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Received on:
September 19, 2018

12 Oaks Winery Resort

General Biological Resources Assessment Report

March 2018

Prepared for:

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Planning Department**

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Report Date: March 30, 2018

Title: General Biological Resources Assessment Report for the 12 Oaks Winery Resort Project

Project Location: The approximately 516-acre project site is located within the unincorporated community of French Valley, Riverside County, California, and east of Interstate 15 and north of Rancho California Road. It is within Sections 13 and 14, Township 7 South, Range 2 West and is shown on the U.S. Geological Survey 7.5-minute Bachelor Mountain quadrangle map.

Assessor's Parcel Numbers (APNs): The project is proposed within Assessor Parcel Numbers (APN) 964-160-001, -002, -004, and 964-190-001 and -008.

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Report Summary: The project is proposed within an approximately 631-acre project site in the unincorporated community of French Valley, Riverside County, California.

Development of the project site was assessed under the approved Owner Initiated Habitat Acquisition and Negotiation Strategy (HANS) No. 00408 as part of a larger study area. The HANS determination resulted in approximately 575 acres of conservation occurring north and west of the project site to contribute to the extension of proposed Core 6 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The determination was that no part of this project site was required to be part of the 575 acres of conservation.

The eastern portion of the project site has also been subject to a recent Conditional Use Permit (CUP) within the development footprint determined by HANS No. 00408 to allow for a large-scale winery resort consisting of a winery and a hotel/conference/event center, among other components.

The purpose of this report is to summarize the existing biological resources within the project site and analyze the project effects on biological resources in accordance with the California Environmental Quality Act (CEQA) and MSHCP. With the incorporation of project design features

and mitigation measures described herein, the project would be consistent with the MSHCP.

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12 Oaks Winery Resort General Biological Resources Assessment

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1.0 INTRODUCTION

At the request of Standard Portfolios Temecula, LLC. (project proponent), HELIX Environmental Planning, Inc. (HELIX) has completed this biological resources technical report for the proposed 12 Oaks Winery Resort (project) located within Assessor's Parcel Numbers (APNs) 964-160-001, -002, and -004 in the unincorporated community of French Valley, Riverside County, California. The purpose of this report is to document the existing biological conditions within an approximately 631-acre project site and provide an analysis of potential impacts to sensitive biological resources with respect to local, state, and federal policy. Consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP; Dudek and Associates [Dudek] 2003) is addressed. This report provides the biological resources technical documentation necessary for review under California Environmental Quality Act (CEQA) by the County of Riverside (County).

1.1 PROJECT LOCATION

This approximately 631-acre project site is generally located in the Wine Country Community Plan (WCCP) portion of unincorporated western Riverside County, approximately 1.0 mile south of Lake Skinner and approximately 2.0 miles east of the City of Temecula (Figure 1). The site is situated within Sections 13 and 14, Township 7 South, Range 2 West of the Bachelor Mountain U.S. Geological Survey 7.5-minute quadrangle map (Figure 2). Specifically, the project site is located south of Borel Road (State Route [SR-] 79), north of Buck Road and west of Warren Road (Figure 3).

Within the boundaries of the MSHCP, the project site occurs within Subunit 4, Cactus Valley/SWRC-MSR/Johnson Ranch in the Southwest Area Plan (Figure 4). The project site was assessed under the approved Owner Initiated Habitat Acquisition and Negotiation Strategy (HANS) No. 00408 as part of a larger study area. The HANS determination resulted in approximately 575 acres of conservation occurring north and west of the project site to contribute to the extension of proposed Core 6, with the entirety of the project site addressed herein located within the HANS-approved development footprint (Figure 5).

1.2 PROJECT DESCRIPTION

The project proposes to develop a winery resort and residences in three construction phases (Figure 6). The first phase consists of a full-service hotel and winery. The proposed winery is considered a large-scale winery in terms of the WCCP and would be similar in size to the existing South Coast Winery. The winery would consist of a tasting room, wedding pavilion and event barn, administrative offices, wine production barn, and two barrel storage buildings. The resort hotel would contain 251 rooms in a three-story building. The hotel would also offer additional amenities such as a spa, restaurant, pools, fitness center and an event center for weddings and events.

The second phase would develop the Wine Village Estate, a 224.3-acre site with 21 residential lots. This phase would include a winery and community clubhouse, and would be located directly west of the winery resort. Each lot is approximately 10 acres. The third phase would develop the Wine Country Residential Subdivision, consisting of 76 single-family residences in the 172.4-acre western portion of the site.

Several roadway improvements are proposed as part of project. This includes the realignment and extension of the General Plan Circulation Element road, Rancho California Road, between Buck Road and Warren Road. Off-site road improvements include the realignment of Buck Road and Camino El Vino to accommodate environmental restoration and connection to existing roads adjacent to the site.

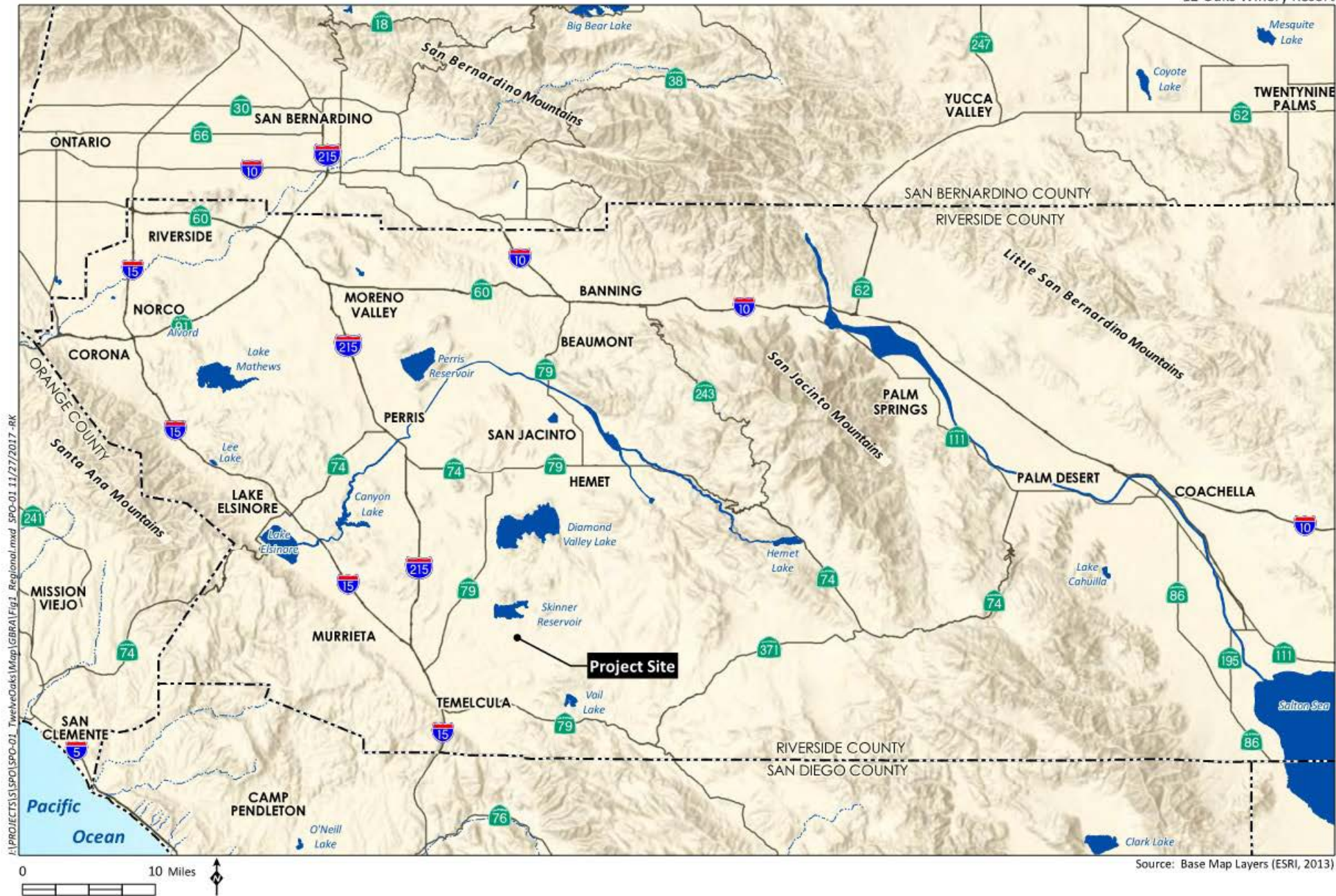
The hotel resort would be accessed from the extension of Rancho California Road while the winery access driveway would connect to the reconfigured intersection of Warren Road, Benton Road, and Rancho California Road. The Wine Village Estate Lots at the center of the project would access the site from the east via Warren Road and from the south via Buck Road. The Wine Village Estate Lot at the east end of the project would access from the east via Buck Road and from the west via a driveway off the realigned Rancho California Road. The single-family homes would have two access points from Buck Road with additional emergency access through the estate lots. The project would also include six internal roadways within the residential portions of the site. These roadways would connect to the realigned and paved Buck Road to the south, and Warren Road to the east.

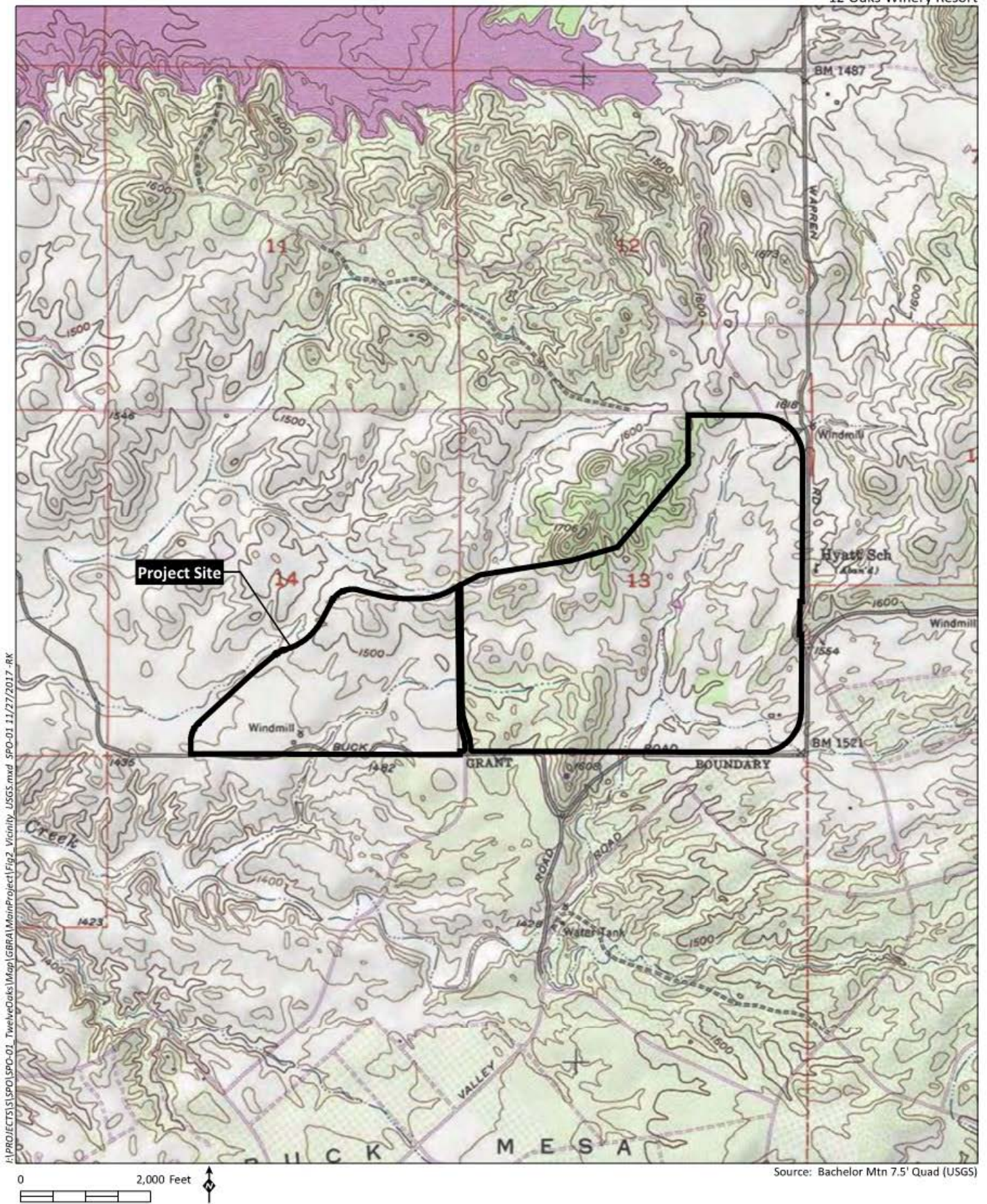
2.0 METHODS

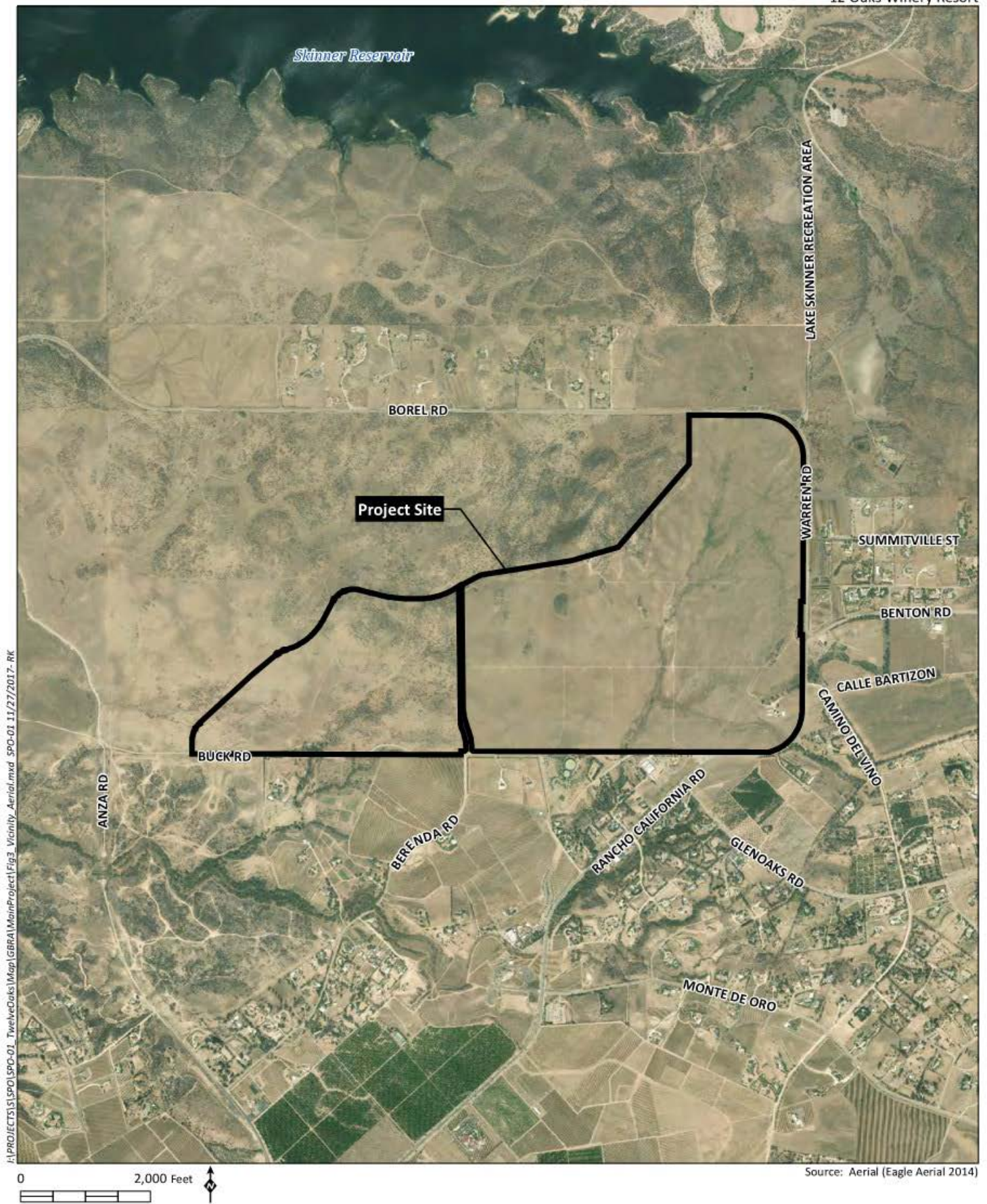
The evaluation of the project site involved a literature review, database search, vegetation mapping, sensitive plant habitat assessment and surveys, burrowing owl habitat assessment and surveys, least Bell's vireo habitat assessment and surveys, Riparian/Riverine and Vernal Pool habitat assessment, and jurisdictional delineation between 2014 and 2017. The methods used to evaluate the biological resources present of the property are discussed in this section. Plant and animal species observed or detected on the site by HELIX are listed in Appendices A and B, respectively.

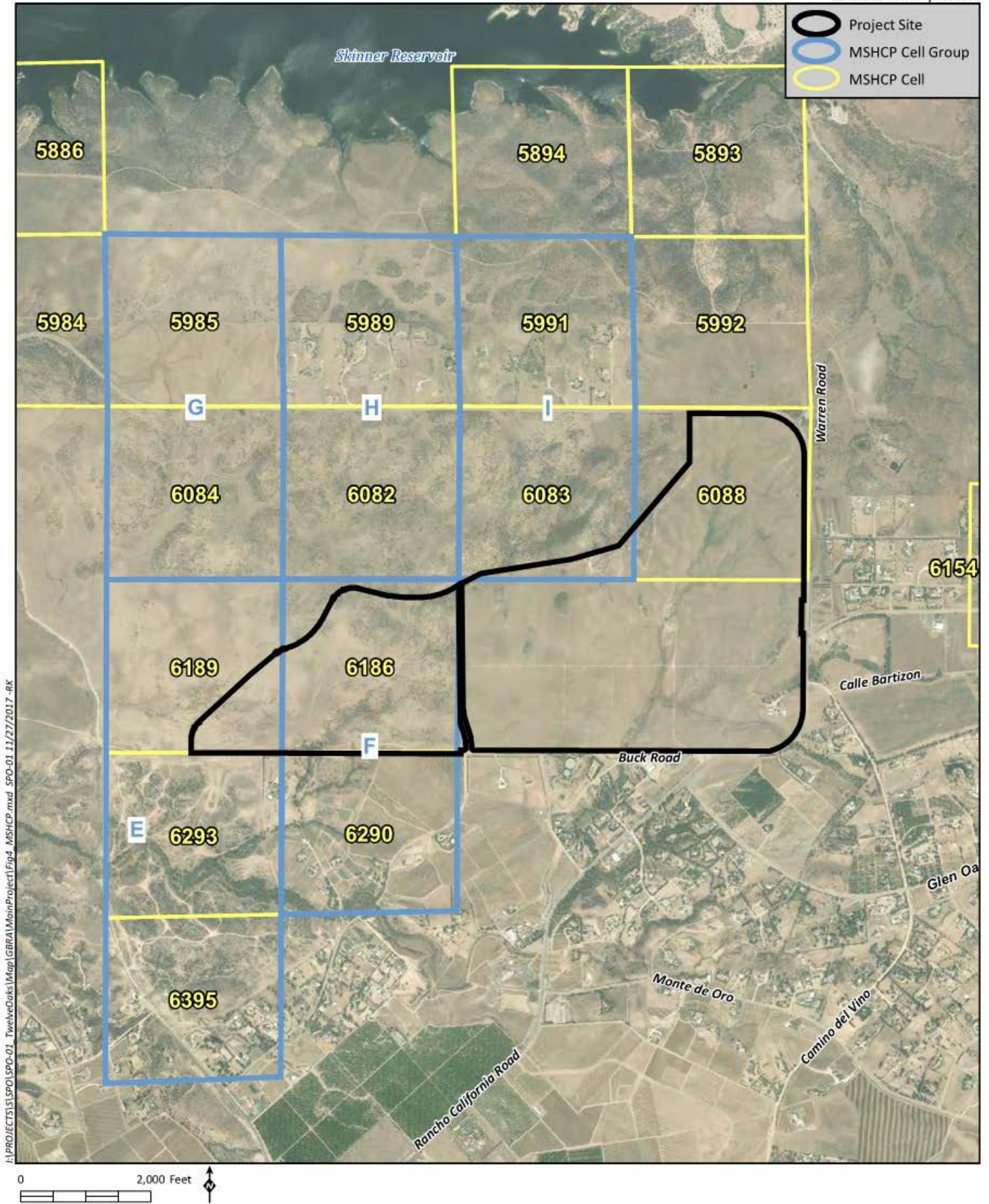
2.1 NOMENCLATURE AND LITERATURE REVIEW

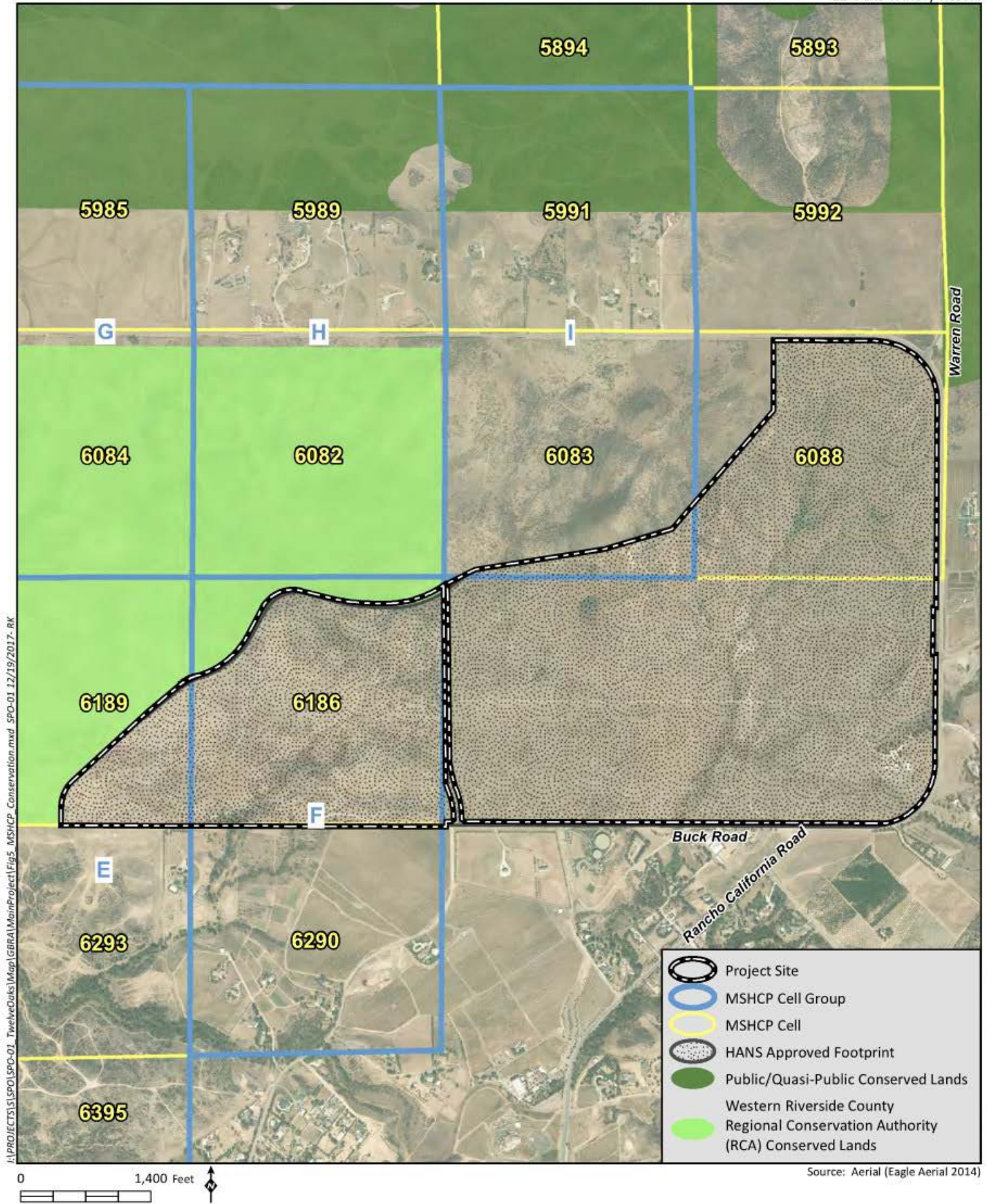
Nomenclature for this report follows Baldwin et al. (2012) for plants with the vegetation community classification follows the MSHCP (Dudek 2003), with additional information taken from Holland (1986) and Oberbauer (2008). Animal nomenclature follows North American Butterfly Association (NABA 2017) for butterflies, Center for North American Herpetology (Taggart 2015) for reptiles and amphibians, American Ornithologists' Union (2017) for birds, and Bradley et al. (2017) for mammals. Sensitive plant and animal status is from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB; 2017a-d), California Native Plant Society's (CNPS') online database (2017), and HELIX in-house databases. Soils information was obtained from U.S. Department of Agriculture (2015).

