neglecta	Western Meadowlark	Х	
Otospermophilus beecheyi	California ground squirrel	X	Х
Sceloporus occidentalis bocourtii	Coast range fence lizard	Х	Х

Appendix D
Special Status Species Evaluation Tables



**Appendix D. Regionally Occurring Special Status Species** 

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Plants					
Agrostis hooveri Hoover's bent grass Poaceae	//1B.2	Santa Barbara and San Luis Obispo counties.	Usually occurs on sandy substrates within closed-cone coniferous forest, chaparral, cismontane woodland, and valley and foothill grassland. Elevations range: 6-610 meters.	April-July	No. The valley needlegrass and non-native annual grasslands onsite are suitable habitat for this species; however botanical surveys were conducted during the bloom period and no individuals were observed.
Arctostaphylos luciana Santa Lucia manzanita Ericaceae	//1B.2	San Luis Obispo County.	Shale substrates within chaparral and cismontane woodland. Elevations range: 350-850 meters.	December- March	No. Suitable habitat for this species does not occur within the project site and it is below the known range in elevation for this species.
Arctostaphylos morroensis  Morro manzanita  Ericaceae	FT//1B.1	San Luis Obispo County.	Baywood fine sand substrates within maritime chaparral, cismontane woodland, coastal dunes and coastal scrub. Elevations: 5-205 meters.	December- March	<b>No.</b> Suitable habitat for this species does not occur onsite.
Arctostaphylos pechoensis Pecho manzanita Ericaceae	//1B.2	Santa Barbara and San Luis Obispo counties.	Siliceous shale substrates within closed-cone coniferous forest, chaparral, and coastal scrub. Elevations range: 125-850 meters.	November- March	<b>No.</b> No suitable habitat onsite.
Arctostaphylos pilosula Santa Margarita manzanita Ericaceae	//1B.2	Monterey and San Luis Obispo counties.	Occasionally sandstone substrates within broadleaf upland forest, closed-cone coniferous forest, chaparral, and cismontane woodland. Elevations range: 170-1100 meters.	December-May	<b>No.</b> Suitable habitat for this species does not occur within the project site.
Arenaria paludicola marsh sandwort Caryophyllaceae	FE/CE/1B.1	Los Angeles, San Bernardino*, Santa Cruz*, San Francisco*, and San Luis Obispo counties.	Sandy openings within freshwater marshes and swamps. Elevations range: 3-170 meters.	May-August	<b>No.</b> No suitable habitat onsite. No freshwater marshes with sandy openings.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Astragalus didymocarpus var. milesianus Miles' milk-vetch Fabaceae	//1B.2	Santa Barbara, San Luis Obispo, and Ventura counties.	Clay substrates within coastal scrub. Elevations range: 20-90 meters.	March-June	<b>No.</b> No suitable habitat onsite. No coastal scrub habitat onsite.
Calochortus obispoensis San Luis mariposa-lily Liliaceae	//1B.2	San Luis Obispo County.	Often on serpentinite substrates within chaparral, coastal scrub, and valley and foothill grassland. Elevations range: 50-730 meters.	May-July	No. The grasslands onsite may be suitable habitat for this species, but no individuals were observed during botanical surveys during the bloom period.
Calochortus simulans  La Panza mariposa-lily  Liliaceae	//1B.3	Santa Barbara and San Luis Obispo counties.	Sandy, granitic or serpentine within chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland.  Elevations range: 395-1100 meters.	April-June	<b>No.</b> This species is not likely to occur because the project site is outside its known range in elevation.
Calystegia subacaulis ssp. episcopalis Cambria morning-glory Convolvulaceae	//4.2	Santa Barbara and San Luis Obispo counties.	Occurs in cismontane woodland, coastal prairie, and valley and foothill grassland. Elevations range: 30-500 meters.	March-July	Yes. The grasslands onsite are suitable habitat for this species and individuals were observed on both properties during surveys.
Carex obispoensis San Luis Obispo sedge Cyperaceae	//1B.2	Monterey, San Diego, and San Luis Obispo counties.	Often serpentinite seeps and clay soils, occasionally gabbro substrates within closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland. Elevations range: 10-820 meters.	April-June	No. The valley needlegrass and non-native annual grasslands onsite may be suitable habitat for this species; however, botanical surveys were conducted during the bloom period and no individuals were observed.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Castilleja densiflora ssp. obispoensis San Luis Obispo owl's-clover Orobanchaceae	//1B.2	San Luis Obispo County.	Occasionally serpentinite substrates within meadows and seeps and valley and foothill grassland. Elevations range: 10-400 meters.	March-May	No. The valley needlegrass and non-native annual grasslands onsite are suitable habitat for this species; however, botanical surveys were conducted during the bloom period and no individuals were observed.