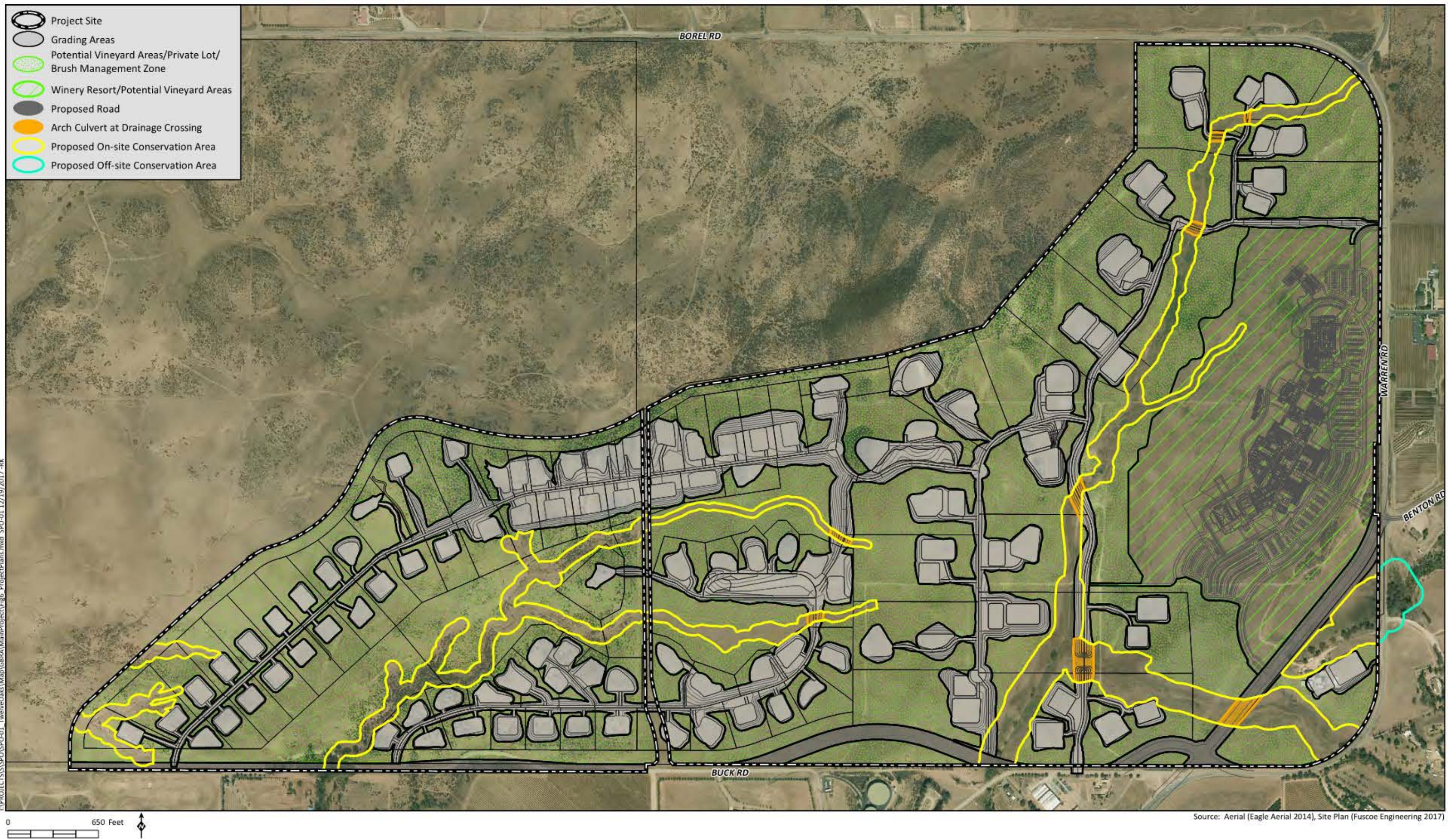












2.2 FIELD SURVEYS

HELIX conducted biological resources surveys for the project in 2014, 2015, 2016, and 2017. Burrowing owl surveys were conducted in July and August 2016 and a jurisdictional delineation was conducted in August 2014, and was updated in January 2016. An abbreviated, non-protocol least Bell's vireo (LBV; *Vireo bellii pusillus*) survey was initially conducted in 2015, with a follow-on protocol-level survey effort completed in 2018. Habitat assessments for fairy shrimp were completed concurrent with the biological resources surveys in 2014, 2015, 2016, and 2017. During HELIX's surveys, focused and incidental observations of plant and animal species were noted. Photographs of the project site were also taken. This report also includes information from a focused Quino checkerspot butterfly (*Euphydryas editha quino*; Principe 2004a) survey; a focused burrowing owl survey (Osborne 2005); a previously-prepared general biological resources assessment (Principe 2004b); and a MSHCP consistency report (Alhadeff 2005). The methods used to evaluate the biological resources present on the project site are discussed in this section.

2.2.1 Vegetation Mapping

HELIX conducted a general biological survey and vegetation mapping on the project site on May 7 and July 9, 2015. Vegetation communities were mapped according to vegetation community classifications in the MSHCP (Dudek 2003) with additional information from Holland (1986). Vegetation communities were mapped to one-tenth of an acre (0.1 acre), with the exception of Riparian/Riverine habitats that were mapped to one one-hundredth of an acre (0.01 acre).

2.2.2 Jurisdictional Delineation

HELIX biologists Larry Sward and Amy Mattson conducted a jurisdictional delineation of the project site on August 14, 2014 to map the limits of USACE and CDFW jurisdiction. Additional data was collected by HELIX biologist Rob Hogenauer on January 21, 2016. Prior to any fieldwork, HELIX biologists reviewed aerial photographs (1"=200' scale), USGS topographic maps, and the western Riverside soils map (Knecht 1971) to determine the locations of potential jurisdictional areas. Data collected for the delineation included mapping the ordinary high water mark (OHWM) and or streambed widths in the non-wetland tributaries and completing data sheets for areas that were suspected to be jurisdictional habitats (and where necessary, their upland counterparts).

The USACE wetland boundaries were determined using the three criteria (vegetation, hydrology, and soils) established for wetland delineations, as described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and since updated in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008a). The USACE non-wetland boundaries were further determined using methods suggested by the USACE in A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States (USACE 2008b).

The results presented here are also discussed in light of court decisions (*i.e.*, *Rapanos v. United States*, *Carabell v. United States*, and *Solid Waste Agency of Northern Cook County [SWANCC] v. USACE*), as outlined and applied by the USACE (USACE 2007; Grumbles and Woodley 2007), USACE and Environmental Protection Agency (EPA; 2007), and EPA and USACE (2007). These

publications explain that the EPA and USACE will assert jurisdiction over traditional navigable waters (TNW) and tributaries to TNWs that are relatively permanent water bodies (RPWs), which have year-round or continuous seasonal flow. For water bodies that are not RPWs, a significant nexus evaluation must be conducted to determine whether the non-RPW is jurisdictional.

Plants were identified according to Baldwin *et al.* (2012), and Calflora (2017) was used to augment common names. Wetland affiliations of plant species follow the Arid West Regional Wetland Plant List (Lichvar *et al.* 2014).

Soils information was taken from the U.S. Department of Agriculture (USDA) Natural Resource Conservation Services' Web Soil Survey (2017). Soil samples were evaluated for hydric soil indicators. Soil chromas were identified according to Munsell's Soil Color Charts (Kollmorgen 1994).

Each sampling point was inspected for primary (i.e., inundation, saturation, water marks, drift lines, sediment deposits, and drainage patterns in wetlands) and secondary (e.g., oxidized root channels, water-stained leaves, and FAC-neutral test) wetland hydrology indicators. Areas were determined to be non-wetland waters of the U.S. if there was evidence of regular surface flow (e.g., bed and bank) but vegetation or soils criterion was not met. Jurisdictional limits for these areas were defined by the OHWM, which is defined in 33 CFR Section 329.11 as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas." The USACE has issued further guidance on the OHWM (Riley 2005; USACE 2008b), which also was used for this delineation.

The CDFW jurisdictional boundaries were determined based on the presence of riparian vegetation or regular surface flow. Streambeds within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation" (Title 14, Section 1.72).

2.2.3 Riparian/Riverine and Vernal Pool Habitat Assessment

The MSHCP defines Riparian/Riverine and Vernal Pool habitats as:

- Riparian/Riverine areas are lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.
- Vernal pools are seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland

species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics and the definition of the watershed supporting vernal pool hydrology must be made on an individual basis. Such determinations should consider the length of time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, the uses to which the area has been subjected, and weather and hydrologic records.

The project site was assessed for the presence of Riparian/Riverine and Vernal Pool habitats during a formal jurisdictional delineation on August 14, 2014 by Larry Sward and Amy Mattson. Additional Riparian/Riverine and Vernal Pool assessments were conducted by Larry Sward on August 18, 2014, Rob Hogenauer and Katie Bellon on May 7, 2015, again by Mr. Hogenauer on July 9, 2015, and during field verifications with the USACE on January 14, 2016 and USFWS and CDFW on September 1, 2016. Aerial photographs, topographic maps, and soils maps were reviewed for signs of flowing or ponded water, topographic depressions, and drainage features. The evaluation consisted of a directed search for field characteristics indicative of Riparian/Riverine or Vernal Pool habitats. Field indicators include certain plants, drainage courses, drainage patterns, ponded water, changes in soil character, changes in vegetation character, and deposits of water-borne debris. Habitats that could be considered Riparian/Riverine habitat under the MSHCP were assessed.

Animal Species Associated with Riparian/Riverine Areas

Invertebrates

Vernal pool fairy shrimp (*Branchinecta lynchi*) occur throughout the Central Valley and in several disjunct populations in Riverside County. This species exists in vernal pools and other ephemeral basins, often located in patches of grassland and agriculture interspersed in Diegan coastal sage scrub and chaparral. Riverside fairy shrimp (*Streptocephalus woottoni*) occurs in Riverside, Orange, and San Diego counties, as well as in northern Baja. This species is typically found in deeper vernal pools and other ephemeral basins that hold water for long periods (30 or more days). Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*) are limited to the Santa Rosa Plateau.

No suitable habitat with potential to support sensitive fairy shrimp occurs on the project site itself. No vernal pools or suitable non-vernal pool features (e.g., depressions, road ruts, etc.) occur on site. Where the landscape and topography might appear to be conducive to support such features, the underlying soils are not suitable and there is no indication of a hard pan that would promote prolonged and suitable periods of inundation or ponding to support fairy shrimp. It is noted that fairy shrimp surveys were previously conducted in 2004 by Chuck Black, Ecological Restoration Service, within off-site habitat as part of HANS No. 00408 (Principe 2004b).

Fish

The Santa Ana sucker (*Catostomus santaanae*) is restricted to the Santa Ana River watershed with year-round flows. No appropriate habitat occurs within the project area; therefore, no survey is required.

Amphibians

No appropriate habitat for the 3 amphibian species (arroyo toad [*Bufo californicus*], mountain yellow-legged frog [*Rana muscosa*], or California red-legged frog [*Rana aurora draytonii*]) listed under MSHCP 6.1.2 occurs within the project area, and none of these species has any potential to occur in the project area. Due to a lack of habitat no surveys are required or were conducted.

Birds

Typical habitat for the LBV consists of well-developed, densely vegetated riparian scrub, woodland, or forest dominated by willows (*Salix* spp.), mule fat (*Baccharis salicifolia*), and western cottonwood (*Populus fremontii*). LBV will also use small patches of trees adjacent to dense, riparian habitat. The MSHCP requires surveys for this species to be conducted for projects that have impacts to suitable habitat.

The riparian habitats that occur on the project site are sparse and under developed and as such do not have a dense stratified canopy typically associated with LBV habitat. The southern willow scrub and southern riparian woodland habitats that occur along the western side of the project area and the southern riparian woodland-disturbed that occurs in the southeast corner are comprised of loosely associated scattered clumps comprised of a few or a single tree. These areas do not comprise habitat that is typically associated with LBV.

The southern riparian woodland that occurs on-site along the eastern side of the project area consists of patchy clumps of trees that are not typical of quality LBV habitat. The adjacent off-site southern willow scrub, east of Buck Road, consists of a mix of sapling and mature willows that has moderate potential to support LBV.

HELIX biologist Rob Hogenauer initially conducted three directed assessments of the on-site riparian habitat on May 7, July 9, and July 20, 2015, which included determining the presence or absence of LBV and other riparian-associated species (Table 1). The surveys were not protocol-level surveys; however, they were conducted during the species' breeding season, in the morning hours, and in accordance with the conditions and described in USFWS protocol (USFWS 2001). The purpose of the survey effort was to further evaluate the overall quality of the habitat on site; determine the presence or absence of riparian-associated species, including LBV; and support the determination that LBV has an overall low potential to occur on site.

The survey on July 9 also included surveying the off-site southern willow scrub on the east side of Buck Road. The habitat on the east side of Buck Road was surveyed by listening and watching (via binoculars) for LBV from the road as to not trespass on private property. Again, this survey was not a protocol-level survey; however, it was conducted in the morning hours in accordance with the conditions and described in USFWS protocol (USFWS 2001). The purpose of the survey was to evaluate the overall quality of the off-site habitat; determine the presence or absence of riparian-associated species, including LBV; and support the determination that LBV has a moderate potential to occur in this off-site area.

Table 1 LEAST BELL'S VIREO SURVEYS		
DATE	TIME	CONDITIONS
2015		
5/7/2015	0815-0845	58°F-60°F, cloudy, wind 4-8 mph
7/9/2015	0730-0830	63°F-65°F, clear, wind 1-4 mph
7/20/2015	0910-0930	73°F, cloudy, wind 1-2 mph
2018		
4/10/2018	Species currently presumed to be absent. Updated 2018 surveys in progress.	
4/20/2018		
4/30/2018		
5/10/2018		
5/21/2018		
5/31/2018		
6/11/2018		
6/21/2018		

As demonstrated by focused surveys in 2015 and other biological surveys in 2014, 2015, 2016, and 2017, LBV are currently presumed to be absent from the site due to overall unsuitability of the habitat and low potential for occurrence. Out of abundance of caution and at the specific request of the County, protocol-level surveys are being completed in 2018 to further demonstrate absence of the species.

The southwestern willow flycatcher (*Empidonax traillii extimus*) is restricted to dense riparian woodlands along streams and rivers with mature, dense stands of willows, cottonwoods (*Populus* spp.), or smaller spring fed or boggy areas with willows or alders (*Alnus* spp.). It breeds in relatively dense riparian habitats. The project area does not include dense riparian woodland habitat suitable for the southwestern willow flycatcher. No impacts to habitat with potential to support southwestern willow flycatcher are proposed; therefore, surveys are not required.

The western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) requires dense, wide riparian woodlands with well-developed understories for breeding. It occurs in densely foliated, deciduous trees and shrubs, especially willows that are required for roost and nest sites. When breeding, the cuckoo is restricted to river bottoms and other mesic habitats where humidity is high and where dense understory abuts slow-moving watercourses, backwaters, or seeps. Willow is almost always a dominant component of the vegetation. There is no suitable habitat within the project area to support the cuckoo.

Both the bald eagle (*Haliaeetus leucocephalus*) and peregrine falcon (*Falco peregrinus*) occur primarily in and adjacent to open water habitats, with the falcon possibly foraging in riparian areas near breeding sites. The peregrine falcon nests on large cliffs that are generally 200 to 300 feet in height. No open water is present on the project area, and no large cliffs are present in the vicinity of the project area. Therefore, no suitable habitat occurs within the project area for these species.

Plant Species Associated with Riparian/Riverine Areas

The MSHCP lists 23 sensitive plant species that have potential to occur in Riparian/Riverine and Vernal Pool habitats. These species are:

- California black walnut (*Juglans californica* var. *californica*),
- Engelmann oak (*Quercus engelmannii*),
- Coulter's matilija poppy (*Romneya coulteri*),
- San Miguel savory (*Satureja chandleri*),
- spreading navarretia (*Navarretia fossalis*),
- graceful tarplant (*Holocarpha virgata* ssp. *elongata*),
- California Orcutt grass (*Orcuttia californica*),
- prostrate navarretia (*Navarretia prostrate*),
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*),
- Orcutt's brodiaea (*Brodiaea orcuttii*),
- thread-leaved brodiaea (*Brodiaea filifolia*),
- Fish's milkwort (*Polygala cornuta* var. *fishiae*),
- lemon lily (*Lilium parryi*),
- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*),
- oscillated Humboldt lily (*L. humboldtii* ssp. *ocellatum*),
- Mojave tarplant (*Deinandra mohavensis*),
- vernal barley (*Hordeum intercedens*),
- Parish's meadowfoam (*Limnanthes gracilis* var. *parishii*),
- slender-horned spineflower (*Dodecahema leptoceras*),
- Santa Ana River woolly-star (*Eriastrum densifolium* spp. *sanctorum*),
- Brand's phacelia (*Phacelia stellaris*),
- mud nama (*Nama stenocarpum*), and
- smooth tarplant (*Centromadia pungens*).

Biological surveys conducted on site included searching for the Riparian/Riverine and Vernal Pool associated species listed above. Riparian/Riverine and vernal pool plant surveys were conducted by Larry Sward and Amy Mattson on August 14, 2014, and by Rob Hogenauer and Katie Bellon on May 7, 2015, with an additional survey conducted by Mr. Hogenauer on July 9, 2015, and field verifications with the USACE on January 14, 2016 and USFWS and CDFW on September 1, 2016.

2.2.4 Narrow Endemic Plant Species

The project site is not within a Narrow Endemic Plant Species Survey Area (NEPSSA). Therefore, no focused NEPSSA surveys are required.

2.2.5 Criteria Area Species

The project site is not within a Criteria Area Species Survey Area (CASSA). Therefore, no focused CASSA plant surveys are required.

2.2.6 Burrowing Owl Habitat Assessment and Survey

HELIX biologists Rob Hogenauer, Laura Moreton, Ben Rosenbaum, Hannah Sadowski, and Summer Schlageter, surveyed the project site for the burrowing owl in July and August 2016 (Table 2). The survey was conducted according to the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (County 2006). A previous survey was conducted by HELIX biologist Mr. Rosenbaum, Mr. Sward, Amy Mattson, Jenna Hartstock, and Mr. Hogenauer in 2014.

The area surveyed was primarily comprised of non-native grassland and disturbed habitat. Transects were walked approximately 30 yards apart through potential owl habitat located on the project site. A 500-foot buffer zone was visually surveyed from the edge of the subject project site where owl habitat bordered the project site to the north, east and south. As HELIX had access to the 500-foot buffer to the west of the project site, this area was surveyed on foot as part of the survey transects.

Biologists walked slowly and methodically, closely checking the areas that met the basic requirements of owl habitat, which include open expanses of sparsely vegetated areas (less than 30 percent canopy cover for trees and shrubs), gently rolling or level terrain, an abundance of small mammal burrows (especially those of California ground squirrel [*Spermophilus beecheyi*]) and/or fence posts, rock, or other low perching locations. Potential owl burrows were checked for signs of recent owl occupation, which include pellets/casting (e.g., regurgitated fur, bones, and insect parts), white wash (excrement), and feathers.

2.2.7 Other Notable Species

Quino Checkerspot Butterfly

Projects processed under the MSHCP are not required to conduct Quino checkerspot butterfly (QCB; *Euphydryas editha quino*) surveys. Prior to the implementation of the MSHCP, a focused QCB survey was conducted on the project site in 2003 (Principe 2003) and on the eastern portion in 2004 (Principe 2004a). The QCB survey in 2004 included all of APN 964-160-004. The 2003 survey covered the remainder of the project site along with additional off-site habitat.

Table 2
BURROWING OWL SURVEY INFORMATION

Survey	Date	Time	Weather Conditions	Biologist*
Focused Burrow Survey/ Focused Burrowing Owl Survey, 1 of 4	7/21/16	0525-0750	Clear, 72°-81°F, wind 1-2 mph	BR, RH
	7/25/16	0530-0830	Partly cloudy, 66°-79°F, wind 0-1 mph	HS, RH
Focused Burrowing Owl Survey, 2 of 4	7/27/16	0530-0830	Clear, 70°-82°F, wind 0-1 mph	RH, SS
	7/28/16	0525-0825	Clear, 68°-77°, wind 0-1 mph	RH, SS
Focused Burrowing Owl Survey, 3 of 4	8/17/16	0550-0820	Clear, 61°-79°, wind 2-4 mph	HS, RH
	8/19/16	0540-0830	Partly cloudy, 61°-75° F, wind 0-1 mph	HS, LM
Focused Burrowing Owl Survey, 4 of 4	8/24/16	0555-0840	Clear, 65°-73°F, wind 0-1 mph	BR, SS
	8/25/16	0550-0845	Clear, 69°-72°F, wind 0-1 mph	RH, SS
Habitat Assessment / Focused Burrow Survey	8/14/14	0900-1500	Clear, 68°-81°F, wind 3-10 mph	AM, LS
Focused Burrow Survey / Focused Burrowing Owl Survey No. 1	8/15/14	0515-0824	Clear, 63°-84°F, wind 0-3 mph	AM, BR
	8/18/14	0524-0826	Clear, 63°-79°F, wind 0-4 mph	AM, BR

Table 2 (cont.) BURROWING OWL SURVEY INFORMATION				
Survey	Date	Time	Weather Conditions	Biologist*
Focused Burrowing Owl Survey No. 2	8/19/14	0545-0826	Cloudy, 65°-70°, wind 0-4 mph	AM, BR, JH
	8/21/14	0530-0830	Partly cloudy, 60°-62° F, wind 2-8 mph	AM, BR, JH
Focused Burrowing Owl Survey No. 3	8/27/14	0545-0832	Clear, 61°-80°F, wind 0-5 mph	AM, JR, BR, LM
Focused Burrowing Owl Survey No. 4	8/28/14	0600-0832	Clear, 69°-72°F, wind 1-4 mph	AM, RH, BR, JH

*AM=Amy Mattson, BR=Ben Rosebaum, JH=Jenna Hartstock, LM=Laura Moreton, LS=Larry Sward, RH=Rob Hogenauer, HS= Hannah Sadowski, LM=Laura Moreton, SS= Summer Schlageter

3.0 RESULTS

Research and survey results are reported here, with their relevance discussed in later sections of this document. Plant and animal species observed or detected on the project site by HELIX are listed in Appendices A and B, respectively.

3.1 TOPOGRAPHY AND SOILS

The topography of the project site consists of rolling terrain that generally slopes from northeast to southwest. Elevations range from 1,600 feet above mean sea level (amsl) in the northeast to 1,440 feet amsl in the north.