Centromadia parryi ssp. congdonii Congdon's tarplant Asteraceae	//1B.1	Alameda, Contra Costa, Monterey, Santa Clara, Santa Cruz*, San Luis Obispo, San Mateo, and Solano* counties.	Alkaline valley and foothill grassland. Elevations range: 0-230 meters.	May-November	No. The valley needlegrass and non-native annual grasslands onsite are suitable habitat for this species; however, botanical surveys were conducted during the bloom period and no individuals were observed.
Centromadia parryi ssp. parryi pappose tarplant Asteraceae	//1B.2	Butte, Colusa, Glenn, Lake, Napa, San Luis Obispo, San Mateo, Solano, and Sonoma counties.	Often alkaline substrates within chaparral, coastal prairie, meadows and seeps, coastal salt marshes and swamps, and vernally mesic valley and foothill grassland. Elevations range: 0-420 meters.	May-November	No. The valley needlegrass and non-native annual grasslands onsite are suitable habitat for this species; however, botanical surveys were conducted during the bloom period and no individuals were observed.
Chlorogalum pomeridianum var. minus dwarf soaproot Agavaceae	//1B.2	Colusa, Lake, San Luis Obispo, Sonoma, and Tehama counties.	Serpentinite substrates within chaparral. Elevations range: 305-1000 meters.	May-August	<b>No.</b> Suitable habitat for this species does not occur within the project site.
Chorizanthe breweri Brewer's spineflower Polygonaceae	//1B.3	Monterey and San Luis Obispo counties.	Serpentinite, rocky or gravelly substrates within closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub. Elevations range: 45-800 meters.	April-August	<b>No.</b> Suitable habitat for this species does not occur within the project site.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Cirsium fontinale var. obispoense Chorro Creek Bog thistle Asteraceae	FE/CE/1B.2	San Luis Obispo County.	Serpentinite seeps and drainages within chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Elevations range: 35-380 meters.	February- September	<b>No.</b> No seeps or seasonal wetlands onsite. No suitable habitat.
Cirsium occidentale var. lucianum  Cuesta Ridge thistle  Asteraceae	//1B.2	San Luis Obispo County.	Serpentinite substrates and often on steep rocky slopes and disturbed roadsides within openings in chaparral. Elevations range: 500-750 meters.	April-June	<b>No.</b> Suitable habitat for this species does not occur onsite.
Clarkia speciosa ssp. immaculata Pismo clarkia Onagraceae	FE/CR/1B.1	San Luis Obispo County.	Sandy substrates, margins and openings within chaparral, cismontane woodland, and valley and foothill grassland. Elevations range: 25-185 meters.	May-July	<b>No.</b> Suitable habitat for this species does not occur within the project site. The substrates within the grasslands onsite are not sandy.
Delphinium parryi ssp. blochmaniae dune larkspur Ranunculaceae	//1B.2	Santa Barbara, San Luis Obispo, and Ventura counties.	Maritime chaparral and coastal dunes. Elevations range: 0-200 meters.	April-June	<b>No.</b> Suitable habitat for this species does not occur within the project site.
Delphinium parryi ssp. eastwoodiae Eastwood's larkspur Ranunculaceae	//1B.2	San Luis Obispo County.	Coastal serpentinite substrates within openings in chaparral and valley and foothill grassland. Elevations range: 75-500 meters.	February-March	No. The valley needlegrass and non-native annual grasslands onsite may be suitable habitat for this species. However, these features do not appear to occur on serpentine substrates. Botanical surveys were conducted during the bloom period and no individuals were observed.
Dudleya abramsii ssp. murina mouse-gray dudleya Crassulaceae	//1B.3	San Luis Obispo County.	Serpentinite substrates within chaparral, cismontane woodland, and valley and foothill grassland. Elevations range: 90-440 meters.	May-June	<b>No.</b> No suitable habitat present on site.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Dudleya blochmaniae ssp. blochmaniae Blochman's dudleya Crassulaceae	//1B.1	Los Angeles, Orange, Santa Barbara, San Diego, San Luis Obispo, and Ventura counties.	Rocky, often clay or serpentinite substrates within coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland. Elevations range: 5-450 meters.	April-June	<b>No.</b> No suitable habitat present on site.
Eriodictyon altissimum Indian Knob mountainbalm Boraginaceae	FE/CE/1B.1	San Luis Obispo County.	Sandstone substrates within maritime chaparral, cismontane woodland, and coastal scrub. Elevations range: 80-270 meters.	March-June	<b>No.</b> No suitable habitat present on site.
Eryngium aristulatum var. hooveri Hoover's button-celery Apiaceae	//1B.1	Alameda, San Benito, Santa Clara*?, San Diego, and San Luis Obispo counties.	Vernal pools. Elevations range: 3-45 meters.	July-August	<b>No.</b> No suitable habitat present on site.
Fritillaria viridea San Benito fritillary Liliaceae	//1B.2	Fresno, Monterey, San Benito, and San Luis Obispo counties.	Serpentinite substrates within chaparral. Elevations range: 200-1525 meters.	March-May	<b>No.</b> Suitable habitat for this species does not occur within the project site.
Horkelia cuneata var. puberula mesa horkelia Rosaceae	//1B.1	Los Angeles, Orange, Riverside*, Santa Barbara, San Bernardino, San Diego*, San Luis Obispo, and Ventura counties.	Sandy or gravelly substrates within maritime chaparral, cismontane woodland, and coastal scrub. Elevations: 70-810 meters.	February- September	<b>No.</b> No suitable habitat onsite and botanical surveys were conducted during the bloom period and no individuals were observed.
Layia jonesii Jones' layia Asteraceae	//1B.2	San Luis Obispo County.	Clay or serpentinite substrates within chaparral and valley and foothill grassland. Elevations range: 5-400 meters.	March-May	<b>No.</b> No suitable habitat onsite and botanical surveys were conducted during the bloom period and no individuals were observed.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Lupinus ludovicianus San Luis Obispo County lupine Fabaceae	//1B.2	San Luis Obispo County.	Sandstone or sandy substrates within chaparral and cismontane woodland. Elevations range: 50-525 meters.	April-July	<b>No.</b> Suitable habitat for this species does not occur within the project site.
Monardella palmeri Palmer's monardella Lamiaceae	//1B.2	Monterey and San Luis Obispo counties.	Serpentinite substrates within chaparral and cismontane woodland. Elevations range: 200-800 meters.	June-August	<b>No.</b> Suitable habitat for this species does not occur onsite.
Sanicula maritima adobe sanicle Apiaceae	/CR/1B.1	Alameda*, Monterey, San Francisco*, and San Luis Obispo counties.	Clay and serpentinite substrates within chaparral, coastal prairie, meadows and seeps, and valley and foothill grassland. Elevations range: 30-240 meters.	February-May	<b>No.</b> Suitable habitat for this species does not occur onsite.
Scrophularia atrata black-flowered figwort Scrophulariaceae	//1B.2	Santa Barbara and San Luis Obispo counties.	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, and riparian scrub. Elevations range: 10-500 meters.	March-July	No. Riparian onsite may be suitable habitat; however botanical surveys were conducted during the bloom period and no individuals were observed.
Senecio aphanactis chaparral ragwort Asteraceae	//2.2	Alameda, Contra Costa, Fresno, Los Angeles, Merced, Monterey, Orange, Riverside, Santa Barbara, San Benito, Santa Clara, Santa Cruz, Santa Catalina Island, San Diego, San Luis Obispo, Solano, Santa Rosa Island, and Ventura counties.	Occasionally alkaline substrates within chaparral, cismontane woodland, and coastal scrub. Elevations range: 15-800 meters.	January-April	No. Riparian woodland onsite may be suitable habitat; however botanical surveys were conducted during the bloom period and no individuals were observed.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Streptanthus glandulosus ssp. glandulosus (Streptanthus albidus ssp. peramoenus) most beautiful jewel-flower Brassicaceae	//1B.2	Alameda, Contra Costa, Monterey, Santa Clara, and San Luis Obispo counties.	Serpentinite substrates within chaparral, cismontane woodland, and valley and foothill grassland. Elevations range: 94-1000 meters.	March-October	<b>No.</b> No suitable habitat onsite. No serpentinite substrates onsite.
Trifolium hydrophilum saline clover Fabaceae	//1B.2	Alameda, Contra Costa, Colusa, Lake, Monterey, Napa, Sacramento, San Benito, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo, Solano, Sonoma, and Yolo counties.	Marshes and swamps, mesic and alkaline areas within valley and foothill grassland, and vernal pools. Elevations range: 0-300 meters.	April-June	<b>No.</b> No suitable habitat.
Invertebrates					