The MSHCP lists nine sensitive soil types as occurring within the Plan Area (Dudek 2003). One of the nine MSHCP sensitive soils, Auld Clay, occurs on the project site. Approximately 24.8 acres of auld clay soils occur in the northeastern portions of the site (Figure 7). Eleven additional soil types are mapped on the project site. The additional soils mapped on the site in order of most prevalent to least are Escondido fine sandy loam, Lodo gravelly/rocky loam, Las Posas loam, Placentia fine sandy loam, Vista coarse sandy loam, Cajalco fine sandy loam, Arlington and Greenfield fine sandy loam, Grangeville fine sandy loam, Ramona sandy loam, Hanford fine sandy loam, Cienba sandy loam, and Friant sandy loam.

3.2 VEGETATION COMMUNITIES

The project site is generally comprised of a mix of non-native grassland and Riversidean sage scrub, the majority of which has been subject to historical agricultural uses. In total, the site

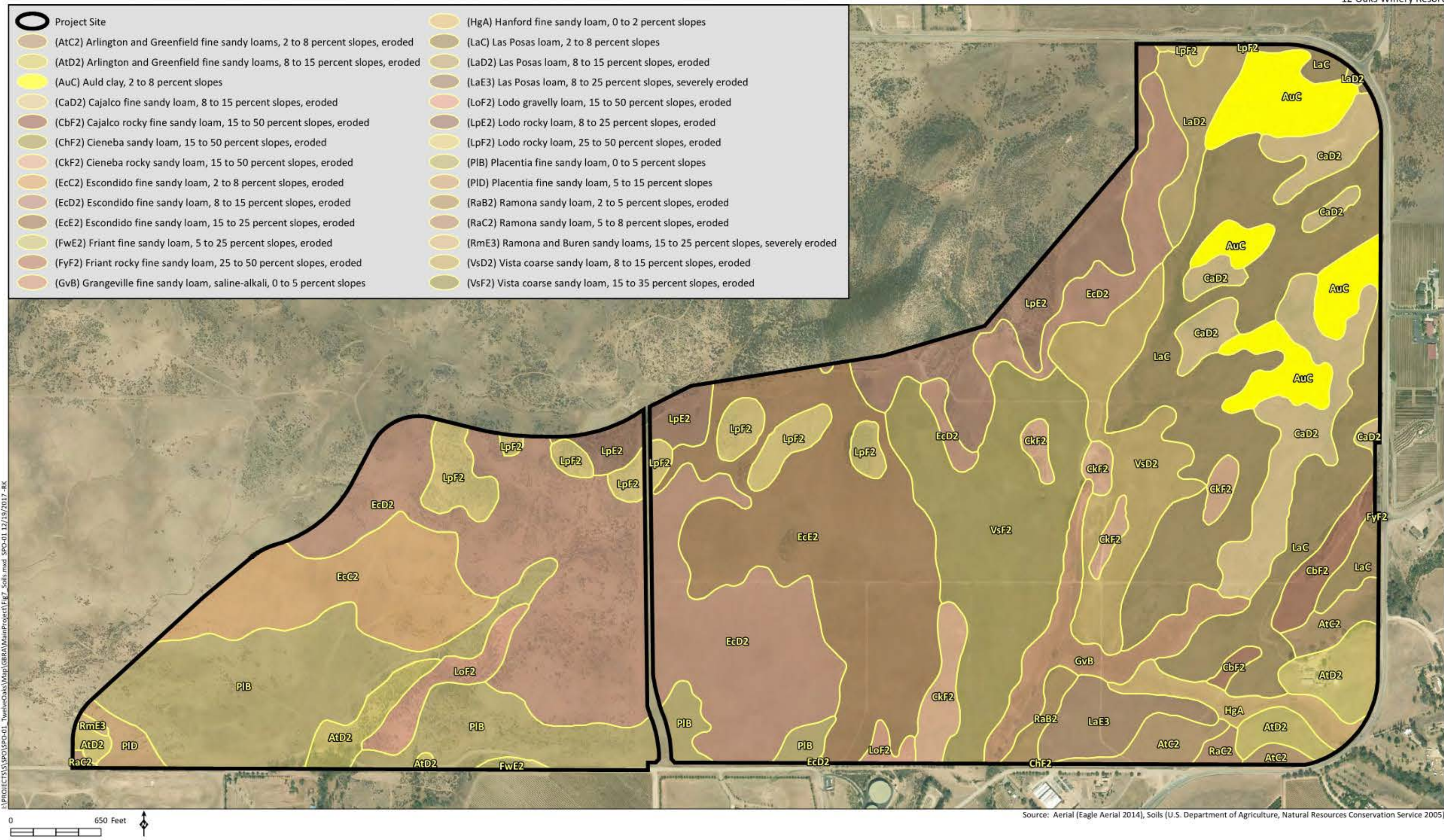
supports fourteen vegetation communities/land use types: agriculture, southern willow scrub, southern riparian woodland (including disturbed), alkali marsh, disturbed wetland, tamarisk scrub, streambed, Riversidean sage scrub (including disturbed), non-native grassland, non-native vegetation, disturbed habitat and developed (Table 3, Figure 8).

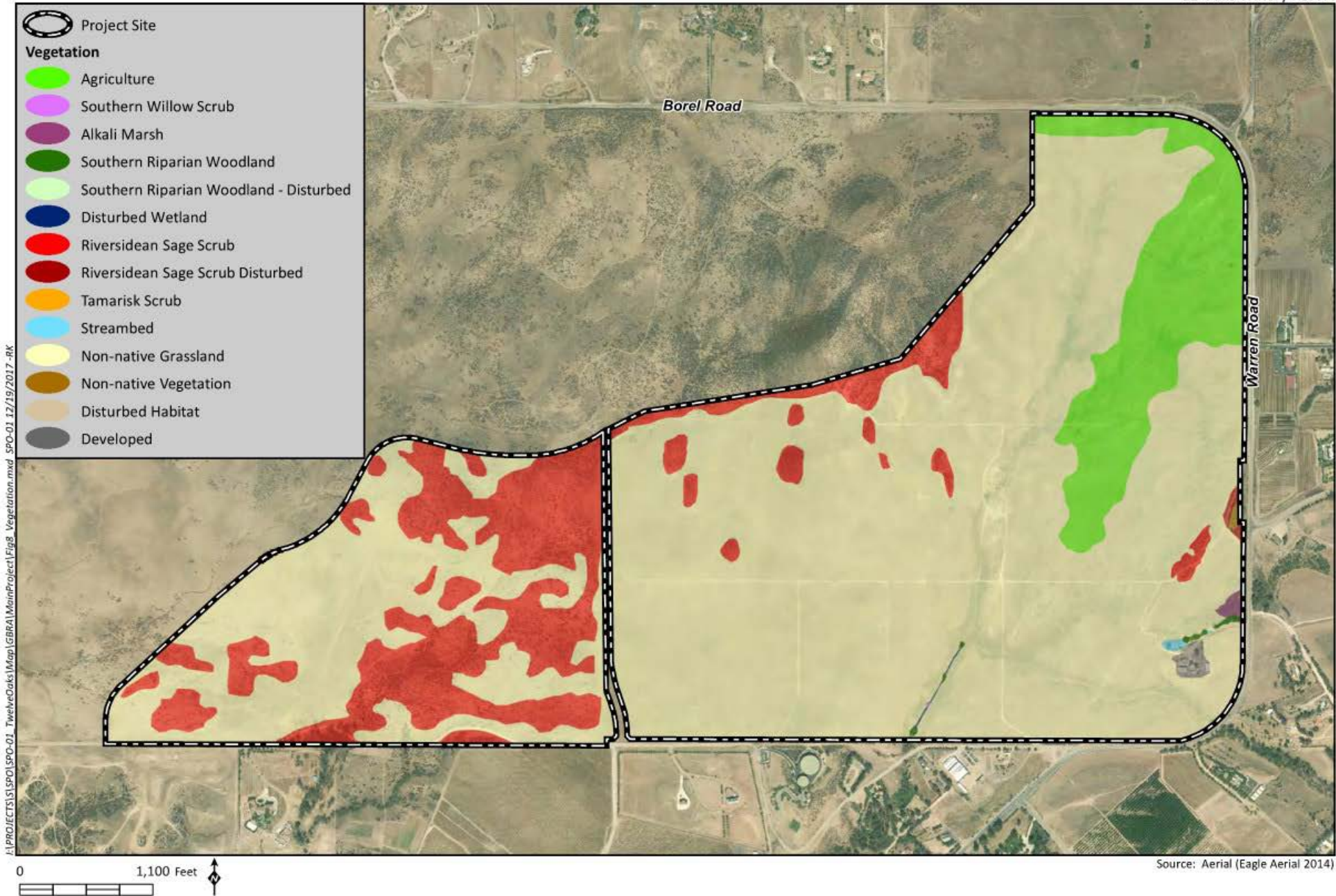
Table 3 EXISTING VEGETATION COMMUNITIES	
HABITAT	ACRES*
Riparian/Riverine Habitats	
Southern Willow Scrub	0.03
Southern Riparian Woodland (including disturbed)	0.70
Alkali Marsh	0.71
Disturbed Wetland	0.18
Streambed	0.37
Subtotal	1.99
Upland Habitats	
Riversidean Sage Scrub (including disturbed)	96.8
Non-native Grassland	473.9
Tamarisk Scrub	0.1
Non-native Vegetation	0.4
Disturbed Habitat	0.2
Agriculture	56.3
Developed	1.5
Subtotal	629.2
TOTAL	631.2

*Riparian/Riverine habitats are rounded to the nearest 0.01, upland habitats are rounded to the nearest 0.1.

3.2.1 Southern Willow Scrub

Southern willow scrub consists of dense, broadleaved, winter-deciduous stands of trees dominated by shrubby willows (*Salix* sp.) in association with mule fat (*Baccharis salisifolia*), and with scattered emergent western cottonwood (*Populus fremontii*) and western sycamores (*Platanus racemosa*). This vegetation community appears as a single layer; it lacks separate shrub and tree layers and generally appears as a mass of short trees or large shrubs. It occurs on loose, sandy or fine gravelly alluvium deposited near stream channels during flood flows. Frequent flooding maintains this early seral community, preventing succession to a riparian woodland or forest (Holland 1986). In the absence of periodic flooding, this early seral type would be succeeded by southern cottonwood or western sycamore riparian forest, provided that the requisite hydrology is present to support the greater water needs of those habitats. The southern willow scrub on the project site is comprised of small stands consisting of isolated willows with a limited herbaceous understory of mixed grasses.





3.2.2 Southern Riparian Woodland (including disturbed)

Southern riparian woodland is composed of winter-deciduous trees that require water near the soil surface. Willow, cottonwood, and western sycamore form a dense medium-height forest in moist canyons and drainage bottoms. Associated understory species include mule fat, stinging nettle, and wild grape (Beauchamp 1986). This community can vary from a shrubby thicket to a tall, open canopy tree community. The differences between woodlands and forests are physiognomic rather than compositional. Woodlands have less canopy cover than forests. In woodlands, there may be large canopy gaps within the upper tree stratum. The southern riparian woodland in the project area is a sparse, underdeveloped habitat with an open canopy consisting of a mix of a western sycamore, western cottonwood, salt cedar (*Tamarix ramosissima*), Peruvian pepper (*Schinus molle*), and willows.

3.2.3 Alkali Marsh

This habitat typically occurs in floodplains of lakes or rivers. This habitat is normally associated with moist alkaline soils and is often dry during the summer months. Typical species include rushes, saltgrass (*Distichlis spicata*), yerba mansa (*Anemopsis californica*), rush (*Juncus* sp.) sedges (*Carex* spp.), cattails, and salt marsh fleabane (*Pluchea odorata*). The project site includes a patch of habitat that is dominated by Mexican rush (*Juncus mexicanus*) and western ragweed (*Ambrosia psilostachya*), with outer edges of the habitat being dominated by saltgrass. This habitat was classified as a dry alkali meadow. Additional species observed in this habitat include short-pod mustard, Italian thistle, wild lettuce, and bromes (*Bromus* spp.). An aerial review of this area shows no inundation by water during the time frame of the photos that included both the wet and dry seasons. This habitat occurs in a relatively dryer area than typical for this habitat. It occurs along the southeastern boundary of the project area.

3.2.4 Disturbed Wetland

Disturbed wetlands include areas permanently or periodically inundated by water, which have been significantly modified by human activity. Disturbed wetlands are often unvegetated, but may contain scattered native or non-native vegetation. Characteristic species include giant reed (*Arundo donax*), bristly ox-tongue (*Helminthotheca echioides*), cocklebur (*Xanthium strumarium* var. *canadense*), salt cedar (*Tamarix* spp.), river red gum (*Eucalyptus camaldulensis*), date palm (*Phoenix* spp.), Mexican fan palm (*Washingtonia robusta*), pampas grass (*Cortaderia* spp.), and rabbit's foot grass (*Polypogon monspeliensis*), but may also contain stinging nettle (*Urtica dioica* ssp. *holosericea*), willow (*Salix* spp.), cattail (*Typha* spp.), and a variety of other wetland plants. Dominant species observed in disturbed wetland within the project site include rabbit's foot grass and water cress (*Nasturtium officinale*). Disturbed wetland occupies the southern reach of the intermittent stream channel in the eastern portion of the project site.

3.2.5 Streambed

Streambeds convey ephemeral, intermittent, or perennial stream flows through drainages. The ephemeral and intermittent streams may support upland vegetation after winter and spring floods or are unvegetated. Streambeds in the project area are ephemeral.

3.2.6 Riversidean Sage Scrub

Riversidean sage scrub (RSS) occupies xeric sites such as steep slopes, severely drained soils, or clays that slowly release stored soil moisture. It is dominated by sub-shrubs with leaves that are deciduous during drought, an adaptation that allows the habitat to withstand the prolonged drought period in the summer and fall. Sage scrub species have relatively shallow root systems and open canopies that allow for the occurrence of a substantial herbaceous (annual plant) component. Typical stands are fairly open and dominated by species such as California sagebrush (*Artemisia californica*), brittlebush (*Encelia farinosa*), and California buckwheat (Holland 1986). On the project site, this habitat occurs in small patches on short slopes that were not previously used by agriculture (winery). These patches are relatively sparse and mainly consist of California buckwheat.

3.2.7 Non-native Grassland

Non-native grassland (NNG) is a dense to sparse cover of annual grasses, often including numerous species of showy-flowered native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils, where it has either supplanted native grassland or been established for grazing by clearing native shrub communities. NNG also establishes over time in disturbed areas and former agricultural fields. Characteristic species include oats (*Avena* spp.), red brome (*Bromus rubens*), ripgut grass (*Bromus diandrus*), ryegrass (*Festuca* spp.), and mustard (*Brassica* sp.).

The NNG that currently exists on the project site occupies areas that have been used for agricultural purposes since as early as 1947 and until as recently as the 2005 or so. This is the dominant habitat on the project site with different dominant species occurring at various locations across the site. Dominant species include Russian thistle, red brome, wild oat, ripgut grass and filaree (*Erodium* spp.). Other species also present in the non-native grassland include salt grass, annual sunflower, stinging nettle, tree tobacco (*Nicotiana glauca*), wild lettuce, short-pod mustard, and tocalote (*Centaurea melitensis*).

3.2.8 Tamarisk Scrub

Tamarisk scrub is typically comprised of shrubs and/or small trees of exotic tamarisk species (*Tamarix* spp.) but may also contain willows, salt bushes (*Atriplex* spp.), catclaw acacia (*Acacia greggii*), and salt grass. This habitat typically occurs along intermittent streams in areas where high evaporation rates increase the salinity level of the soil. Tamarisk is a phreatophyte, a plant that can obtain water from an underground water table. Because of its deep root system and high transpiration rates, tamarisk can substantially lower the water table to below the root zone of native species, thereby competitively excluding them. As a prolific seeder, it may rapidly displace native species within a drainage (Holland 1986). On the project site, this habitat occurs along the edge of the road on the eastern side of the site and is comprised primarily of salt cedar an herbaceous mix of Queen Anne's lace, short-pod mustard, annual sunflower (*Helianthus annuus*) and a variety of other herbs and forbs.

3.2.9 Non-Native Vegetation

Non-native vegetation (exotic) consists of cultivated plants that have naturalized into otherwise native habitat areas or that are remnants of previous cultivated land uses. On site, this habitat type is represented by an open patch of eucalyptus trees (*Eucalyptus* spp.) located on the eastern side of the project site. Species found in the exotic vegetation on site include eucalyptus, with a sparse understory that includes California buckwheat, red brome, jimson weed, and ripgut grass.

3.2.10 Disturbed Habitat

Disturbed habitat includes unvegetated or sparsely vegetated areas, particularly where the soil has been heavily compacted by prior development or where agricultural lands have been abandoned. Disturbed habitat is generally dominated by non-native weedy species that adapt to frequent disturbance or consist of dirt trails and roads. In the project area this habitat is primarily comprised of dirt roads and road shoulders. Species present include short-pod mustard, filaree (*Erodium* spp.), bromes, and tocalote.

3.2.11 Agriculture

Agriculture is land that is primarily used for production of food and fiber. In the project area, this habitat consists of orchards and vineyards located in the northeastern and eastern boundaries.

3.2.12 Developed

Developed land is where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained. The developed portion of the project area is comprised of paved roads and remnants of a residential area.

3.3 JURISDICTIONAL WATERS AND WETLANDS

The project site supports potential jurisdictional resources in the form of ephemeral and intermittent drainage features, in addition to riparian and wetland habitat types, as described below in the context of regulatory agency jurisdiction.

3.3.1 Waters of the U.S./State – USACE/RWQCB Jurisdiction

Potential waters of the U.S./State subject to USACE/RWQCB jurisdiction within the project site were field-verified with USACE staff on January 14, 2016. A total of 1.16 acres comprised of 0.18 acre of wetland and 0.98 acre of non-wetland waters of the U.S./State were determined present on the project site (Figure 9; Table 4). The wetland waters are comprised of 0.18 acre of disturbed wetland and the non-wetland waters are comprised of 0.48 acre of remnant streambed (i.e., non-wetland waters of the U.S./State whereby surface hydrology had been significantly altered as a result of historic agricultural uses), 0.16 acre intermittent streambed, and 0.34 acre of ephemeral streambed.

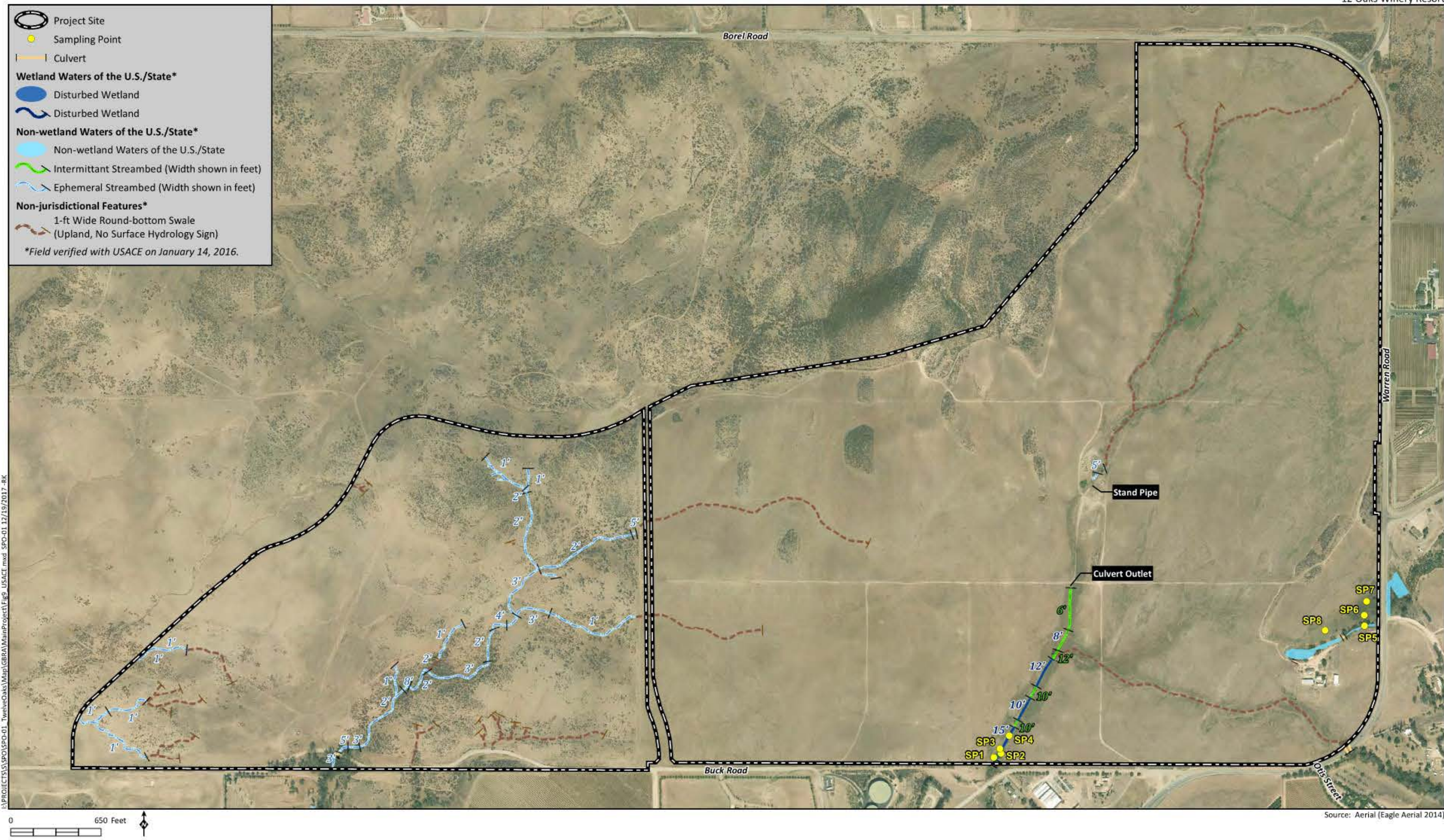
Table 4 EXISTING WATERS OF THE U.S. / STATE		
JURISDICTIONAL AREAS	AREA¹ (acres)	LENGTH² (feet)
Wetland		
Disturbed Wetland	0.18	627
Subtotal	0.18	627
Non-Wetland		
Remnant Streambed	0.48	640
Intermittent Streambed	0.16	785
Ephemeral Streambed	0.34	8,008
Subtotal	0.98	9,433
TOTAL	1.16	10,060

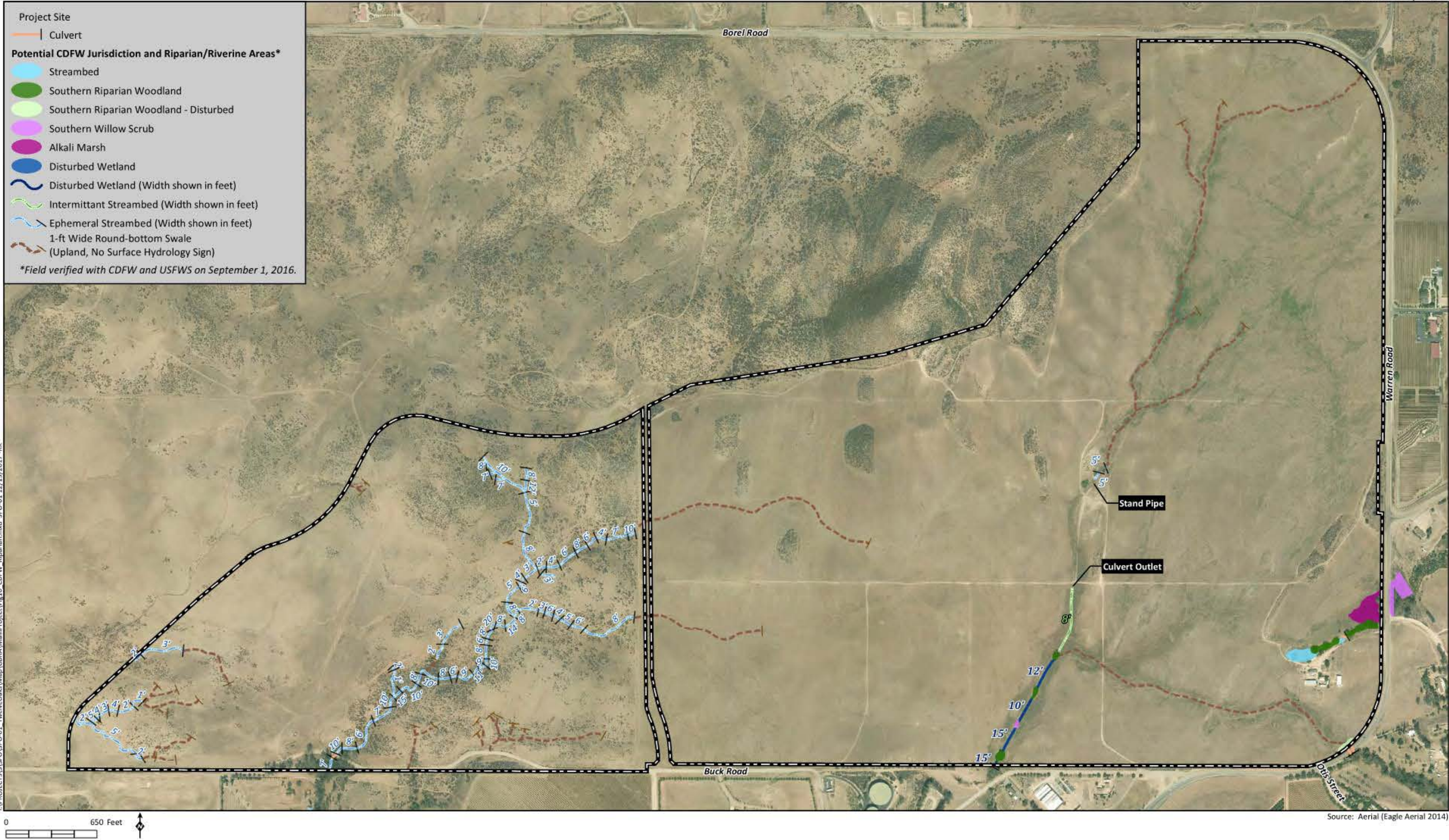
¹Rounded to nearest one-hundredth.

²Rounded to nearest foot.

The streambed in the central portion of the site has evidently been altered as a result of previous agricultural operations on the site. The channel is characterized by a relatively uniform width and straight alignment, which is not natural. The streambed in the eastern portion of the site was created from grading activities related to previous agricultural operations. The streambed appears to have been created sometime between 1967 and 1978 as indicated from a review of historical aerial photographs (NETR 2013). The review of aerial photographs did not show any water pooling in the streambed. There is a subterranean drainage pipe located at the western end of the streambed. Any flow in the streambed appears to have been redirected to this pipe that may have been used for agricultural purposes. Aerial photograph review includes those taken during both the rainy and dry seasons during both wet and dry years. The remainder of the streambeds scattered throughout the site appear to be in the natural condition.

In addition, approximately 0.36 acre of 1.0-foot-wide round bottom swales were delineated, but verified by the USACE during a January 2016 field verification to be non-jurisdictional to the USACE/RWQCB due to lack of OHWM and other jurisdictional criteria.





3.3.2 Streambed and Riparian Habitat – CDFW Jurisdiction

Potential streambed and riparian habitat subject to CDFW jurisdiction within the project site was field-verified with CDFW and USFWS staff on September 1, 2016. CDFW jurisdiction within the site totals 4.05 acres, comprised of 0.49 acre southern willow scrub, 0.69 acre southern riparian woodland (including 0.10 acre disturbed), 0.71 acre alkali marsh, 0.18 acre disturbed wetland, 1.62 acres streambed (including 1.16 acres ephemeral and 0.09 acre intermittent), and 0.36 acre round-bottom swale (Table 5; Figure 10).

Table 5 EXISTING CDFW JURISDICTION AND RIPARIAN / RIVERINE AREAS	
HABITAT	ACRES¹
Southern willow scrub	0.49
Southern riparian woodland (including disturbed)	0.69
Alkali Marsh	0.71
Disturbed Wetland	0.18
Streambed	1.62
Round-Bottom Swale	0.36
TOTAL	4.05

¹Rounded to nearest one-hundredth.

3.4 RIPARIAN/RIVERINE AND VERNAL POOL HABITAT ASSESSMENT

The identification of Riparian/Riverine habitats is based on potential for the habitat to support, or are tributary to habitat that support, Riparian/Riverine Covered Species, which are identified in MSHCP Section 6.1.2.

As noted above, the Riparian/Riverine resources are the same as the CDFW jurisdictional areas (Table 5; Figure 10). The Riparian/Riverine assessments determined that 4.05 acres of Riparian/Riverine habitat occurs in the project site. The Riparian/Riverine habitat is comprised of 0.49 acre southern willow scrub, 0.69 acre southern riparian woodland (including 0.10 acre disturbed), 0.71 acre alkali marsh, 0.18 acre disturbed wetland, 1.62 acres streambed (including 1.16 acres ephemeral and 0.09 acre intermittent), and 0.36 acre round-bottom swale. No vernal pool habitat occurs in the project area.

The Riparian/Riverine drainage courses are tributary to Santa Gertrudis Creek. Riparian habitat occurs in scattered stands along the drainage on the western edge of the site, along with occurring in patches in the southeast quarter of the site. The functions of the streambed (riverine habitat) are primarily water conveyance, sediment transport, and energy dissipation (hydrologic regime and flood attenuation). The vegetated drainages (riparian habitat; southern willow scrub, disturbed wetland, and southern riparian woodland) and associated habitats (alkali meadow and tamarisk scrub) also provide the same functions as the streambed, along with toxin trapping and filtering, and live-in habitat for various animal species.

The project site has been used for agricultural purposes since as early as 1947. Evidence of previous agricultural uses is apparent throughout the site, especially within the Riparian/Riverine habitat. The drainage features supporting Riparian/Riverine habitat on the site have been substantially modified from their natural course and width. The westernmost drainage has been straightened and modified to have a relatively uniform width that is much larger than would be expected based on the hydrology and vegetation observed during surveys. The easternmost drainage has been artificially extended, diked, and dammed on the downstream end, presumably as part of a historic stock pond that no longer exists. Previous agricultural activities have resulted in substantial modification to these features and permanent changes to the hydrology of the site.

3.4.1 Invertebrates

Vernal pool fairy shrimp occurs throughout the Central Valley and in several disjunct populations in Riverside County. This species exists in vernal pools and other ephemeral basins often located in patches of grassland and agriculture interspersed in Diegan coastal sage scrub and chaparral. Riverside fairy shrimp occurs in Riverside, Orange, and San Diego counties, as well as in northern Baja. This species is typically found in deeper vernal pools and other ephemeral basins that hold water for long periods of time (30 or more days). Santa Rosa Plateau fairy shrimp are limited to the Santa Rosa Plateau.

No suitable habitat with potential to support sensitive fairy shrimp occurs on the project site itself. No vernal pools or suitable non-vernal pool features (e.g., depressions, road ruts, etc.) occur on site. Where the landscape and topography might appear to be conducive to support such features, the underlying soils are not suitable and there is no indication of a hard pan that would promote prolonged and suitable periods of inundation or ponding to support fairy shrimp.

The project site includes several drainage features, including a streambed in the eastern portion that was created from grading activities related to previous agricultural operations. The streambed appears to have been dammed and created from the grading that occurred sometime between 1967 and 1978 as indicated from a review of historical aerial photographs (NETR 2013). The review of aerial photographs did not show any water pooling in the streambed. There is a subterranean drainage pipe located at the western end of the streambed. Any flow in the streambed appears to have been redirected to this pipe that may have been used for agricultural purposes. Localized flows appear to percolate into the sandy loam soils and there is no evidence of standing water. Aerial photograph review includes those taken during both the rainy and dry seasons during both wet and dry years. Therefore, the streambed does not constitute fairy shrimp habitat.

Last, the fairy shrimp surveys conducted by Dr. Chuck Black covered the project site along with a much larger area to the west. No fairy shrimp or fairy shrimp cysts (sensitive or common) were found on the project site. Dr. Black's survey found Riverside fairy shrimp cysts at a stock pond that occurs off-site to the north of the western half of the project site. The CNDDDB records show that Dr. Black observed the Riverside fairy shrimp at a location that is approximately 100 feet north of the project site. No fairy shrimp were found to occur within the site by Dr. Black, and there are no CNDDDB records of sensitive fairy shrimp occurring within the site.

In conclusion, no suitable habitat for fairy shrimp occurs on the project site due to lack of vernal pools, non-vernal pool features (e.g., depressions, road ruts, etc.), evidence of prolonged standing water (e.g., soil cracks, water marks, hydrophytic vegetation, etc.), associated soils mapped in flat landscape positions (e.g., clay soils on flat land that does not drain), and evidence of underlying hard pan.

3.4.2 Fish

The Santa Ana sucker (*Catostomus santaanae*) is restricted to the Santa Ana River watershed with year-round flows. The streams on the project site lack surface flow for most of the year. Additionally, the USFWS species profile shows that the Santa Ana Sucker is not known to occur south of Lake Mathews (USFWS 2013). This species is not expected to occur on site.

3.4.3 Amphibians

No appropriate habitat for the 3 amphibian species (arroyo toad [*Bufo californicus*], mountain yellow-legged frog [*Rana muscosa*], or California red-legged frog [*Rana aurora draytonii*]) listed under MSHCP 6.1.2 occurs on site, and none of these species has any potential to occur on site. This project site lies outside of the MSHCP arroyo toad survey area, and no surveys are required.

3.4.4 Birds

The LBV, WIFL, and YBCU are found in riparian habitats such as southern willow scrub, cottonwood forest, mule fat scrub, sycamore alluvial woodland, and arroyo willow riparian forest habitats that typically feature dense cover. The MSHCP requires surveys to be conducted for projects that have impacts to suitable habitat for the aforementioned riparian birds.

The project site includes a couple sparse patches of southern willow scrub, southern riparian woodland, and riparian scrub comprised of one to a few trees per stand that do not constitute potential habitat for LBV. There is a larger patch of southern willow scrub on the eastern side of Warren Road that has some potential to support LBV. The proximity of the southern willow scrub (moderate potential for LBV) located east of Warren Road, to the southern riparian woodland on the project site results in the southern riparian woodland having low potential to be used by LBV. CNDDDB records show LBV occurring less than 1.0 mile north of the project site near Lake Skinner and less than 1.0 mile southwest of the site along Santa Gertrudis Creek.

The project does not propose to directly impact the habitat with potential to support LBV; however, the area is being considered for re-establishment mitigation through the removal of the existing Warren Road crossing. Under the MSHCP, protocol surveys for LBV are not required in avoidance areas. The initial abbreviated LBV survey conducted by Mr. Hogenauer did not detect any LBV on the project site or in the off-site southern willow scrub east of Warren Road. The species was not detected during any of the other biological surveys conducted in 2014 through 2017.

Based on the lack of suitable habitat on the project site itself, LBV is not likely to occur and no on-site direct or indirect impacts are anticipated. Based on the marginal quality of the off-site southern willow scrub habitat east of Warren Road, LBV have only a low potential to occur and

no off-site direct impacts are anticipated. In the unexpected event that LBV utilize the off-site habitat in the future, potential indirect impacts could occur if demolition and removal of the existing Warren Road crossing is conducted during the LBV breeding season (March 15 to September 15). Out of an abundance of caution and at the specific request of the County, updated 2018 protocol-level surveys for LBV are planned to occur in April through June 2018 to confirm the presumed absence of the species in the off-site habitat.

The Riparian/Riverine habitat assessment determined that the riparian habitat present on site is not sufficiently developed to support WIFL or YBCU. The southern willow scrub and riparian woodland occurs in small patches (described above) and lack the appropriate canopy layers and understory to support these species; therefore, focused surveys are not required.

The proposed project will not impact habitat with potential to support bald eagle or peregrine falcon. There is potential for these species to occur nearby to the north at Lake Skinner, but it is not likely for either of these species to utilize the habitats that occur on the project site.

3.4.5 Riparian/Riverine Plant Species

Twenty-three plant species are identified in the MSHCP as potentially occurring in Riparian/Riverine and Vernal Pool habitats. None of the 23 sensitive plant species identified in the MSHCP as potentially occurring in association with Riparian/Riverine and Vernal Pool habitats occur on the project site.

A number of the species have distributions well above or below the elevations at the project, and/or well outside the area of the project. Species in this group include lemon lily, Mojave tarplant, Parish's meadowfoam, Santa Ana River woolly-star, and Brand's phacelia.

The remaining species have a distribution that encompasses the project site or that occur in vegetation communities/habitats found on or near the project site. The non-herbaceous species (e.g., trees and shrubs) are identifiable regardless of the time of year. The herbaceous species would also have been in flower at the time of the surveys. Species in this category include Engelmann oak, California black walnut, San Miguel savory, Coulter's matilija poppy, and Fish's milkwort.

California black walnut is restricted to woodlands and forests below 900 meters (m) and may be found in riparian or non-riparian areas (Dudek 2003). It has been documented in several locations within western Riverside County, with the majority of stands documented to occur on the eastern and western subregions of the Santa Rosa Plateau of the Santa Ana Mountains. No oak habitat occurs on site.

San Miguel savory is primarily restricted to rocky, gabbroic, and metavolcanic substrates in coastal sage scrub, chaparral, cismontane woodland, riparian woodland, and valley and foothill grasslands (between 120 and 1,005 m; Dudek 2003). The majority of the populations/individuals are associated with the Santa Rosa Plateau and the Santa Ana Mountains. Minimal suitable habitat occurs on site; however, this species was not observed during biological surveys conducted on the project site.

San Jacinto Valley crownscale primarily occurs in floodplains and is associated with alkali playas, alkali scrub, vernal pools and alkali grasslands at elevations above 2,500 feet AMSL. This species is endemic to western Riverside and is restricted to San Jacinto, Meniffee, and Elsinore Valleys (Dudek 2003). This species is not known to occur in French Valley and the project site is at or below 1,600 feet AMSL; therefore, the species is not expected to occur on the project site.

Coulter's matilija poppy occurs in dry washes and canyons below 3,900 feet AMSL in open, mildly disturbed sage scrub, chaparral, and along rocky drainages (Dudek 2003). The majority of known occurrences for this species are in the Santa Ana Mountains and east to Temescal Canyon. This species is conspicuous and can be identified year round. Typical habitat for this species does not occur on the project site, and it was not observed during the various biological surveys conducted.

Fish's milkwort is restricted to the eastern slopes of the Santa Ana Mountains and possibly the northern slopes of the Agua Tibia Mountains (Dudek 2003). It is associated with shaded areas within cismontane oak woodlands and riparian woodlands, although it also occurs in xeric and mesic chaparral habitat. Suitable habitat does not occur on the project site and this species was not observed during biological surveys conducted on the project site.

All of the herbaceous species potentially occurring on site would have been in flower and readily identifiable during one or more of the surveys conducted in the project area. These species are discussed in greater detail below and include specific habitat information that greatly decreases their probability of occurrence on site.

Several of the species are associated with vernal pools, mesic clay substrate, saline flats and depressions, mesic grasslands, playas, or similar habitats. These species are spreading navarretia, California Orcutt grass, prostrate navarretia, San Diego button-celery, thread-leaved brodiaea, Orcutt's brodiaea, vernal barley, and smooth tarplant. None of these species were found during the Riparian/Riverine and Vernal Pool Habitat Assessments or other surveys on the project site, and they are not expected to occur.

Mud nama is restricted to muddy embankments of marshes and swamps and within lake margins and riverbanks. Three populations are known from Riverside County, with 2 occurring along the San Jacinto River (Dudek 2003). Habitat for this species is absent from the project site.

Graceful tarplant has a fairly scattered distribution, with known occurrences concentrated within the Santa Ana Mountains and Foothills, primarily within U.S. Forest Service lands (Dudek 2003). Within the Plan Area, graceful tarplant is restricted to coastal scrub, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grasslands at elevations below 2,000 feet AMSL within western Riverside County (Dudek 2003). Minimal amounts of suitable habitat occur on the project site; however, this species was not observed during biological surveys conducted on the project site.

Ocellated Humboldt lily occurs in openings in oak canyons, chaparral, and yellow pine forest. Within western Riverside County, this species is restricted to canyons along the east slope of the Santa Ana Mountains and the north slope of the Palomar Mountains (Dudek 2003). Habitat for

this species does not occur on the project site. This species was not observed during biological surveys conducted on the project site.

Slender-horned spineflower occurs in chaparral and coastal sage scrub on alluvial fans. This habitat does not occur on the project site. This species was not observed during biological surveys conducted on the project site.

3.5 BURROWING OWL HABITAT ASSESSMENT AND SURVEY

HELIX completed protocol-level surveys for burrowing owl in 2014 and 2016 (Figure 11). A single, unpaired burrowing owl (BUOW1) was observed during both survey events using a burrow along the southern boundary of the site near the intersection of Buck Road and Brenda Road. This owl is presumed to be a resident owl. In 2014, an unpaired transient owl (BUOW2) was observed outside a burrow in the northwestern portion of the site; however, the owl was only observed on a single occasion and was not observed again in 2016. An additional unpaired transient owl (BUOW3) was also incidentally observed foraging off site on June 24, 2016 during a jurisdictional delineation survey; however, this owl was also only observed on a single occasion and was not observed again 2016.

Additional burrows with potential to be used by burrowing owls were observed at various locations throughout the project site (Figure 10). None of these other burrows showed signs of recent or historic use by burrowing owl. These potential burrows included fossorial mammal burrows, dirt mounds, rock piles and debris piles, none of which supported any burrowing owl sign.

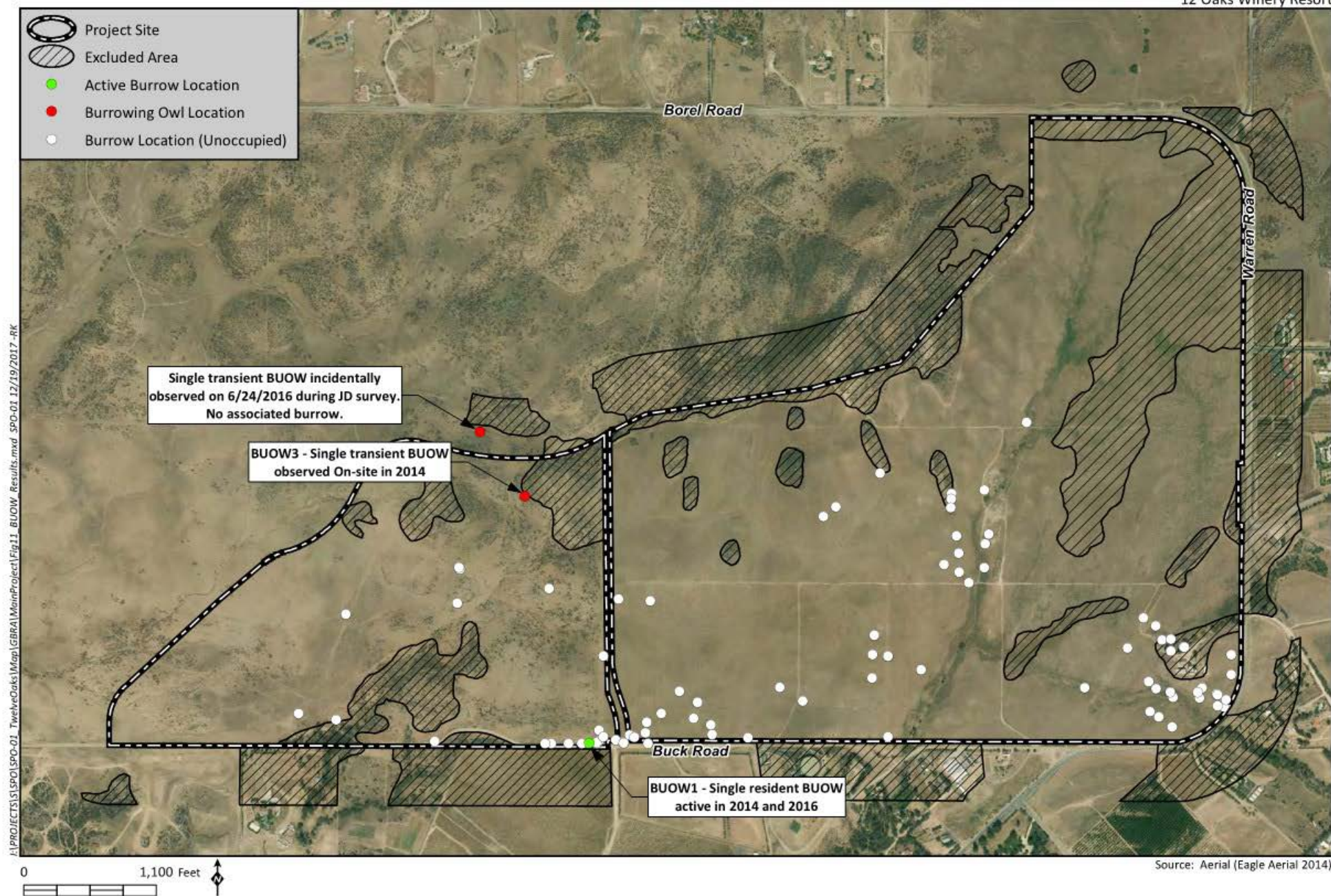
3.6 OTHER SENSITIVE SPECIES

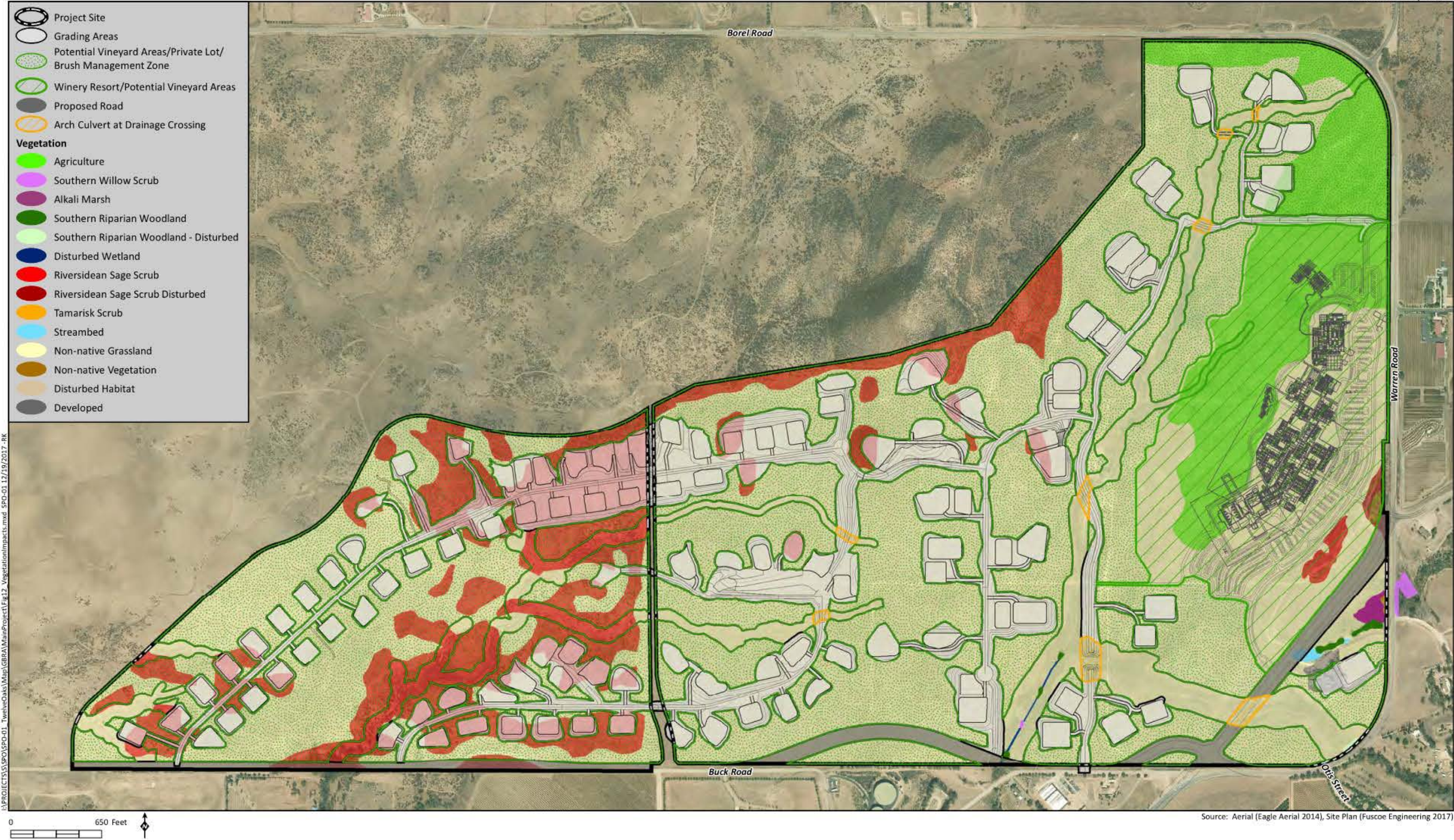
A nine-quadrangle (Temecula, Hemet, Romoland, Sage, Winchester, Murrieta, Vail Lake, Pechanga and Bachelor Mountain) search centered on the Bachelor Mountain quadrangle of the CNDDDB was conducted along with an in-house database for sensitive plants and animals that have potential to occur in the project vicinity.