Branchinecta lynchi vernal pool fairy shrimp	FT//	Endemic to the grasslands of the Central Valley, and Central Coast and the South Coast mountains of San Luis Obispo County.	Rain-filled pools; small, clear- water sandstone-depression pools and grassland swale, earth slump, or basalt-flow depression pools.	Adults: wet season, approximately December-April  Cysts: dry season, approximately June-October	<b>No.</b> No suitable vernal pool habitat.
Danaus plexippus Monarch butterfly	//	Populations west of the continental divide overwinter in several locations throughout SLO County.	Roosts located in wind- protected tree groves (eucalyptus Monterey pine, cypress) with nectar and water sources nearby.	December- March	No. No individuals observed during the surveys and the eucalyptus trees onsite do not provide suitable overwintering habitat.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Linderiella occidentalis California linderiella	FSC//	Shasta County south to Fresno County, across the Central Valley, and south to near Sulfur Mountain in Ventura County.	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions.	Adults: wet season, approximately December-April  Cysts: dry season, approximately June-October	<b>No.</b> No suitable habitat. The site does not meet habitat requirements (i.e. standing water).
Polyphylla nubila Atascadero june beetle	//	San Luis Obispo County.	Sand dunes.	June-September (synchronized with peak flowering period of buckwheat host plants).	<b>No.</b> No suitable habitat. Species is restricted to dune habitat.
Fish			T		
Eucyclogobius newberryi tidewater goby	FE/CSSC/	Coastal California from Del Norte County to San Diego County.	Occurs in brackish and freshwater shallow lagoons and slow-moving lower stream reaches. Requires fairly calm and still waters, but not stagnant. Avoids open areas with strong currents or wave action.	Typically July- October (occasionally outside this period with agency consultation)	<b>No.</b> No suitable habitat on site.
Oncorhynchus mykiss irideus Steelhead – South/Central California Coast DPS	FT/CSSC/	All naturally spawned populations that occur in coastal streams from the Pajaro River south to, but excluding the Santa Maria River. The major watersheds include the Pajaro, Salinas, and Carmel, as well as the smaller rivers along the Big Sur Coast and south.	Occurs in riparian, emergent, and palustrine habitats. Spawning and rearing occurs in cool, clear fast-flowing streams with abundant gravel or cobble and riffles. Feeds and forages in open waters within estuarine subtidal and riverine habitats. Connectivity to the Pacific Ocean is required to complete its life cycle.	Year Round	<b>No.</b> No suitable habitat on site.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale	
Amphibians						
Ambystoma californiense California tiger salamander Central CA DPS	FT/ST/	Sonoma to Santa Barbara Counties, including eastern and western areas of San Luis Obispo County.	Breeding and aestivation habitat includes vernal pools, seasonal and perennial ponds, and surrounding upland areas in grassland and oak savannah. Need underground refuges (i.e. ground squirrel burrows, pipes).	Adults: wet season (approximately September-April with at least 70% average rainfall)  Aquatic Larvae: March-May	<b>No.</b> No suitable habitat.	
Rana draytonii California red-legged frog	FT/CSSC/	Coastal drainages of central California, from Marin County, south to San Diego County	Found in permanent and temporary pools of deep water in streams, marshes, and ponds with dense grassy, shrubby, or emergent vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to upland aestivation habitat.	November-June	No. Not observed during USFWS protocol surveys conducted in 1998 or during follow up reconnaissance surveys in 2013. CRLF predators were noted in the existing waterways such as bullfrog and crayfish.	
Taricha torosa torosa Coast Range newt	/CSSC/	Coastal drainages from Mendocino County to San Diego County.	Prefers wooded rocky streamsides in forested and wooded areas and will migrate over 1 kilometer to breed in slow water.	Fall to late Spring	No. No suitable habitat. Unlikely to occur onsite due to ephemeral nature of streams and lack of dense wooded areas.	
Reptiles						
Anniella pulchra pulchra silvery legless lizard	FSC/CSSC/	Contra Costa County south through the Coast, Transverse, and Peninsular Ranges, along the western edge of the Sierra Nevada Mountains and parts of the San Joaquin Valley and Mojave Desert.	Requires dune scrub, coastal scrub, chaparral, pine-oak woodland, oak woodland, and riparian woodland. Utilizes loose sandy or loamy soils for burrowing, moisture, warmth, and adequate vegetative cover.	Year Round (dawn and dusk)	<b>No.</b> No suitable habitat (i.e., loose sandy soils).	