3.6.1 Plants

A total of 82 sensitive plant species were reviewed for their potential to occur in the project vicinity. Eleven of the 82 species are listed at the state or federal level, 10 of which are not expected to occur in the project site. The single listed species that has low potential to occur in the project area is the federally listed as endangered and state listed as threatened Munz's onion (*Allium munzii*). Focused plant surveys previously conducted in 2003 were negative for Munz's onion and other sensitive and listed plant species (Principe 2004a). This species was also not observed during HELIX's recent surveys.

The other 10 listed species are California Orcutt grass (*Orcuttia californica*), Nevin's barberry (*Berberis nevinii*), San Diego button celery (*Eryngium aristulatum* var. *parishii*), and slender-horned spineflower (*Dodecahema leptoceras*) that are federally and state listed as endangered. San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) and San Diego ambrosia (*Ambrosia pumila*) that are federally listed as endangered. Thread-leaved brodiaea (*Brodiaea filifolia*) and





Vail Lake ceonothus (*Ceonothus ophiochilus*) that are both federally listed as threatened and state listed as endangered. Spreading navaretia (*Navaretia fossalis*) that is federally listed as threatened Mojave (paniculate) tarplant (*Deinandra mohavensis*) that is state listed as endangered (Table 6).

One of the remaining 71 non listed species were observed on the site. The one non listed sensitive species on the site is paniculate tarplant (*Deinandra paniculata*).

Paniculate Tarplant

Paniculate tarplant is a California Native Plant Society Rank 4.2 species. Species in this category are considered of limited distribution and are uncommon enough that their status requires monitoring. Most of the plants of this rank do not meet the definitions of a Sectiona 1901, Chapter 10 of the Native Plant Protection Act, or Sections 2062 and 2067 of the California Endangered Species Act (CNPS 2017). This species is relatively common in this part of California and is regularly documented in the area. This species is not a covered species under the MSHCP. Additional details are included in Sections 5 and 6 below.

Table 6
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 1-Listed Species			
California Orcutt grass (<i>Orcuttia californica</i>)	FE/SE CNPS Rank 1B.1	Vernal pools.	Not expected. No vernal pools present.
Nevin's barberry (<i>Berberis nevinii</i>)	FE/SE CNPS Rank 1B.2	Occurs in chaparral, woodland, coastal and riparian scrub communities and cismontane woodland, in gravelly soils. Associated with steep.	Not expected. Riparian and sage scrub habitats are limited. Gravelly soils not present. Species conspicuous year round and was not observed.
San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>)	FE/SE CNPS Rank 1B.1	Mesic area, sage scrub, grassland, vernal pools.	Not expected. Vernal pool and similar mesic habitats absent from project area.
slender-horned spineflower (<i>Dodecahema leptoceras</i>)	FE/SE CNPS Rank 1B.1	Chaparral, woodland, scrub, sandy soil.	Not expected. Soils are more loam than sand, no chaparral habitat and only limited scrub habitat in project area.
Munz's onion (<i>Allium munzii</i>)	FE/ST CNPS Rank 1B.1	Clay soils, opening in grassland, sage scrub.	Low. Small patches of clay soils with grassland are present, much of the clay soils have been disturbed by agriculture.
San Jacinto Valley crownscale (<i>Atriplex coronata</i> var. <i>notatior</i>)	FE/-- CNPS Rank 1B.1	Occurs in playas, chenopod scrub, valley and foothill grassland, and vernal pools. From 1,250 to 1,805 feet in elevation.	Not expected. The alkali meadow is low potential habitat for this species, but this species is restricted to San Jacinto, Meniffee and Elsinore Valleys (Dudek 2003). It is not known to occur in French Valley.
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE/-- CNPS Rank 1B.1	Floodplain terraces and vernal pool margins.	Not expected. Vernal pools and/or Floodplain habitat not present in project area.

Table 6 (cont.)
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 1-Listed Species			
thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	FT/SE CNPS Rank 1B.1	Occurs in chaparral, cismontane woodlands, coastal scrub, playas, vernal pools, and valley and foothill grasslands, usually in clay soils. From 80 to 2,820 feet in elevation.	Not expected. Vernal pool habitat not present. Clay soils are present but occur in dry grasslands. Mesic environment on clay soils not present in project area.
Vail Lake ceanothus (<i>Ceanothus ophiochilus</i>)	FT/SE CNPS Rank 1B.1	Occurs in chaparral on gabbroic or pyroxenite-rich outcrops. From 1,900 to 3,495 feet in elevation.	Not expected. Project area occurs below 1,600 feet AMSL. No gabbroic outcrops present.
spreading navarretia (<i>Navarretia fossalis</i>)	FT/-- CNPS Rank 1B.1	Vernal pools.	Not expected. No vernal pools present.
Mojave (paniculate) tarplant (<i>Deinandra mohavensis</i>)	--/SE CNPS Rank 1B.3	Scrub and grassland, vernal mesic. Typically found at elevations above 2,000 feet AMSL.	Not expected. Vernal mesic areas with clay soils are not present in project area. Project area is below 1,600 feet AMSL.
Section 2-Non-listed Sensitive Species			
Alkali marsh aster (<i>Almutaster pauciflorus</i>)	--/-- CNPS Rank 2B.2	Alkaline meadows and seeps.	Not expected. Preferred habitat does not occur in project area.
Ashy spike-moss (<i>Selaginella cinerascens</i>)	--/-- CNPS Rank 4.1	Chaparral and sage scrub.	Low. A small amount of sage scrub occurs in the project area.
Brewer's calandrinia (<i>Calandrinia breweri</i>)	--/-- CNPS Rank 4.2	Sandy or loamy soils, disturbed and burn sites, chaparral and coastal scrub.	Low. Small amount of disturbed habitat and sage scrub occur on site.
California beardtongue (<i>Penstemon californicus</i>)	--/-- CNPS Rank 1B.2	Sandy soils in Chaparral, coniferous forest and juniper woodland.	Not expected. Sandy soils not present. Preferred habitats not present in project area.

Table 6 (cont.)
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2-Non-listed Sensitive Species			
California screw moss (<i>Tortula californica</i>)	--/-- CNPS Rank 1B.2	Sandy soils in chenopod scrub or native grasslands.	Not expected. Chenopod scrub does not occur on site. Soils are more loam than sand.
Chaparral nolina (<i>Nolina cismontana</i>)	--/-- CNPS List 1B.2	Chaparral and coastal scrub.	Not expected. Minimal scrub habitat present in project area.
Chaparral ragwort (<i>Senecio aphanactis</i>)	--/-- CNPS Rank 2B.2	Chaparral, woodland and coastal scrub.	Low to not expected. Property includes a minimal amount of woodland and scrub habitats.
Chaparral sand verbena (<i>Abronia villosa</i> <i>aurita</i>)	--/-- CNPS List 1B.1	Sandy soils, requires bare ground, not tolerant of weeds.	Not expected. Sandy soils not present, soils are loamy.
Coulter's goldfields (<i>Lasthenia glabrata</i> <i>ssp. coulteri</i>)	--/-- CNPS Rank 1B.1	Alkaline habitats associated w/Travers soil.	Not expected. No Travers soils present in project area.
Davidson's saltscale (<i>Atriplex serenana</i> var. <i>davidsonii</i>)	--/-- CNPS Rank 1B.2	Alkaline lowlands with saline soil.	Not expected. Saline soils not present.
Delicate clarkia (<i>Clarkia delicata</i>)	--/-- CNPS Rank 1B.2	Chaparral and woodland, often on gabbroic soil.	Not expected. Gabbroic soils, chaparral and woodlands not present in project area.
Douglas fiddleneck (<i>Amsinckia</i> <i>douglasiana</i>)	--/-- CNPS Rank 4.2	Monterey shale, dry, cismontane woodland, grassland.	Not expected. Monterey shale soil does not occur on site.
Engelmann oak (<i>Quercus engelmannii</i>)	--/-- CNPS Rank 4.2	Chaparral, cismontane woodland, riparian woodland, grasslands.	Not expected. Species is conspicuous year round and was not observed on site.
felt-leaved monardella (<i>Monardella hypoleuca</i> <i>spp. lanata</i>)	--/-- CNPS Rank 1B.2	Chaparral and woodland.	Not expected. No chaparral habitat on site, and only a small patch of woodland.

Table 6 (cont.)
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2-Non-listed Sensitive Species			
Fish's milkwort (<i>Polygala cornuta</i> var. <i>fishiae</i>)	--/-- CNPS Rank 4.3	Shaded areas in woodland, also can occur in xeric and mesic chaparral.	Not expected. Woodland on site small and open, no chaparral habitat.
Gander's ragwort (<i>Senecio ganderi</i>)	--/SR CNPS Rank 1B.2	Chaparral, burn and gabbroic outcrops.	Not expected. No burn areas, chaparral or gabbroic soils.
Golden violet (<i>Viola purpurea</i> ssp. <i>aurea</i>)	--/-- CNPS Rank 1B.2	Sandy soils in great basin scrub, and pinyon and juniper woodland.	Not expected. Sandy soils, great basin scrub and pinyon juniper woodland not present.
graceful tarplant (<i>Holocarpha virgata</i> ssp. <i>elongata</i>)	--/-- CNPS Rank 4.2	Woodland, chaparral, sage scrub and grassland typically lacking a well developed scrub cover.	Low. Large area of grassland with minimal shrub cover occur on the site. Not observed during the various surveys.
Hall's monardella (<i>Monardella macrantha</i> ssp. <i>hallii</i>)	--/-- CNPS Rank 1B.3	Broad leaf forest, coniferous forest, chaparral, cismontane woodland and grassland.	Low. Grassland habitat present, species more likely to occur in forest or chaparral that are not present.
Heart-leaved pitcher sage (<i>Lepechinia cardiophylla</i>)	--/-- CNPS Rank 1B.2	Perennial shrub found in coniferous forests, chaparral and cismontane woodland.	Not expected. Preferred habitats do not occur on site.
Intermediate mariposa lily (<i>Calochortus weedii</i> var. <i>intermedius</i>)	--/-- CNPS List 1B.2 MSHCP Covered.	Rocky, chaparral, scrub, grassland.	Low. Grassland is present but rocky area are lacking.
Intermediate monardella (<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>)	--/-- CNPS Rank 1B.3	Chaparral, cismontane woodland and occasionally coniferous forest.	Not expected. Preferred habitat does not occur on site.
Jaeger's bush milk-vetch (<i>Astragalus pachypus</i> var. <i>jaegeri</i>)	--/-- CNPS Rank 1B.1	Sandy soils, chaparral, woodland, scrub, grassland.	Not expected. Chaparral and sandy soils not present.

Table 6 (cont.)
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2-Non-listed Sensitive Species			
Lakeside Ceanothus (<i>Ceanothus cyaneus</i>)	--/-- CNPS Rank 1B.1	Coniferous forest, chaparral.	Not expected. Preferred habitat does not occur.
Latimer's woodland-gilia (<i>Saltugilia latimeri</i>)	--/-- CNPS Rank 1B.2	Chaparral, Mojavean desert scrub, Pinyon and juniper woodland /rocky or sandy, often granitic, sometimes washes.	Not expected. Species preferred habitat does not occur on site.
Little mouseltail (<i>Myosurus minimus ssp. apus</i>)	--/-- CNPS Rank 3.1	Alkaline vernal pools in grassland.	Not expected. Vernal pools not present in project area.
Long-spined spineflower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>)	--/-- CNPS List 1B.2 MSHCP Covered.	Chaparral, sage scrub, grassland, often in clay soils.	Low. Small patches of clay soils present in grassland. No chaparral or sage scrub with clays soils.
many-stemmed dudleya (<i>Dudleya multicaulis</i>)	--/-- CNPS Rank 1B	Clay soils in barren, rocky areas with limited vegetation.	Not expected. Rocky habitat limited and does not occur in areas with clay soils.
Mesa horkelia (<i>Horkelia cuneata</i> ssp. <i>puberula</i>)	--/-- CNPS List 1B.1	Chaparral, woodland, and scrub, sandy or gravelly soils.	Not expected. Sandy and gravelly soils not present. Limited woodland and scrub habitats.
Mission canyon bluecup (<i>Githopsis diffusa</i> ssp. <i>filicaulis</i>)	--/-- CNPS Rank 3.1	Mesic and disturbed areas in Chaparral.	Not expected. No chaparral habitat on site.
Ocellated humboldt lily (<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>)	--/-- CNPS Rank 4.2	Openings in chaparral, cismontane woodland, coastal scrub, riparian woodland.	Low to not expected. A small amount of coastal scrub and riparian woodland occur on site. other preferred habitats do not occur.
Orcutt's brodiaea (<i>Brodiaea orcuttii</i>)	--/-- CNPS Rank 1B.1	Mesic clay, woodland, chaparral scrub, vernal pools.	Not expected. Mesic areas on clay soils not present.

Table 6 (cont.)
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2-Non-listed Sensitive Species			
Orcutt's linanthus (<i>Linanthus Orcuttii</i>)	--/-- CNPS Rank 1B.3	Openings in chaparral, coniferous forest and juniper woodland.	Not expected. Preferred habitats not present in project area.
Orcutt's pincushion (<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>)	--/-- CNPS Rank 1B.1	Sandy soils, coastal bluff scrub below 200 feet AMSL.	Not expected. Project area occurs above 1,500 feet AMSL.
Palmer's grapplinghook (<i>Harpagonella palmeri</i>)	--/-- CNPS List 4.2 MSHCP Covered.	Clay soil, chaparral, sage scrub, and grassland.	Low. Small patches of clay soils present in grassland.
Palomar monkeyflower (<i>Mimulus diffusus</i>)	--/-- CNPS Rank 4.3	Sandy or gravelly soil in chaparral or coniferous forest.	Not expected. preferred habitat does not occur on site.
Paniculate tarplant (<i>Deinandra paniculata</i>)	--/-- CNPS Rank 4.2	Usually found in vernal mesic areas and sometimes sandy areas within coastal scrub, grassland and vernal pools. Often found in fields adjacent to ephemeral and intermittent streams.	Present. Species observed in scattered patches adjacent to the ephemeral streams in southwestern portion of the property.
Parish's brittlescale (<i>Atriplex parishii</i>)	--/-- CNPS Rank 1B.1	Alkaline lowlands with saline soil.	Not expected. Saline soils not present in project area.
Parish's chaenactis (<i>Chaenactis parishii</i>)	--/-- CNPS Rank 1B.3	Rocky soils in Chaparral.	Not expected. No chaparral or rocky soils present.
Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>)	--/-- CNPS List 1B.1 MSHCP Covered.	Openings in chaparral and sage scrub, sandy, or rocky soil.	Not expected. Sandy and rocky soils not present. Limited sage scrub present.
Parry's tetracoccus (<i>Tetracoccus dioicus</i>)	--/-- CNPS Rank 1B.2	Chaparral and coastal scrub.	Low. Limited amount of sage scrub present. No chaparral in project area.

Table 6 (cont.)
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2-Non-listed Sensitive Species			
Payson's jewel-flower (<i>Caulanthus simulans</i>)	--/-- CNPS Rank 4.2	Pinyon-juniper woodland, chaparral and sage scrub. Typically on slopes and ridgelines with sandy granitic soil.	Not expected. True hills with ridgelines not present. Limited sage scrub present in project area.
Peninsular spineflower (<i>Chorizanthe leptotheca</i>)	--/-- CNPS Rank 4.2	Alluvial fans with granitic soils and chaparral, coastal scrub or coniferous forest habitats.	Not expected. Alluvial fan habitat does not occur on the site.
Plummer's mariposa lily (<i>Calochortus plummerae</i>)	--/-- CNPS List 4.2 MSHCP Covered.	Rocky and sandy soils, in scrub, chaparral, woodland and grassland.	Not expected. Sandy and rocky soils not present. Limited sage scrub present.
Prostrate navarretia (<i>Navarretia prostrata</i>)	--/-- CNPS List 1B.1 MSHCP Covered.	Mesic, alkaline, vernal pools, grassland, scrub.	Not expected. Mesic areas not present. No vernal pool habitat in project area.
rainbow manzanita (<i>Arctostaphylos rainbowensis</i>)	--/-- CNPS Rank 1B.1	Chaparral.	Not expected. No chaparral habitat is present in project area.
Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	--/-- CNPS List 4.3	Openings in chaparral and sage scrub, typically dry sites.	Low. No chaparral and only limited sage scrub occur in project area.
round-leaved filaree (<i>California macrophylla</i>)	--/-- CNPS Rank 1B.1	Clay soils, woodland and grassland, preferably mesic.	Low. Small patches of clay soils present in grassland, but not mesic. Clay soils disturbed from years of agriculture.
salt spring checkerbloom (<i>Sidalcea neomexicana</i>)	--/-- CNPS Rank 2B.2	Alkaline mesic soils, chaparral, coastal and desert scrub, playas.	Not expected. Species preferred habitat does not occur on site.

Table 6 (cont.)
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2-Non-listed Sensitive Species			
San Bernardino aster (<i>Symphyotrichum defoliatum</i>)	--/-- CNPS List 1B.2	Grassland and disturbed areas.	Low. Grassland and disturbed habitats present. Species not observed during previously conducted focused surveys (Principe 2004a).
San Diego hulsea (<i>Hulsea californica</i>)	--/-- CNPS Rank 1B.3	Burned areas in chaparral and coniferous forest.	Not expected. Burn areas not present in project area.
San Diego sunflower (<i>Hulsea californica</i>)	--/-- CNPS Rank 1B.3	Burned areas in chaparral and coniferous forest.	Not expected. Chaparral and coniferous forest do not occur, and site is not a burn area.
San Gabriel ragwort (<i>Senecio astephanus</i>)	--/-- CNPS Rank 4.3	Rocky slopes in coastal scrub and chaparral.	Low. Minimal amount of slightly rocky sage scrub on site.
San Lucia dwarf rush (<i>Juncus luciensis</i>)	--/-- CNPS Rank 1B.2	Meadows, seeps, vernal pool in chaparral, coniferous forest and great basin scrub.	Not expected. Mesic areas such as meadows, seeps and vernal pools not present.
San Miguel savory (<i>Satureja chandleri</i>)	--/-- CNPS Rank 1B.2	Chaparral, woodland, scrub, grassland, rocky areas.	Low. Grassland habitat present but limited rocky habitat.
Santa Rosa basalt brodiaea (<i>Brodiaea santarosae</i>)	--/-- CNPS Rank 1B.2	Valley and foothill grasslands on basaltic soils.	Not expected. No basaltic soils on site.
Santiago peak phacelia (<i>Phacelia keckii</i>)	--/-- CNPS Rank 1B.3	Closed cone coniferous forest, chaparral above 1,500 feet AMSL.	Not expected. Habitat does not occur on site.
Shevock's copper moss (<i>Schizymenium shevockii</i>)	--/-- CNPS Rank 1B.2	Cismontane woodland, rocky, mesic. Often on rocks along roads.	Not expected. Cismontane woodland does not occur on site.

Table 6 (cont.)
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2-Non-listed Sensitive Species			
Small-flowering microseris (<i>Microseris gouglasii</i> sp. <i>platycarpa</i>)	--/-- CNPS Rank 4.2	Clay soils in woodland, coastal scrub, grasslands and vernal pools.	Low. Clay soils occur on site, but have been highly disturbed from agriculture.
Small-flowering morning-glory (<i>Convolvulus simulans</i>)	--/-- CNPS Rank 4.2	Clay soils, seeps, in chaparral, coastal scrub and grasslands.	Low. Clay soils occur on site, but have been highly disturbed from agriculture. No seeps observed.
smooth tarplant (<i>Centromadia pungens</i> spp. <i>laevis</i>)	--/-- CNPS Rank 1B.1	Riparian/watercourses, grassland, alkali scrub.	Low. Riparian habitat present, with adjacent grassland. Species not observed and is obvious when present.
South coast saltscale (<i>Atriplex pacifica</i>)	--/-- CNPS Rank 1B.2	Coastal scrub, dunes, and playas, below 500 feet amsl.	Not expected. Dunes and playas not present, entire site is above 1,400 feet amsl.
southern skullcap (<i>Scutellaria bolanderi</i> spp. <i>austromontana</i>)	--/-- CNPS Rank 1B.2	Woodland, chaparral, mesic.	Not expected. Mesic habitats not present in project area.
Sticky dudleya (<i>Dudleya viscida</i>)	--/-- CNPS Rank 1B.2	Chaparral, scrub, coastal bluffs, rocky.	Low to not expected. Chaparral and bluffs do not occur, small amount of sage scrub on site.
Tecate cypress (<i>Hesperocyparis forbesii</i>)	--/-- CNPS Rank 1B.1	Clay, gabbroic or metavolcanic soils in coniferous forest or chaparral.	Not expected. Species conspicuous year round and was not observed. Preferred habitat not present.
vernal barley (<i>Hordeum intercedens</i>)	--/-- CNPS Rank 3.2	mesic grasslands, vernal pools, and large saline flats or depressions.	Low. Saline flats not present, minimal mesic habitat on site.
Western spleenwort (<i>Asplenium verpertinum</i>)	--/-- CNPS Rank 4.2	Rocky soils in Chaparral, woodland or coastal scrub.	Low. Minimal sage scrub present on site.

Table 6 (cont.)
SENSITIVE PLANT SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2-Non-listed Sensitive Species			
White rabbit-tobacco (<i>Pseudognaphalium leucocephalum</i>)	--/-- CNPS Rank 2B.2	Riparian areas, woodland, sandy or gravelly areas.	Not expected. Riparian habitat is small, species not observed. Sandy or gravelly soils not present.
Wiggin's cryptantha (<i>Cryptantha wigginsii</i>)	--/-- CNPs Rank 1B.2	Sage scrub habitat often with clay soils.	Low to not expected. Clay soils and sage scrub occur but not together.
Woolly chaparral-pea (<i>Pickeringia montana</i> var <i>tomentosa</i>)	--/-- CNPS Rank 4.3	Gabbroic, granitic clay chaparral.	Not expected. No chaparral habitat occurs on site.
Woven spored lichen (<i>Texosporium sancti-jacobi</i>)	--/-- CNPS Rank 3	Chaparral openings, usually on animal pellets, dead twigs or detritus rich soil.	Not expected. No chaparral habitat occurs on site.

*Explanation of Sensitivity Status is included as Appendix C.

3.6.2 Wildlife

There are 52 sensitive wildlife species historically known to occur in the vicinity of the project site, 11 of which are listed at the state or federal level (Table 8). One of the 11 listed species was observed on the site. The federally endangered and state species of special concern quino checkerspot butterfly (*Euphydryas editha quino*), was observed along the western edge of the property in 2003 (Principe 2003a). Four of the listed species have potential to occur in the project area. Stephens' kangaroo rat (*Dipodomys stephensi*), a federally endangered and state threatened species, has a moderate potential to occur in the project site based on range and habitat requirements, although no sign of this species was observed. LBV, a federal and state endangered species, was determined to have only a low potential to occur within a small patch of marginal habitat on the eastern border of the project site. The federal listed as threatened coastal California gnatcatcher (CAGN: *Poliophtila californica californica*) has a moderate potential to occur. A pair of CAGN were observed adjacent to the northern border of the site during a quino checkerspot butterfly survey in 2004 (Principe 2004a). The state listed as threatened Swainson's hawk (*Buteo swainsoni*) has a low potential to temporarily use the site for foraging during migration.

The six additional listed species are not expected to occur in the site. These species are: federally endangered and state species of special concern, arroyo toad (*Anaxyrus californicus*), and San Bernardino kangaroo rat (*Dipodomys merriami parvus*); the federally endangered Riverside fairy shrimp (*Streptocephalus wootoni*); the federally threatened vernal pool fairy shrimp (*Branchinecta*

lynchi); the federal threatened and state endangered western yellow-billed cuckoo (*Coccyzus americanus occidentalis*); and the federally delisted, state endangered bald eagle.

Nine of the remaining 41 sensitive (non-listed) species were observed on the site. The nine species observed include five State species of special concern: burrowing owl (*Athene cunicularia*), coast horned lizard (*Phrynosoma coronatum blainvillei*), Cooper's hawk (*Accipiter cooperii*), loggerhead shrike (*Lanius ludovicianus*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and yellow warbler (*Dendroica petechia brewsteri*). The other three sensitive species observed on site are white-tailed kite (*Elanus leucurus*), a CDFW fully protected species; California horned lark (*Eremophila alpestris actia*) a CDFW watch list species; and coastal whiptail (*Aspidoscelis tigris stejnegeri*), which is no longer recognized as a CDFW watch list species. The species observed on site include species noted in previous biological reports that included a larger study area, but the species observed also have high potential habitat with the target project area (Principe 2004a).

All of the listed and sensitive species observed on site are covered species under the MSHCP. Compliance with the MSHCP, including payment of associated fees mitigates potential impacts to all of the sensitive species with potential to occur in the project site except coast patch-nosed snake (*Salvadora hexalepis virgultea*), Jacumba pocket mouse (*Perognathus longimembris internationalis*), southern grasshopper mouse (*Onychomys torridus ramona*), summer tanager (*Piranga rubra*), and two-striped garter snake (*Thamnophis hammondi*), all of which are state species of special concern with low potential to occur in the project site.

Table 7 SENSITIVE ANIMAL SPECIES ASSESSED FOR POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 1 – Listed Species			
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE/SE	Riparian areas with dense ground cover and stratified canopy, prefers willows.	Not expected to Low. Riparian habitat on site is marginal and sparse compared to typical habitat. Southern willow scrub off site to east is typical habitat for species. Species not detected during general surveys in 2015.

Table 7 (cont.)
SENSITIVE ANIMAL SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 1 – Listed Species			
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	FE/ST	Open areas with sparse perennial cover and loose soil.	Moderate. Habitat occurs on site, although a large portion of the grassland has dense cover. CNDDDB records of species occurring in Project area.
Arroyo toad (<i>Anaxyrus californicus</i>)	FE/SC	Low flow streams with sparse cover in foothills, valleys and mountains. Requires sandy terraces.	Not expected. Flowing streams not present in Project area.
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE/SC	Open areas, sparse vegetation, flowers. Host plants include <i>Plantago</i> spp., <i>Antirrhinum coulterianum</i> , <i>Cordylanthus rigidus</i> .	Present. A single adult was observed on or adjacent to the western side of the property in 2003 (Principe 2003a).
San Bernardino kangaroo rat (<i>Dipodomys merriami parvus</i>)	FE/SC	Sage scrub, sandy soils, alluvial fans, floodplains.	Not expected. Project area has sandy soils, but has limited sage scrub and is not alluvial. Species not known to occur south of Perris.

Table 7 (cont.)
STATUS OF SENSITIVE ANIMAL SPECIES ON THE PROJECT SITE

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 1 – Listed Species (cont.)			
Riverside fairy shrimp (<i>Streptocephalus wootoni</i>)	FE/--	Endemic to Western Riverside, Orange, and San Diego Counties in areas of tectonic swales/ earth slump basins within grassland and coastal sage scrub. Found in vernal pools.	Not expected. No vernal pools in Project area. Surveys previously conducted, concluded species not present in Project area. A single cyst was reported in a stock pond approximately 100 feet north of the Project area.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT/--	Vernal pool and playa habitat, cool pools, preferable on clay soils.	Not expected. Clay soils occur on site in grassland, but no vernal pools occur.
Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT/SE	Dense, thick riparian with willows, dense understory, slow-moving watercourses.	Not expected. Dense riparian habitat with slow moving water does not occur in Project area.
Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	FT/SSC	Coastal sage and other low scrub.	Moderate. Limited sparse patches of sage scrub occur on project site. Species known to occur nearby (Principe 2003b).
Swainson's Hawk (<i>Buteo swainsoni</i>)	--/ST	Open desert, sparse scrub with large trees.	Low. Limited scrub habitat present. Tall trees present. Species may use site for short stop over during migration.
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	DL/SE**	Large bodies of open water for foraging, Nearby trees for nesting and roosting.	Not expected to Low. No open water on project. Species may occur at nearby Lake Skinner.

Table 7 (cont.)
SENSITIVE ANIMAL SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2 – Sensitive (non-listed) Species			
Arroyo chubb (<i>Gila orcuttii</i>)	--/SC	Occurs in the Los Angeles basin south coastal stream, in slow water stream sections with mud or sand bottoms.	Not expected. Flowing streams not present in Project area.
Bell's sage sparrow (<i>Amphispiza belli belli</i>)	--/SC	Evenly spaced sage scrub.	Moderate. Limited sage scrub occurs in Project area, species observed adjacent to Project area.
Bendire's thrasher (<i>Toxostoma bendirei</i>)	--/SC	Mojave desert scrub is preferred habitat. Areas with cholla, creosote and yucca. Will also use juniper woodland.	Not expected. Preferred habitat does not occur in Project area.
Burrowing owl (<i>Athene cunicularia</i>)	--/SC	Grassland, fallow agriculture, and areas of sparse cover, preferably with burrows of fossorial mammals.	Present. Species observed on western portion of property.
Coast horned lizard (<i>Phrynosoma coronatum blainvillei</i>)	--/SC	Grassland, scrub, chaparral, and woodland and an abundance of ants for prey.	Present. Species observed on or adjacent to project area during previous studies (Principe 2004a).
Coast patch-nosed snake (<i>Salvadora hexalepis virgultea</i>)	--/SC	Coastal and desert scrub, chaparral, washes. A generalist.	Low. Project area mainly comprised of grassland with limited scrub habitat.
Coast Range newt (<i>Taricha torosa torosa</i>)	--/SC	Grassland, woodland associated with ponds, and slow moving streams.	Not expected. No flowing streams or ponds occur in Project area.

Table 7 (cont.)
SENSITIVE ANIMAL SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2 – Sensitive (non-listed) Species			
Coastal cactus wren (<i>Campylorhynchus brunneicapillus sandiegensis</i>)	--/SC	Scrub, desert thickets, and areas with large branching cacti.	Not expected. Desert thickets and large cacti not present.
Cooper's hawk (<i>Accipiter cooperii</i>)	--/SC	Grassland, woodland, open areas, prefers rocky vegetated streams but is also found in uplands.	Present. Species observed on eastern edge of Project area in riparian habitat.
Coronado Island skink (<i>Plestiodon skiltonianus hoainterparietalis</i>)	--/SC	Grassland, woodland, open areas, prefers rocky vegetated streams but is also found in uplands.	Not expected. flowing streams do not occur on site. Grassland present but is dense.
Dulzura pocket mouse (<i>Chaetodipus californicus femoralis</i>)	--/SC	Grassland and chaparral ecotone, sage scrub.	Not expected. No ecotone habitat present. Limited sage scrub patches present.
Ferruginous hawk (<i>Buteo regalis</i>)	--/SC	Grassland and chaparral ecotone, sage scrub.	Present. Species observed in area as part of previous surveys (Principe 2004a)
Golden eagle (<i>Aquila chrysaetos</i>)	--/SC	Open country, prefers mountains or hills. Avoids areas of dense human populations.	Not expected. Mountains and hills not present in Project area.
Jacumba pocket mouse (<i>Perognathus longimembris internationalis</i>)	--/SC	Open habitats, grassland, sage scrub with sandy soils.	Low. Soils more loam than sand. Limited sage scrub.
Loggerhead shrike (<i>Lanius ludovicianus</i>)	--/SC	Open grassland or shrubland with trees, utility poles, fence post or other perch sites.	Present. Species observed in Project area.

Table 7 (cont.)
SENSITIVE ANIMAL SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2 – Sensitive (non-listed) Species			
Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)	--/SC	Fine sandy soils with sparse vegetation.	Not expected. Grassland relatively dense, soils are sandy loam.
Northern harrier (<i>Circus cyaneus</i>)	--/SC	Meadows, grassland, scrub, rarely in woodland. Roosts on ground.	High. Grassland is dominate habitat. Species locally common.
Northern red-diamond rattlesnake (<i>Crotalus ruber</i>)	--/SC	Heavy brush, boulders, can use a variety of habitats; prey density determining factor.	Low. Limited brush in project area that in mainly comprised of grassland.
Orange-throated whiptail (<i>Cnemidophorus hyperthrus</i>)	--/SC	Chaparral, sage scrub, grassland, woodland, and riparian areas.	Low. Grassland present along with small amounts of riparian and sage scrub.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	--/SC	Primarily open scrub with short grasses.	Present. Species observed on site and is locally common.
San Diego desert woodrat (<i>Neotoma lepida</i>)	--/SC	Scrub and desert, rock outcrops, or areas of dense cover.	High. Neotoma middens observed in project area. Species locally common.
San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	--/SC	Sage scrub and grassland, sandy soils.	Low. Grassland present, limited sage scrub in Project area. Soils are more loam than sand.
Southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	--/SC	Open space in grassland and sparse sage scrub.	Low. Grassland relatively dense, limited scrub habitat present.

Table 7 (cont.)
SENSITIVE ANIMAL SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2 – Sensitive (non-listed) Species			
Summer tanager (<i>Piranga rubra</i>)	--/SC	Breeds in deciduous forests, pine oak forests and riparian woodland.	Low. Project area is primarily grassland. Small amount of riparian habitat in Project area.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	--/SC	Roosts in cave and similar cover with open dark areas. Uses a variety of habitats including desert scrub and pine forests.	Not expected. Caves or similar roosting habitat not present.
Two-striped garter snake (<i>Thamnophis hammondi</i>)	--/SC	Stream course with adjacent dense vegetation.	Low. Streams in Project area are dry ephemeral streams.
Western mastiff bat (<i>Eumops perotis californicus</i>)	--/SC	Rocky areas, cliff faces, known to roost in buildings.	Not expected. No cliff or large rocky areas present.
Western pond turtle (<i>Actinemys marmorata pallida</i>)	--/SC	Slow moving stream, ponds, reservoirs, and other water bodies deeper than 6 feet with logs or other submerged cover.	Not expected. No water bodies in Project area.
Western spadefoot (<i>Spea hammondi</i>)	--/SC	Grassland, sage scrub or occasionally chaparral. Standing water, puddles, vernal pools, needed for reproduction.	Low. Grassland present but preferred breeding habitat does not occur in project area.
Western yellow bat (<i>Lasiurus xanthinus</i>)	--/SC	Desert grassland and scrub with an associated water feature.	Not expected. No water bodies in Project area.

Table 7 (cont.)
SENSITIVE ANIMAL SPECIES ASSESSED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2 – Sensitive (non-listed) Species			
Yellow warbler (<i>Dendroica petechia brewsteri</i>)	--/SC	Riparian woodland and scrub.	Moderate. Species heard calling from off-site southern willow scrub on east side of Project area. The habitat on site is marginal for this species.
Yellow-breasted chat (<i>Icteria virens</i>)	--/SC	Wide riparian woodland, dense willow thickets, with well-developed understory.	Low. Small area of preferred habitat occurs in off site portion of Project area.
White-tailed kite (<i>Elanus leucurus</i>)	--/--	Grassland, agriculture with nearby woodland for nesting.	Present. Observed in Project area.
San Diego banded gecko (<i>Coleonyx variegatus abbotti</i>)	--/--	Deserts scrub to chaparral; micro-habitat desert species.	Not expected. Scrub habitat limited on site and is not desert scrub.
Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	--/--	Open rocky areas with sparse vegetation usually scrub or grassland.	Present. Species observed in Project area.
Black crowned night heron (<i>Nycticorax nycticorax</i>)	--/--	Wetland/riparian habitats around streams, estuaries, marshes and lakes.	Low. Waterways not present in Project area, but species was observed near project area (Principe 2004a).
San Bernardino ringneck snake (<i>Diadophis punctatus modestus</i>)	--/--	Moist habitats. woodlands, farms, grassland, chaparral.	Not expected. Project area is dry, including riparian areas.
Santa Rosa Plateau fairy shrimp (<i>Linderiella santrosae</i>)	--/--	Southern basalt vernal pools of the Santa Rosa Plateau that remain filled for extended periods of time.	Not expected. No vernal pools in the Project area. Species limited to Santa Rosa Plateau.

Table 7 (cont.) SENSITIVE ANIMAL SPECIES ASSESSED FOR POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY STATUS*	HABITAT	STATUS ON SITE
Section 2 – Sensitive (non-listed) Species			
California horned lark (<i>Eremophila alpestris actia</i>)	--/--	Grassland, agriculture fields, and disturbed fields.	Present. Species observed in grasslands.
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	--/--	Hillsides, with grassland, sage scrub, or chaparral.	Low. Project area has small slopes but not true hill sides. Limited sage scrub in Project area.
White-faced ibis (<i>Plegadis chihi</i>)	--/--	Shallow marshes, spoils banks, meadows, marshes.	Not expected. Wet habitats not present in Project area.

*Explanation of Sensitivity Status is included as Appendix C

3.6.3 Listed Species

As stated above there are four listed species with potential to occur on the project site, and one was observed on site. Quino checkerspot butterfly was observed on the western portion of the site in 2003. Stephens' kangaroo rat has moderate to high potential to occur and LBV, coastal California gnatcatcher and Swainson's hawk have low potential to occur on site. All five of these species are covered under the MSHCP.

Quino Checkerspot Butterfly

A single Quino checkerspot butterfly (QCB) was observed during survey 6 of a protocol survey conducted in 2003 (Principe 2003a). This single adult was observed near or on the western edge of the property. The majority of the property is comprised of grasslands that are not habitat for QCB. Potential habitat for this species occurs on the northwestern portion of the property and on the adjacent off site habitat that is part of the MSHCP preserve. Potential impacts to QCB are fully covered by compliance with the MSHCP and payment of the MSHCP development fees.

Stephens' Kangaroo Rat

Stephens' kangaroo rat (SKR) has multiple CNDDDB records (CDFG 2017) documenting this species occurring adjacent to the project area in habitat similar to what occurs within the site. The project site soils are not sandy loose soils, but are rather comprised of a mix of sandy and rocky loams. Additionally, the grassland is relatively dense in most areas but does include some areas of sparse cover. Potential impacts to SKR are covered by compliance with the MSHCP and payment of the MSHCP and SKR mitigation fees.

Least Bell's Vireo

LBV has CNDDDB records of the species occurring approximately 1.0 mile to the north near Lake Skinner and 1.0 mile to the southwest in habitat associated with Santa Gertrudis Creek. The off-site southern willow scrub along the eastern edge of the site has moderate potential to support the species. The southern riparian woodland along the eastern edge of the site has low potential to support LBV due to proximity with better quality habitat off site. As a standalone habitat, the southern riparian woodland on the site would not be considered typical habitat for LBV.

The project does not propose to directly impact the habitat with potential to support LBV; however, the area is being considered for re-establishment mitigation through the removal of the existing Warren Road crossing. Under the MSHCP, protocol surveys for LBV are not required in avoidance areas. The initial abbreviated LBV survey conducted by Mr. Hogenauer did not detect any LBV on the project site or in the off-site southern willow scrub east of Warren Road. The species was not detected during any of the other biological surveys conducted in 2014 through 2017.

Based on the lack of suitable habitat on the project site itself, LBV is not likely to occur and no on-site direct or indirect impacts are anticipated. Based on the marginal quality of the off-site southern willow scrub habitat east of Warren Road, LBV have only a low potential to occur and no off-site direct impacts are anticipated. In the unexpected event that LBV utilize the off-site habitat in the future, potential indirect impacts could occur if demolition and removal of the existing Warren Road crossing is conducted during the LBV breeding season (March 15 to September 15). Potential impacts to LBV are fully covered by compliance with the MSHCP and payment of the MSHCP development fees. Nevertheless, out of an abundance of caution and at the specific request of the County, updated 2018 protocol-level surveys for LBV are planned to occur in April through June 2018 to confirm the presumed absence of the species in the off-site habitat.

Coastal California Gnatcatcher

The coastal California gnatcatcher (CAGN) utilizes coastal sage scrub habitat, almost exclusively. This sage scrub on the eastern half of the project site occurs as a couple small stands that are not large enough to support a CAGN breeding territory. The western portion of the site has a more extensive cover from sage scrub. A focused CAGN survey conducted in 2003 that included the western half of the property was negative for CAGN. The species is known to occur in the large areas of expansive sage scrub north, and to the west of the project site. A pair of CAGN were observed foraging on the northern border of the site in 2004 during a quino checkerspot butterfly survey (Principe 2004a). The proximity of CAGN to the project site results in the potential for CAGN to disperse and/or forage in the small patches of sage scrub on the project site; however, CAGN are not expected to breed on site. Potential impacts to CAGN are fully covered by compliance with the MSHCP and payment of the MSHCP development fees.

Swainson's Hawk

Swainson's hawk has potential to forage in the sparse sage scrub and grasslands in and adjacent to the project site. This species is only known to occur in Riverside County for short periods as it

migrates through the region from wintering to breeding grounds. Potential impacts to Swainson's hawk are covered by compliance with the MSHCP.

3.6.4 Sensitive Non-Listed Species

As stated above there are nine species that were observed on the project site either during the previous surveys conducted (Princippe 2004a) or by HELIX during the recent surveys. Six of the eight species are California species of special concern. These species are: burrowing owl, coast horned lizard, coopers hawk, loggerhead shrike, San Diego black-tailed jackrabbit, yellow warbler, and white-tailed kite. The two additional sensitive species are California horned lark and coastal whiptail. The burrowing owl is a ground nesting bird of prey and required specific mitigation measures when present on a site. Details are discussed in Sections 5 and 6 below.

4.0 REGULATORY CONTEXT

4.1 FEDERAL GOVERNMENT

Administered by the USFWS, the federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the ESA. Section 9(a) of the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

Sections 4(d), 7, and 10(a) of the federal ESA regulate actions that could jeopardize endangered or threatened species. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A biological assessment is required for any major construction activity if it may affect listed species. In this case, take can be authorized via a letter of biological opinion, issued by the USFWS for non-marine related listed species issues. A Section 7 consultation is required when there is a nexus between federally listed species' use of the site and impacts to USACE jurisdictional areas. Section 10(a) allows issuance of permits for "incidental" take of endangered or threatened species. The term 'incidental' applies if the taking of a listed species is incidental to and not the purpose of an otherwise lawful activity. The MSHCP is the Section 10(a) permit for western Riverside County, including the subject project site.

All migratory bird species that are native to the United States or its territories are protected under the MBTA, as amended under the MBTA of 2004 (FR Doc. 05-5127). This law is generally protective of migratory birds from the direct physical take of the species.

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the Clean Water Act (CWA). The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all WUS. Permitting for projects filling WUS (including wetlands and

vernal pools) is overseen by the USACE under Section 404 of the CWA. Projects may be permitted on an individual basis or may be covered under one of several approved Nationwide Permits. Individual Permits are assessed individually based on the type of action, amount of fill, etc. Individual Permits typically require substantial time (often longer than 6 months) to review and approve, while Nationwide Permits are pre-approved if a project meets appropriate conditions. A CWA Section 401 Water Quality Certification, which is administered by the State Water Resources Control Board, must be issued prior to any 404 Permit.

4.2 STATE OF CALIFORNIA

The California ESA is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. Section 2081 of the California ESA authorizes the CDFW to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes. The MSHCP is the regional 2081 for this portion of the County, including the subject project site. The golden eagle (*Aquila chrysaetos*) and white-tailed kite are considered State Fully Protected Species. Fully Protected species may not be taken or possessed at any time and no state licenses or permits may be issued for their take except for collecting these species necessary for scientific research and relocation of the bird species for the protection of livestock (Fish and Game Code Sections 3511, 4700, 5050, and 5515).

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in plants that are listed.

The California ESA followed the NPPA and covers both plants and animals that are determined to be endangered or threatened with extinction. Plants listed as rare under NPPA were designated threatened under the California ESA.

The California Fish and Game Code (Section 1600 et seq.) requires an agreement with CDFW for projects affecting riparian and wetland habitats through issuance of a Streambed Alteration Agreement.

4.3 WESTERN RIVERSIDE MULTIPLE SPECIES HABITAT CONSERVATION PLAN

The MSHCP is a comprehensive multi-jurisdictional effort that includes Riverside County and multiple cities, including the City of Temecula in western Riverside County. Rather than address sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, proposing a reserve system of approximately 500,000 acres and a mechanism to fund and implement the reserve system (Dudek 2003). Most importantly, the MSHCP allows participating entities to issue take permits for listed species so that individual applicants need not seek their own permits from the USFWS and/or CDFW. The MSHCP was adopted on June 17, 2003, by the Riverside County Board of Supervisors. The Incidental Take Permit was issued by both the USFWS and CDFW on June 22, 2004. As this project site is located in the County of Riverside, the County is the lead agency/permittee.

Within the boundaries of the MSHCP, the project site occurs within Subunit 4, Cactus Valley/SWRC-MSR/Johnson Ranch in the Southwest Area Plan (Figure 4). The project site was

assessed under the approved HANS No. 00408 as part of a larger study area. The HANS determination resulted in approximately 575 acres of conservation occurring north and west of the project site to contribute to the extension of proposed Core 6, with the entirety of the project site addressed herein located within the HANS-approved development footprint (Figure 5).

4.3.1 MSHCP Conservation

This project site is within the Southwest Area Plan; Subunit 4, Cactus Valley/SWRC-MSR/Johnson Ranch and previously subject to approved HANS No. 00408 as part of Joint Project Review (JPR) 05-03-04-03, which resulted in the entirety of the project site designated within a HANS-approved development footprint, offset by approximately 575 acres of Core 6 conservation occurring immediately north and west of the site. See Section 4.3.2 below and Appendix D. Therefore, MSHCP conservation at the project site has already occurred and no additional conservation pursuant to the HANS process is required on the project site.

Nevertheless, a description of the MSHCP criteria for the site is provided herein for context in light of the current environmental baseline and as reinforcement of the HANS approval already completed for the site.

The project site occurs within portions of the following Cells; independent Cell 6088, in Cell 6083 of Cell Group I, Cell 6186 of Cell Group F, and Cell 6189 of Cell Group E.

Subunit 4 of the Southwest Area Plan includes a list of biological issues and considerations that relate to conservation goals of the MSHCP. Each issue is listed below.