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Actinemys (=Clemmys) marmorata pallida western pond turtle	FSC/CSSC/	Western portion of California, including the coast ranges and the central valley, west of the crest of Cascades and Sierra Nevadas.	Occurs in river/streams w/deep pools and irrigation canals with moderate amounts of riparian and emergent vegetation. Slow moving waters, perm aquatics.	March-October	<b>No.</b> No suitable habitat. Species requires perennial water source, and water does not occur on site every year.
Phrynosoma blainvillii (Anota coronatum) coast horned lizard	FSC/CSSC/	Fragmented distribution that includes the Pacific coast from the Baja California border west of the deserts and the Sierra Nevada, north to the Bay Area, and inland as far north as Shasta Reservoir, and south into Baja California.	Coastal sage, chaparral, grassland, conifer forests and other woodlands, riparian, with open areas and patches of loose soil.	May-September	<b>No.</b> Not observed during surveys and no suitable habitat onsite.
Birds	T	1	Occurs in anon areas with fow		
Asio flammeus short-eared owl (nesting)	/CSSC/	Breeds sparsely in the northeast portion of California, south to Lassen County, southern Sacramento Valley, around the San Francisco Bay, and south to Monterey County.	Occurs in open areas with few trees and grasslands, dunes, meadows, and irrigated croplands. Frequents saline and emergent wetlands. Nests on the ground in prairies, tundra, savannahs, or meadows with enough vegetation to conceal the incubating female.	Year Round	<b>No.</b> No suitable habitat on site.
Accipiter cooperii Cooper's hawk (nesting)	WL/CSSC/	Breeding resident throughout most of the wooded portion of the state. Breeds in southern Sierra Nevada foothills, New York Mts., Owens Valley, and other local areas in southern California.	Forages and nests in open woodlands and wood margins, riparian forests.	Year Round	<b>Yes.</b> Suitable habitat onsite. Not observed during surveys, however potential to occur onsite.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Accipiter striatus Sharp shinned hawk (nesting)	WL/CSSC/	Fairly common migrant and winter resident throughout California. Breeding distribution poorly documented.	Forages and nests in open woodlands and wood margins, riparian forests.	Year Round	<b>Yes.</b> Suitable habitat onsite. Not observed during surveys, however potential to occur onsite.
Agelius tricolor Tricolored blackbird (Nesting colony)	FSC/CSSC/	Common locally throughout Central Valley and in coastal districts from Sonoma County to southern California counties.	Grassland and cropland habitats with emergent wetland with tall, dense cattails and/or tules. Also occurs in thickets of willow, blackberry, and tall herbs.	Year Round	<b>No.</b> No suitable habitat onsite; not observed during surveys. Unlikely to occur onsite.
Aquila chrysaetos Golden eagle (nesting & wintering)	/CSSC/	Extensive range throughout California. Known to occur in San Luis Obispo.	Nests on cliffs, rocks, and large trees and forages in open country, grasslands.	Year Round	No. No suitable habitat onsite; not observed during surveys. Unlikely to occur onsite.
Athene cunicularia burrowing owl	FSC/CSSC/	Central Valley, the Modoc Plateau and northeastern California, and the southeastern portions of the state.	Occurs in open dry grasslands and desert habitats. Also occurs in open areas within pinyon-juniper habitat.	Year Round	No. Suitable habitat for this species occurs on the project site, however no species observed during USFWS protocol surveys.
Buteo regalis Ferruginous hawk	/CSSC/	Uncommon winter resident and migrant at lower elevations and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges.	Open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitat.	Winter	Yes. May be present during migration.
Charadrius alexandrines nivosus western snowy plover	FT/CSSC/	Range is largely restricted to coastal California. Also occurs in a few inland alkaline lakes, the Salton Sea. and Mono Lake.	Requires dune-backed beaches, barrier beaches, and salt-evaporated ponds. Uses sandy, gravelly, or friable soils for nesting. Occasionally uses agricultural waste ponds of the Central Valley.	Year Round	<b>No.</b> No suitable habitat on site.