- Conserve upland Habitat around the Southwestern Riverside County Multi-Species Reserve to augment existing Conservation within the Southwestern Riverside County Multi-Species Reserve, primarily to the north, south and west, and provide connectivity to proposed Constrained Linkages in French Valley.
- Conserve upland Habitat east of the Southwestern Riverside County Multi-Species Reserve to provide connectivity between the Southwestern Riverside County Multi-Species Reserve and existing conserved lands in the San Bernardino National Forest, proposed Vail Lake Core Area and contributing to the proposed Linkage in Subunit 5 of the San Jacinto Valley Area Plan. Conservation shall incorporate both Live-In Habitat and wildlife movement.
- Conserve key populations of Quino checkerspot butterfly.
- Conserve key populations of coastal California gnatcatcher.
- Conserve golden eagle nest site in Rawson Canyon upstream from Lake Skinner.
- Maintain LBV in Rawson Canyon and east of Lake Skinner.
- Maintain grassland Habitat for mountain plover.
- Maintain turkey vulture nest in Rawson Canyon east/north of Lake Skinner.
- Maintain Core Area for bobcat.
- Maintain Core Area for mountain lion.
- Maintain Core and Linkage Habitat for Stephens' kangaroo rat.
- Determine presence of potential Core and Linkage Habitat for Los Angeles pocket mouse along Tualota Creek east of Lake Skinner.

- Maintain Core and Linkage Habitat for Quino checkerspot butterfly.
- Maintain Core and Linkage Habitat for western pond turtle.

SubUnit 4 also includes a list of Planning Species that the proposed conservation will provide habitat for. These species are:

- Bell's sage sparrow
- burrowing owl
- cactus wren
- coastal California gnatcatcher
- golden eagle (nest site)
- grasshopper sparrow
- LBV
- mountain plover
- northern harrier
- Southern California rufous-crowned sparrow
- tree swallow
- turkey vulture
- white-tailed kite
- Quino checkerspot butterfly
- bobcat
- Los Angeles pocket mouse
- mountain lion
- Stephens' kangaroo rat
- western pond turtle

Proposed Extension of Existing Core 6

HANS No. 00408 determination for the project site resulted in the contribution of 575 acres of conservation into Core 6. Proposed Extension of Existing Core 6 consists of upland habitat immediately southwest of Core Areas in Lake Skinner and Johnson Ranch. This extension is contiguous with Core Area to the north in Lake Skinner and to west in Johnson Ranch. This Extension of Existing Core would contribute to Conservation of species occurring within the Core Areas in Diamond Valley Lake, Lake Skinner, and Johnson Ranch, including mountain lion, bobcat, coastal California gnatcatcher, Quino checkerspot butterfly and Stephens' kangaroo rat. It would also broaden the connection between Johnson Ranch and Lake Skinner. Maintenance of habitat quality and contiguity with adjacent Core Areas is important for these species. In addition to indirect effects of adjacent land uses described in *Section 6.0* of this document, runoff and the use of toxics associated with agricultural planned land use located adjacent to MSHCP Conservation Areas may adversely affect planning species.

Conservation Requirements

The Conservation Criteria for the Criteria Cells that overlap the project site are summarized within Table 8.

Table 8 MSHCP CONSERVATION CRITERIA		
CELL GROUP	CELL	MSHCP CONSERVATION CRITERIA
N/A	6088	Conservation within this Cell will contribute to assembly of Proposed Extension of Existing Core 6. Conservation within this Cell will focus on grassland and coastal sage scrub habitat. Areas conserved within this Cell will be connected to grassland and coastal sage scrub habitat proposed for conservation in Cell Group I to the west and in Cell #5992 to the north. Conservation within this Cell will range from 25%-35% of the Cell focusing in the northwestern portion of the Cell.
E	6189	Conservation within this Cell Group will contribute to assembly of Proposed Extension of Existing Core 6. Conservation within this Cell Group will focus on agricultural land. Areas conserved within this Cell Group will be connected to grassland habitat proposed for conservation in Cell Group G to the north and to agricultural land proposed for conservation in Cell Group F to the east. Conservation within this Cell Group will range from 30%-40% of the Cell Group focusing in the northern portion of the Cell Group.
F	6186	Conservation within this Cell Group will contribute to assembly of Proposed Extension of Existing Core 6. Conservation within this Cell Group will focus on agricultural land and coastal sage scrub, grassland, woodland and forest habitat. Areas conserved within this Cell Group will be connected to grassland habitat proposed for conservation in Cell Group H to the north and to agricultural land proposed for conservation in Cell Group E to the west. Conservation within this Cell Group will range from 40%-50% of the Cell Group focusing in the northern portion of the Cell Group.
I	6083	Conservation within this Cell Group will contribute to assembly of Proposed Extension of Existing Core 6. Conservation within this Cell Group will focus on grassland and coastal sage scrub habitat. Areas conserved within this Cell Group will be connected to grassland habitat proposed for conservation in Cell Group H to the west and to grassland and coastal sage scrub habitat proposed for conservation in Cell #5992 and #6088 both to the east. Conservation within this Cell Group will range from 70%-80% of the Cell Group focusing in the southern portion of the Cell Group.

The specific portions of each cell that occurs within the project site are the eastern two-thirds of Cell 6088, the southwestern edge of Cell 6083 (southern cell of the two-cell Cell Group I), the

majority of Cell 6186 (northern cell of two-cell Cell Group F) and the southwest quarter of Cell 6189 (northern cell of the three-cell Cell Group E; Figure 4).

4.3.2 Owner Initiated Habitat Acquisition and Negotiation Strategy (HANS)

As noted, the project site is contained within a larger, approximately 1,100-acre study area that was previously processed under HANS 00408 as part of JPR 05-03-04-03 that was finalized on October 6, 2005 (Appendix D). The HANS determination approved the project site for development, offset by approximately 575 acres of conservation to the immediate north and west of the site to contribute to Core 6. (Figure 5).

4.3.3 Additional Surveys (MSHCP Section 6.3.2)

The project site is not within a survey area for CASSA plant species. The project site is also not located within an amphibian or a mammal survey area. Species addressed under MSHCP Section 6.3.2 do not occur in the project site.

A burrowing owl habitat assessment was conducted by HELIX along with two protocol-level burrowing owl surveys. The surveys confirmed the presence of a single resident owl (BUOW1; Figure 11) occupying a burrow adjacent to Buck Road near the southern boundary of the site, approximately 250 feet from the proposed impact area of the project.

Two transient or migrant owls were also observed (BUOW2 and BUOW3) on single occasions during surveys of the site. Other than the burrows at the location of BUOW1, the burrows observed within the project site did not show sign of current or historic use by burrowing owl. Previous surveys conducted in 2004 observed a burrowing owl occurring in the project site but the location of the owl was not included in the biological report (Principe 2004a).

5.0 PROJECT EFFECTS

This section describes potential direct and indirect impacts associated with the proposed project. Direct impacts immediately alter the affected biological resources such that those resources are eliminated temporarily or permanently. Indirect impacts consist of secondary effects of a project, including noise, decreased water quality (e.g., through sedimentation, urban contaminants, or fuel release), fugitive dust, colonization of non-native plant species, animal behavioral changes, and night lighting. The magnitude of an indirect impact can be the same as a direct impact; however, the effect usually takes a longer time to become apparent.

According to Appendix G of the CEQA Guidelines, project impacts to biological resources would be considered significant if they would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any special status species in local or regional plans, policies, or regulations, or by the CDFW and or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.1 SENSITIVE SPECIES

Habitat assessment surveys were completed for special status plant and animal species known to occur in the region. The surveys confirmed the presence of suitable habitat within the project site for two special status plants and 14 special status animals, including 15 MSHCP Covered Species and one additional species not covered under the MSHCP. Of these species, 10 MSHCP Covered Species and a single non-covered species were observed or otherwise detected on the site during surveys.

In addition, although not observed or otherwise detected during biological surveys conducted from 2014 through 2017, the MSHCP Covered Species, LBV, was determined to have some potential to occur in off-site southern willow scrub habitat to the immediate east of Warren Road. The initial abbreviated LBV survey conducted in 2015 did not detect any LBV in the off-site habitat, and the species was not detected during any of the other biological surveys conducted in 2014 through 2017. Out of an abundance of caution and at the specific request of the County, updated 2018 protocol-level surveys for LBV are planned to occur in April through June 2018, although the species is currently presumed to be absent from the off-site habitat. Regardless of LBV presence or absence, the off-site habitat will not be directly impacted, although the project is preliminarily planning to demolish and remove the existing Warren Road crossing in an effort to re-establish riparian habitat. In the unexpected event that LBV utilize the off-site habitat in the future when these activities take place, a potential indirect impact could occur if the activities would commence during the LBV breeding season (March 15 through September 15).

If unmitigated, potential impacts on MSHCP Covered Species would be considered significant. Project impacts would be mitigated through payment of MSHCP Development Fees, as address in Section 6.4 below. Potential impacts on burrowing owl are further addressed below within Section 5.1.1 and 5.4.5.

Potential impacts on the non-covered species, paniculate tarplant, would be less than significant due to the low number of individuals expected to be impacted on site, the species' current sensitivity status as a CNPS Rarity Rank 4.2 plant, and the species' current conservation status in the region. This species has a Global Rank of G4 and State Rank of S4, meaning that the species is reported as being apparently secure within California (CNPS 2017). This species is reported as being conserved in the immediate area, with records reported from Lake Skinner Park approximately 1.0 mile northeast of the site and the Johnson Ranch Preserve approximately 1.0 mile west of the site (Calflora 2017). Multiple other occurrences are reported in the region, including those at Skunk Hollow Preserve and Lake Skinner Reserve Area, among others. Therefore, potential impacts on paniculate tarplant would be less than significant and no additional mitigation is required.

5.1.1 Burrowing Owl

A single, unpaired resident burrowing owl was observed in the southern portion of the project site, immediately adjacent to the southern boundary and Buck Road, during 2014 and 2016 protocol-level surveys. Two unpaired transient or migratory owls were also observed on single occasions during surveys, including one in the central portion of the site and one immediately off site to the north. The site is currently presumed to be occupied by a single burrowing owl and supports suitable burrows and foraging habitat for the species. The burrowing owl is an MSHCP Covered Species with additional survey and avoidance needs.

If unmitigated, potential impacts on burrowing owl individuals would be considered significant. Project impacts and mitigation on burrowing owl individuals are addressed in Sections 5.4.5 and 6.0 below and further analyzed in the project's Determination of Biologically Equivalent or Superior Preservation (DBESP), provided under separate cover.

Potential impacts on unoccupied, but suitable foraging and wintering habitat, would also be considered significant, but would be adequately mitigated through payment of MSHCP Development Fees.

5.1.2 Nesting Birds

If unmitigated, project construction could result in impacts on active migratory bird nests, including eggs and young. Disturbance to or destruction of migratory bird eggs, young, or adults is in violation of the MBTA and California Fish and Game Code, and therefore, considered to be a potentially significant impact. If construction must occur during the general bird breeding season, then pre-construction surveys and avoidance of nesting birds will be required, as addressed in Section 6.0.

5.2 VEGETATION COMMUNITIES

The project proposes to impact approximately 558 acres of the 631-acre site, primarily as a result of potential vineyard area (Figure 12). The impacts are comprised of 555.2 acres of permanent impacts and 2.9 acres of temporary impacts. All impacts are contained within the development footprint approved by HANS No. 00408.

The project has undergone multiple design iterations, with the current design centered around maximum avoidance of the existing Riparian/Riverine Areas on the site. None of the existing Riparian/Riverine Areas are proposed to be completely filled or eliminated. Of the total approximately 4.05 acres of existing Riparian/Riverine Areas, 3.76 acre will be avoided and/or restored and preserved. This represents a conservation percentage of 93 percent.

Prior to construction, the avoided Riparian/Riverine Areas and their associated buffers will be delineated on construction drawings as environmentally sensitive areas with notes for restricting construction activities from the areas. Temporary construction snow fence, and where applicable in accordance with the project's SWPPP, silt fence, will be placed around the perimeter of the avoided Riparian/Riverine Areas and buffers. The temporary fencing will remain in place during the construction of the arched culverts and the planting of vineyards, unless otherwise replaced by permanent fencing in the case of vineyards.

Where unavoidable impacts must occur, they are comprised of relatively minor permanent impacts where vineyards and individual lots are proposed, and temporary impacts where arch culverts will be placed to span existing swales and retain earthen channel and flow characteristics. Permanent impacts on Riparian/Riverine Areas include 0.2 acre to ephemeral streambed and 0.09 acre to round-bottom swale. Temporary impacts on Riparian/Riverine Areas are limited to 0.02 acre to round-bottom swale.

If unmitigated, impacts on sensitive Riparian/Riverine Areas (ephemeral streambed and round-bottom swale) would be considered significant. Project impacts and mitigation for Riparian/Riverine resources are addressed in Sections 5.4.2 and 6.1 below and further analyzed in the project's DBESP, provided under separate cover.

Permanent impacts to sensitive upland habitats include 414.8 acres to non-native grassland and 83.1 acres to Riversidean sage scrub. Temporary impacts are limited to 2.8 acres to non-native grassland. If unmitigated, impacts to sensitive upland habitats (Riversidean sage scrub and non-native grassland) would also be considered significant. Project impacts would be mitigated through payment of MSHCP Development Fees, as address in Section 6.0 below.

5.3 JURISDICTIONAL WATERS AND WETLANDS IMPACTS

Potential waters of the U.S./State subject to USACE/RWQCB jurisdiction within the project site were field-verified with USACE staff on January 14, 2016. Potential streambed and riparian habitat subject to CDFW jurisdiction within the project site was field-verified with CDFW and USFWS staff on September 1, 2016.

As currently proposed, impacts of the project will be restricted primarily to upland areas that lack potential jurisdictional waters and wetlands (Figures 13 and 14). The project proposes to avoid and set back from all major drainage corridors on the site. Setbacks range from a minimum of 50 feet, to over 200 feet from proposed vineyard areas and individual lots.

In total, 1.12 acres (97 percent) of waters of the U.S./State and 3.76 acres (93 percent) of CDFW jurisdiction and Riparian/Riverine Areas on the project site would be avoided and conserved. An additional 0.46 acre of streambed and southern willow scrub located immediately off site to the east would also be conserved.

Despite the majority of jurisdictional waters and wetlands being avoided on site, unavoidable impacts would occur, primarily as a result of temporary construction of arch culverts at drainage crossings and grading or vineyard planting over a few round-bottom swales. The impacts are discussed in more detail below.

5.3.1 Waters of the U.S./State – USACE/RWOCB Jurisdiction

Unavoidable impacts to waters of the U.S./State include the following (Table 9; Figure 13): permanent impacts to 0.03 acre non-wetland waters of the U.S./State. No impacts to wetland waters of the U.S./State would occur. No temporary impacts would occur.

If unmitigated, impacts would be considered significant. The project proposes to compensate impacts through a combination of on- and/or off-site establishment/re-establishment, rehabilitation, enhancement, and preservation, as detailed in Section 6.0.

As a regulatory requirement, the project would also submit notification and obtain necessary permits for impacts to waters of the U.S./State, including CWA Section 404 permit from the USACE and a CWA Section 401 Certification from the RWQCB.

Table 9		
IMPACTS WATERS OF THE U.S. / STATE		
WATERS OF THE U.S./STATE	PERMANENT IMPACTS	
	AREA¹ (acres)	LENGTH² (feet)
Wetland	0.00	0
Subtotal	0.00	0
Non-Wetland		
Remnant Streambed	0.03	1,046
Subtotal	0.03	1,046
TOTAL	0.03	1,046

¹Rounded to nearest one-hundredth. No temporary impacts would occur.

²Rounded to nearest foot. No temporary impacts would occur.

5.3.2 Streambed and Riparian Habitat – CDFW Jurisdiction

Unavoidable impacts to CDFW jurisdiction include the following (Table 10; Figure 14): temporary impacts to 0.02 acre unvegetated streambed and permanent impacts to 0.29 acre unvegetated streambed. Impacts are limited to ephemeral streambed and round-bottom swale only. No

permanent or temporary impacts would occur to riparian/wetland-vegetated streambed and the entirety of those resources would be avoided and conserved.

Table 10 IMPACTS TO CDFW JURISDICTION AND RIPARIAN / RIVERINE AREAS			
HABITAT	PERMANENT IMPACT ACRES¹	TEMPORARY IMPACT ACRES	TOTAL IMPACT ACRES
Ephemeral Streambed	0.20	0.00	0.20
Round-Bottom Swale	0.09	0.02	0.11
TOTAL	0.29	0.02	0.31

¹Rounded to nearest one-hundredth.

If unmitigated, impacts would be considered significant. The project proposes to compensate impacts through a combination of on- and/or off-site establishment/re-establishment, rehabilitation, enhancement, and preservation, as detailed in Section 6.0.

As a regulatory requirement, the project would submit a Notification of Lake and Streambed Alteration to CDFW and, if required by CDFW, obtain a Streambed Alteration Agreement.

5.4 MSHCP CONSISTENCY ANALYSIS

The purpose of this section is to provide an analysis of the project with respect to compliance with biological resources aspects of the MSHCP.

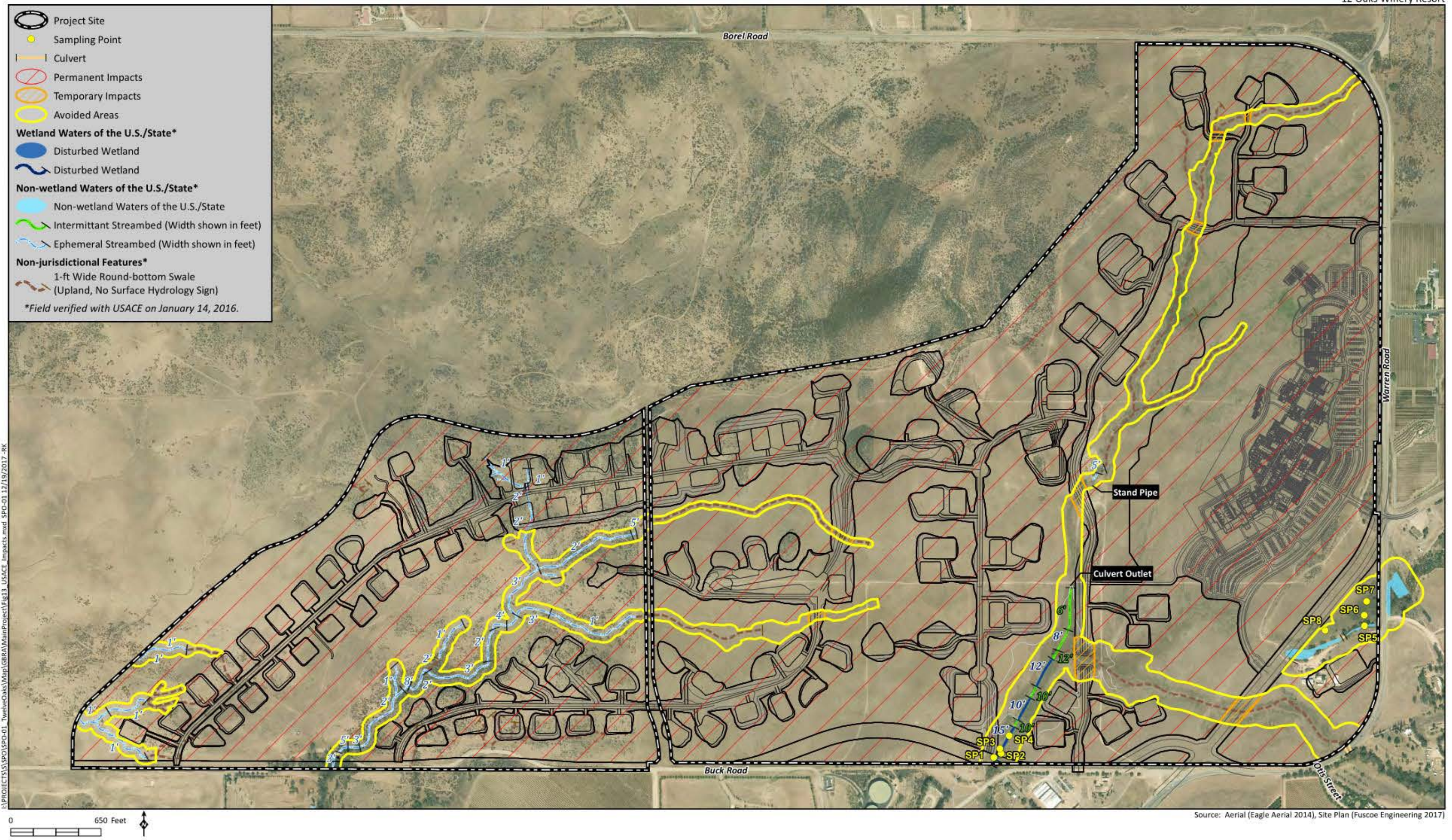
The project was evaluated for consistency with the following MSHCP issue areas:

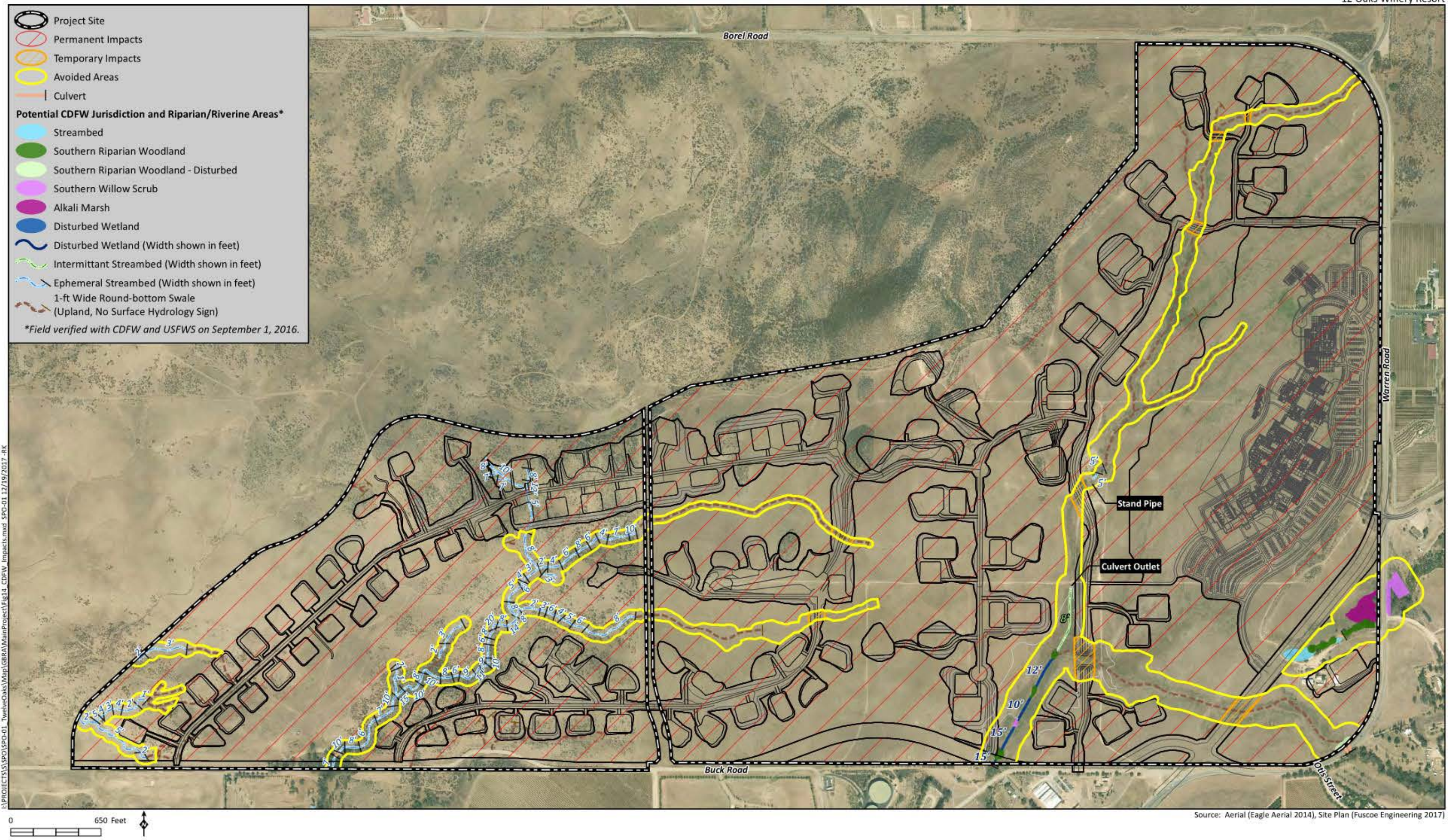
- MSHCP Reserve Assembly requirements;
- Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools);
- Section 6.1.3 (Protection of Narrow Endemic Plant Species);
- Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface);
- Section 6.3.2 (Additional Survey Needs and Procedures); and,
- Section 6.4 (Fuels Management).