Circus cyaneus Northern harrier	/CSSC/	Breeds throughout San Luis Obispo County, mostly inland.	Typically nests in emergent wetlands or marshes and requires tall grasses and forbs in wetlands for cover.	Year Round	<b>No.</b> No suitable habitat onsite for nesting. No wetlands or marshes onsite.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FC/CSSC/	Coastal valleys from the Mexican border to Sebastopol, Sonoma County and the Central Valley from Bakersfield and Weldon, Kern County, north to Redding, Shasta County.	Riparian plants, prefers willows, cottonwoods, aspens, sycamores and alders for resting and foraging.	Year Round	<b>No.</b> No suitable habitat on site. Riparian woodland lacks the structural diversity and contiguous habitat required for this species.
Dendroica petechia brewsteri Yellow warbler	/CSSC/	Breeds locally in small numbers in San Luis Obispo County.	Riparian plants, prefers willows, cottonwoods, aspens, sycamores and alders for perching and foraging.	Year Round	<b>No.</b> No suitable habitat onsite. Riparian woodland lacks structural diversity and density required for this species.
Elanus leucurus white-tailed kite	/CFP/	California's coastal and valley regions excluding the Cascades, Sierra Nevadas, Mojave Desert, and Peninsular Ranges.	Grasslands, dry farmed agricultural fields, savannahs and relatively open oak woodlands, and other relatively open lowland scrublands.	Year Round	<b>Yes.</b> Suitable habitat onsite. Not observed during surveys, however potential to occur onsite.
Eremophila alpestris actia California horned lark	/CSSC/	A common resident throughout California, and known populations in San Luis Obispo County.	Grasslands, open coastal plains, and alkali flats. Prefers low, sparse vegetation.	Year Round	<b>Yes.</b> Suitable habitat onsite. Not observed during surveys, however potential to occur onsite.
Falco columbarius Merlin	/CSSC/	Extensive range throughout California. Known to occur in San Luis Obispo.	Forages over coastlines, open grasslands, savannahs, woodlands, and wetlands.	Winter	Yes. Suitable habitat onsite. Not observed during surveys, however potential to occur onsite.
Falco mexicanus Prairie falcon (nesting)	/CSSC/	Southeastern deserts northwest throughout the Central Valley and along the inner Coast Ranges and Sierra Nevada.	Dry, open terrain, flat or hilly with breeding sites located on cliffs.	February- September	No. No suitable habitat onsite.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
Gymnogyps californianus California condor	FE/CE/	Coastal mountain ranges of Monterey, San Luis Obispo, Santa Barbara, and Ventura counties, a portion of the Transverse Range in Kern and Los Angeles counties, and part of the southern Sierra Nevada in Tulare County.	Forages in open foothill grasslands and oak savannahs. Roosts in large trees, dead snags, and on large cliffs. Breeds in remote mountainous areas of pine forest or chaparral with cliffs and large rock outcrops and caves.	Year Round	<b>No.</b> No suitable habitat onsite; not observed during surveys. Unlikely to occur on site.
Lanius ludovicianus Loggerhead shrike	FSC/CSSC/	Extensive range throughout California. Known to occur in San Luis Obispo.	Coastal sage scrub, grasslands.	Year Round	<b>Yes.</b> Suitable habitat onsite. Not observed during surveys, however potential to occur onsite.
Progne subis Purple martin (nesting)	/CSSC/	San Luis Obispo County.	Inhabits woodlands including sycamores, low elevation coniferous forest of Douglas fir, ponderosa pine, and Monterey pine. Primarily nests in old woodpecker cavities.	Summer	<b>No.</b> No suitable habitat on site, however potential to occur onsite during summer as a rare migrant.
Mammals					
Antrozous pallidus Pallid bat	/CSSC/	Throughout California except for the high Sierra Nevada from Shasta to Kern Cos., and the northwestern corner of the state from Del Norte and western Siskiyou Cos. to northern Mendocino Co.	Rock crevices, tree hollow, mines, caves, structures. Open, lowland areas.	Year Round	<b>No.</b> Not observed during surveys and no suitable habitat. Rock crevices, tree hollows and caves not present.
Plecotus townsendii townsendii Townsend's western big- eared bat	/CSSC, CC/	Extensive range throughout California. Known to occur in San Luis Obispo.	Requires caves, mines, tunnels, buildings, or other human-made structures for roosting.	Year Round	<b>No.</b> Not observed during surveys and no suitable habitat. Cavernous nesting habitat not present.

Scientific Name/ Common Name Family (Plants Only)	Status Federal/State/ CRPR- Other	Distribution	Habitat Requirements	Period of Identification	Potential to Occur/ Rationale
<i>Taxidea taxus</i> American badger	/CSSC/	Extensive range throughout California. Known to occur in San Luis Obispo.	Requires open, arid habitats, but are most commonly associated with grasslands, savannahs, mountain meadows, and open areas of desert scrub. Soils must be friable for burrow excavation.	Year Round	<b>No.</b> No suitable habitat onsite. No suitable friable soils for burrow excavation.

#### STATUS CODES

# Federal: United States Fish and Wildlife Service

FE Federally Endangered
FT Federally Threatened
FD Federally Delisted
FW Federal Watchlist
FC Federal Candidate

FSC Federal Species of Concern

### State: California Department of Fish and Game

CE California Endangered
CT California Threatened
CC California Candidate
CR California Rare

CSSC California Species of Special Concern

CFP California Fully Protected

## **CRPR: California Rare Plant Rank**

1B Plants Rare, Threatened, or Endangered in California and Elsewhere

2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

4 Plants of Limited Distribution - A Watch

List

? Uncertain About Distribution or Identity

\* May be Extirpated

### **Threat Ranks**

0.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2 Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

0.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Sources: USFWS, 2013; CDFG, 2013; and CNPS,

2013