The discussions below provide a summary demonstrating how the project is consistent with MSHCP requirements for each of the above-listed issue areas.

5.4.1 MSHCP Reserve Assembly Requirements

As noted above, the project site is within the Southwest Area Plan; Subunit 4, Cactus Valley/SWRC-MSR/Johnson Ranch and previously subject to approved HANS No. 00408 as part of JPR 05-03-04-





03, which resulted in the entirety of the project site designated within a HANS-approved development footprint, offset by approximately 575 acres of Core 6 conservation occurring immediately north and west of the site (Appendix D). Therefore, MSHCP conservation at the project site has already occurred and no additional conservation pursuant to the HANS process is required on the project site. Nevertheless, a project consistency analysis against the MSHCP criteria is provided for context in light of the current environmental baseline and as reinforcement of the HANS approval already completed for the site.

Subunit 4 of the Southwest Area Plan includes a list of biological issues and considerations that relate to conservation goals of the MSHCP. Each issue is listed below and an assessment of consistency is provided.

- Conserve upland habitat around the Southwestern Riverside County Multi-Species Reserve to augment existing Conservation within the Southwestern Riverside County Multi-Species Reserve, primarily to the north, south and west, and provide connectivity to proposed Constrained Linkages in French Valley.

Status – The project site is part of a larger study area for HANS 00408 that resulted in conservation of 575 acres, primarily non-native grassland and Riversidean sage scrub, immediately north and west of the project site (Figure 5). Therefore, upland habitat has been conserved and the project is consistent with this issue.

- Conserve upland habitat east of the Southwestern Riverside County Multi-Species Reserve to provide connectivity between the Southwestern Riverside County Multi-Species Reserve and existing conserved lands in the San Bernardino National Forest, proposed Vail Lake Core Area and contributing to the proposed Linkage in Subunit 5 of the San Jacinto Valley Area Plan. Conservation shall incorporate both Live-In Habitat and wildlife movement.

Status – This is outside of the project site and does not apply to the project.

- Conserve key populations of Quino checkerspot butterfly and Maintain Core and Linkage Habitat for Quino checkerspot butterfly.

Status – Surveys previously conducted on the larger area subject to HANS 00408 were positive for Quino checkerspot butterfly (Principe 2004a). Conservation of approximately 575 acres to the north and west of the project site will aid in maintaining habitat for Quino checkerspot butterfly. Therefore, Quino habitat has been conserved and the project is consistent with this issue.

- Conserve key populations of coastal California gnatcatcher.

Status – The project site is part of the larger study area for HANS 00408 that resulted in conservation of 575 acres, primarily non-native grassland and Riversidean sage scrub, immediately north and west of the project site (Figure 5). Additional conservation of Riversidean sage scrub is being implemented by the project within on-site open space

surrounding the drainage corridors. Therefore, suitable Riversidean sage scrub for gnatcatcher has been conserved and the project is consistent with this issue.

- Conserve golden eagle nest site in Rawson Canyon upstream from Lake Skinner.

Status – The project site does not include Rawson Canyon and this does not apply to the project.

- Maintain LBV in Rawson Canyon and east of Lake Skinner.

Status – The project site does not include Rawson Canyon and this does not apply to the project.

- Maintain grassland habitat for mountain plover.

Status – The project site occurs below 1,600 feet AMSL. Mountain plover prefer higher-elevation open grazed fields of annual grasses or cultivated fields (Dudek 2003). The grassland on the site is suitable, but not likely within the range of mountain plover. The project would be consistent with this issue.

- Maintain turkey vulture nest in Rawson Canyon east/north of Lake Skinner.

Status – The project site does not include Rawson Canyon and this does not apply to the project.

- Maintain Core Area for mountain lion and bobcat.

Status – As mentioned above the project is part of HANS 00408 that conserved 575 acres of habitat. This conserved land includes habitat for mountain lion and bobcat that contributes to the Core Area. Therefore, the project is consistent with this issue.

- Maintain Core and Linkage Habitat for Stephens' kangaroo rat.

Status – As mentioned above the project is part of HANS 00408 that conserved 575 acres of habitat. This conserved land includes open sage scrub that has potential to support Stephens' kangaroo rat. Therefore, the project is consistent with this issue.

- Determine presence of potential Core and Linkage Habitat for Los Angeles pocket mouse along Tualota Creek east of Lake Skinner.

Status – The project site is located south of Lake Skinner and does not include the Tualota Creek located east of Lake Skinner. The project is consistent with this issue.

- Maintain Core and Linkage Habitat for western pond turtle.

Status – The project site does not include habitat for western pond turtle. As discussed above the project is part of HANS 00408 that conserved 575 acres of habitat to extend the Core area around Lake Skinner. Therefore, the project is consistent with this issue.

5.4.2 MSHCP Section 6.1.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

MSHCP Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, states:

“The purpose of the procedures described in this section is to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained such that habitat values for species inside the MSHCP Conservation Area are maintained.”

MSHCP Section 6.1.2 focuses on protection of Riparian/Riverine areas and vernal pool habitats capable of supporting MSHCP covered species, particularly within the identified Conservation Area.

Riparian/Riverine Areas

The project has undergone multiple design iterations, with the current design centered around maximum avoidance of the existing Riparian/Riverine Areas on the site. None of the existing Riparian/Riverine Areas are proposed to be completely filled or eliminated. Of the total approximately 4.05 acres of existing Riparian/Riverine Areas, 3.76 acre will be avoided and/or restored and preserved. This represents a conservation percentage of 93 percent.

Prior to construction, the avoided Riparian/Riverine Areas and their associated buffers will be delineated on construction drawings as environmentally sensitive areas with notes for restricting construction activities from the areas. Temporary construction snow fence, and where applicable in accordance with the project’s SWPPP, silt fence, will be placed around the perimeter of the avoided Riparian/Riverine Areas and buffers. The temporary fencing will remain in place during the construction of the arched culverts and the planting of vineyards, unless otherwise replaced by permanent fencing in the case of vineyards.

The project will result in unavoidable impacts to Riparian/Riverine Areas, primarily as a result of temporary construction of arch culverts at drainage crossings and permanent vineyard and private lot impacts to minor ephemeral swales (Table 10; Figure 14). Unavoidable impacts include temporary impacts to 0.02 acre unvegetated streambed and permanent impacts to 0.29 acre unvegetated streambed. These impacts would be considered significant. Project mitigation for Riparian/Riverine resources are addressed in Section 6.1 below and further analyzed in the project’s DBESP, provided under separate cover.

Impacts are limited to ephemeral streambed and round-bottom swale only; no permanent or temporary impacts would occur to riparian/wetland-vegetated streambed and the entirety of those resources would be avoided and conserved.

Vernal Pools

No vernal pools exist on site and no vernal pool species are expected to occur, including fairy shrimp. Therefore, no impacts would occur to vernal pools.

Riparian/Riverine and Vernal Pool Species

None of the plant or animal species listed in Section 6.1.2 of the MSHCP were observed or expected to occur within the project site.

No suitable habitat for fairy shrimp occurs on the project site due to lack of vernal pools, non-vernal pool features (e.g., depressions, road ruts, etc.), evidence of prolonged standing water (e.g., soil cracks, water marks, hydrophytic vegetation, etc.), associated soils mapped in flat landscape positions (e.g., clay soils on flat land that does not drain), and evidence of underlying hard pan. Therefore, no impacts are anticipated to vernal pool species, including fairy shrimp.

LBV was determined to have a low potential to occur in off-site southern willow scrub habitat to the immediate east of Warren Road. The initial abbreviated LBV survey conducted in 2015 did not detect any LBV in the off-site habitat, and the species was not detected during any of the other biological surveys conducted in 2014 through 2017. Out of an abundance of caution and at the specific request of the County, updated 2018 protocol-level surveys for LBV are planned to occur in April through June 2018, although the species is currently presumed to be absent from the off-site habitat. Regardless of LBV presence or absence, the off-site habitat will not be directly impacted, although the project is preliminarily planning to demolish and remove the existing Warren Road crossing in an effort to re-establish riparian habitat. In the unexpected event that LBV utilize the off-site habitat in the future when these activities take place, a potential indirect impact could occur if the activities would commence during the LBV breeding season (March 15 through September 15).

5.4.3 MSHCP Section 6.1.3 Protection of Narrow Endemic Plant Species

The project site is not within a survey area for NEPSSA species and no NEPSSA species were observed during the various surveys conducted on the site. Therefore, the project is consistent with this issue.

5.4.4 MSHCP Section 6.1.4 Guidelines Pertaining to the Urban/Wildlands Interface

Section 6.1.4 addresses potential indirect impacts to the MSHCP Conservation Area via the Urban Wildlands Interface Guidelines (UWIG). The project occurs in close proximity MSHCP conserved lands to the north and west. Public/Quasi Public (PQP) lands occur to the north of the project site and are part of the existing Core associated with Lake Skinner. The 575 acres, west of the project, that were conserved as part of HANS 00408 are RCA-conserved lands that contribute to the

Proposed Extension of Existing Core 6. The proposed project footprint leaves a buffer of 100 to 400 feet between the development and adjacent conservation. Due to the project's proximity to MSHCP Conservation Area, the project is subject to the UWIG to reduce/prevent potential impacts to the reserve by the development.

Drainage

The MSHCP Conservation Area is located upslope of the project site. The proposed project would nonetheless incorporate measures, including those required through National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to downstream areas is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff into downstream waters. Storm-water systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes downstream of the site. This would be accomplished by incorporating one or more of the following methods: natural detention basins, grass swales, or mechanical trapping devices. Regular maintenance shall occur to ensure effective operation of runoff control systems.

Toxics

Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bio-products that are potentially toxic or may adversely affect wildlife species, habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. Measures such as those employed to address drainage issues would be implemented by the proposed project to avoid the potential impacts of toxics.

Lighting

Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding would be incorporated in proposed project lighting designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.

Noise

Where the project occurs adjacent to the MSHCP conservation, the project shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards (County 2006). As such, the MSHCP Conservation Area would not be subject to noise that would exceed residential noise standards.

Invasives

Project landscaping shall avoid the use of plants shown on MSHCP Table 6.2 (Appendix C).

Barriers

The edges of the project that are directly adjacent to the MSHCP Conservation Area shall include walls, fences, or other barriers to prevent unauthorized public access, domestic animal predation, illegal trespass, or dumping in the MSHCP Conservation Area. Barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms.

Grading/Land Development

Manufactured slopes associated with proposed site development shall be included in the project impact and will not extend into the lands proposed to contribute to the MSHCP Conservation Area.

5.4.5 MSHCP Section 6.3.2 Additional Survey Needs and Procedures

Burrowing Owl

The MSHCP requires a habitat assessment and survey if burrowing habitat occurs on site. Protocol-level surveys for burrowing owl were completed in 2014 and 2016. The surveys confirmed the presence of a single resident owl (BUOW1; Figure 11) occupying a burrow adjacent to Buck Road near the southern boundary of the site, approximately 250 feet from the proposed impact area of the project.

Two transient or migrant owls were also observed (BUOW2 and BUOW3) on single occasions during surveys of the site. Other than the burrows at the location of BUOW1, the burrows observed within the project site did not show sign of current or historic use by burrowing owl. Previous surveys conducted in 2004 observed a burrowing owl occurring in the project site but the location of the owl was not included in the biological report (Principe 2004a).

The site is currently presumed to be occupied by a single burrowing owl and supports suitable burrows and foraging habitat for the species. The burrowing owl is an MSHCP Covered Species with additional survey and avoidance needs.

Direct impacts could occur to individual and occupied burrows during project construction. Adverse indirect impacts from noise and vibration during construction could also occur. If unmitigated, potential impacts on burrowing owl individuals would be considered significant. Mitigation on burrowing owl individuals are addressed in Section 6.0 below and further analyzed in the project's DBESP, provided under separate cover. Mitigation includes pre-construction take avoidance surveys and, of necessary, relocation and monitoring in coordination with the RCA, USFWS, and CDFW.

Potential impacts on unoccupied, but suitable foraging and wintering habitat, would also be considered significant, but would be adequately mitigated through payment of MSHCP Development Fees.

Least Bell's Vireo

As addressed above, LBV was determined to have a low potential to occur in off-site southern willow scrub habitat to the immediate east of Warren Road. The species was not observed or otherwise detected in the off-site habitat after initial (non-protocol) surveys in 2015, and the species was not detected during any of the other biological surveys conducted in 2014 through 2017. Out of an abundance of caution and at the specific request of the County, updated 2018 protocol-level surveys for LBV are planned to occur in April through June 2018, although the species is currently presumed to be absent from the off-site habitat. Regardless of LBV presence or absence, the off-site habitat will not be directly impacted, although the project is preliminarily planning to demolish and remove the existing Warren Road crossing in an effort to re-establish riparian habitat. In the event that LBV utilize the off-site habitat in the future when these activities take place, a potential indirect impact could occur if the activities would commence during the LBV breeding season (March 15 through September 15).

Other Species

The project is not within a CASSA plant survey area and therefore surveys for CASSA plant species are not required. The project site is also not within an amphibian or mammal survey area. No surveys or mitigation is required under the MSHCP. No other surveys are required or recommended, and the proposed project is consistent with MSHCP Section 6.3.2.

5.4.6 MSHCP Section 6.4 Fuels Management

The project site is adjacent to an MSHCP Conservation Area. Fuel modification impacts would not extend into the Conservation Area because the fuel modification zone requirements were taken into account when the proposed project was designed.

6.0 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

6.1 SENSITIVE SPECIES

6.1.1. Burrowing Owl

To ensure the project does not result in significant direct or indirect impacts to burrowing owls, pre-construction take avoidance surveys should be conducted in accordance with mitigation measure BIO 1.

- BIO 1: Pre-Construction Burrowing Owl Survey and Avoidance.** Within 30 days prior to initiating ground-disturbance activities, the project applicant shall retain a qualified biologist to complete a pre-construction take avoidance survey in accordance with the MSHCP. If the take avoidance survey is negative and burrowing owls are confirmed to be absent, then ground-disturbing activities shall be allowed to commence, and no further mitigation would be required. If

the survey is positive and burrowing owls are confirmed to be present, then implementation of the following avoidance measures shall be required:

The project applicant shall consult with the CDFW and prepare and implement a project-specific burrowing owl mitigation plan. The plan shall be reviewed and approved by the CDFW. To avoid take, any impacted individuals shall be relocated outside of the impact area by a qualified biologist and in consultation with CDFW using passive relocation methodologies, utilizing the off-site lands managed by the RCA and already conserved under HANS No. 00408 to the immediate north and west of the project site, unless otherwise required by CDFW.

6.1.2 Nesting Birds

Implementation of mitigation measure BIO 2 would ensure that potential impacts to birds protected under the MBTA and CFG Code are avoided during project construction.

BIO 2: Pre-Construction Nesting Bird Survey and Avoidance. Vegetation clearing should be conducted outside the nesting season, which is generally defined as January 15 to August 31. If vegetation clearing must take place during the nesting season, a qualified biologist shall be retained to perform a pre-construction survey for nesting birds, including raptors. A pre-construction nesting bird survey would not be required unless direct impacts to vegetation are proposed to occur. The nesting bird survey shall occur no more than 7 days prior to vegetation removal. If active bird nests are confirmed to be present during the pre-construction survey, temporary avoidance of the nests shall be required until a qualified biologist has verified that the young have fledged or the nest has otherwise become inactive.

The pre-construction survey shall requirement shall also apply to the off-site Warren Road demolition and re-establishment mitigation component of the project, which is conceptually planned to occur to the immediate east of the site and adjacent to areas where nesting birds, including sensitive species such as the least Bell's vireo, have potential to occur. The pre-construction survey shall be conducted in this off-site area regardless of whether direct impacts to vegetation are proposed occur and shall be conducted no more than 7 days prior to the initiation of component activities. Similarly, if active bird nests belonging to non-sensitive bird species are confirmed to be present during the pre-construction survey, temporary avoidance of the nests shall be required until a qualified biologist has verified that the young have fledged or the nest has otherwise become inactive. If active bird nests belonging to the least Bell's vireo or other sensitive bird species are confirmed, the nest sites shall be avoided, with a 500-foot avoidance buffer, until September 15 or until a qualified biologist determines that the nest is no longer active, whichever occurs first.

6.2 RIPARIAN / RIVERINE AREAS

Section 6.2.1 of the MSHCP states:

“If an avoidance alternative is not Feasible, a practicable alternative that minimizes direct and indirect effects to Riparian/Riverine areas and vernal pools and associated functions and values to the greatest extent possible shall be selected.”

Riparian/Riverine Areas within the project site were field-verified with USACE staff on January 14, 2016 and with CDFW and USFWS staff on September 1, 2016. As currently proposed, impacts of the project will be restricted primarily to upland areas, outside of Riparian/Riverine Areas (Figure 14). The project has undergone multiple design iterations, with the current design centered around maximum avoidance of the existing Riparian/Riverine Areas on the site. None of the existing Riparian/Riverine Areas are proposed to be completely filled or eliminated. The project proposes to avoid and set back from all major drainage corridors on the site, with setbacks ranging from a minimum of 50 feet, to over 200 feet from proposed vineyard areas and individual lots. In total, 3.76 acres (93 percent) of Riparian/Riverine Areas would be avoided and conserved on site. An additional 0.46 acre of streambed and southern willow scrub located immediately off site to the east would also be conserved.

Prior to construction, the avoided Riparian/Riverine Areas and their associated buffers will be delineated on construction drawings as environmentally sensitive areas with notes for restricting construction activities from the areas. Temporary construction snow fence, and where applicable in accordance with the project's SWPPP, silt fence, will be placed around the perimeter of the avoided Riparian/Riverine Areas and buffers. The temporary fencing will remain in place during the construction of the arched culverts and the planting of vineyards, unless otherwise replaced by permanent fencing in the case of vineyards.

Despite the majority of Riparian/Riverine Areas being avoided on site, unavoidable impacts would occur, primarily as a result of temporary construction of arch culverts at drainage crossings and grading or vineyard planting over a few round-bottom swales. These impacts are considered significant.

As proposed below within mitigation measure BIO 3, the project would compensate the loss of 0.29 acre of permanent and 0.02 acre of temporary impacts Riparian/Riverine Areas through a combination of on- and/or off-site establishment/re-establishment, rehabilitation, enhancement, and/or preservation. Mitigation for permanent impacts to riparian/wetland habitat types are proposed at a 3:1 ratio and for streambed at a 1:1 ratio. Mitigation for temporary impacts are proposed at a 1:1 ratio.

As currently planned, the conceptual mitigation plan for the project includes the following:

- On-site re-establishment through daylighting an existing underground pipeline in the eastern portion of the site within avoidance areas along Santa Gertrudis Creek;
- On-site re-establishment through removing a section of Warren Road that will be abandoned across an existing drainage feature within avoidance areas to the immediate east of the site;

- On-site rehabilitation of existing Riparian/Riverine Areas within avoidance areas; and
- On-site preservation of existing Riparian/Riverine Areas within avoidance areas.

The complete conceptual mitigation plan is included in the DBESP, which is being provided under a separate cover.

Implementation of mitigation measure BIO 3 would ensure that direct impacts on Riparian/Riverine Areas are fully compensated in accordance with MSHCP requirements.

BIO 3: Compensatory Mitigation for Riparian/Riverine Areas. Impacts to Riparian/Riverine Areas shall be compensated through a combination of on-site establishment/re-establishment, rehabilitation, restoration, and/or enhancement within areas to be conserved by the project, as determined in consultation with the RCA, USFWS, and CDFW, and in accordance with the approved DBESP for the project. Mitigation for permanent impacts to riparian/wetland habitat types shall be provided at a 3:1 ratio and for streambed at a 1:1 ratio. Mitigation for temporary impacts shall be provided at a 1:1 ratio.

The following Best Management Practices (BMPs) and project design features may further be implemented to avoid and minimize potential indirect impacts on sensitive biological resources:

- Use of standard Best Management Practices (BMPs) to minimize the impacts to adjacent waters during construction (See also Section 5.3.3 above);
- Equipment will be stored in upland areas, outside of drainages except as required by project design (restoration, trash removal, etc.);
- Source control and treatment control BMPs will be implemented to minimize the potential contaminants that are generated during and after construction. Source control BMPs include landscape planning, roof runoff controls, trash storage areas, use of alternative building materials, and education of future tenants and residents. Treatment control BMPs includes detention basins, vegetated swales (bio-swales), drain inlets, and vegetated buffers. Water quality BMPs will be implemented throughout the project to capture and treat contaminants.
- To avoid attracting predators, the project shall be kept clean of debris to the extent possible. All food related trash items shall be enclosed in sealed containers and regularly removed from site.
- Employees shall strictly limit their activities, vehicles, equipment and construction material to the proposed project footprint, staging areas, and designated routes of travel.
- Construction limits shall be fenced with orange snow screen and exclusion fencing should be maintained until the completion of construction activities.

6.3 NON-NATIVE INVASIVE SPECIES RESTRICTIONS

In accordance with the MSHCP, no species on List 6.2 of the MSHCP shall be utilized on the site (including any hydroseed mix used for interim erosion control) for consistency with Section 6.1.4 of the MSHCP.

6.4 MSHCP MITIGATION FEE

As mentioned above, the project is subject to the MSHCP fee. The applicant shall pay MSHCP Local Development Mitigation fees as determined by the City. The fee schedule is adjusted annually by the Western Riverside County Regional Conservation Authority RCA and was recently adjusted for the 2016 fiscal year. When multiple uses are proposed, the commercial per acre fee is used. The current fee is \$6,645 per acre for industrial or commercial uses. The residential development fee currently ranges from \$1,015 to \$1,952 per dwelling unit, depending on the density per acre.

6.5 STEPHENS' KANGAROO RAT HCP FEE

The project is also within the Stephens' kangaroo rat fee area and is subject to the Stephens' kangaroo rat fee of \$500 per acre (County 1996).

7.0 CERTIFICATION/QUALIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: March 30, 2018

SIGNED: 
Karl L. Osmundson
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8.0 REFERENCES

- Alhadeff & Solar, LLP. 2005. Western Riverside County Multiple Species Habitat Conservation Plan Supplemental Submittal in Support of MSHCP Consistency Analysis. Tentative Tract No. 31947. February 3.
- American Ornithological Society (AOS). 2017. AOU Checklist of North and Middle American Birds. Online: <http://checklist.aou.org/>
- Baldwin, B.G. et al editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.
- Bradley, R.D., Ammerman, L.K., Baker, R.J., Bradley, L.C., Cook, J.A., Dowler, R.D. Jones, C., Schmidly, D.J, Stangi, F.B., Van De Bussche, R.A., Wursig, B. (2014). *Revised checklist of North American mammals north of Mexico*. Museum of Texas Tech University Occasional Papers. 327:1-27.
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB). 2017a. RareFind 5.2.14 (Internet) Data updated November 3.
- 2017b. California Natural Diversity Database (CNDDDB). Special Animal List. July. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>
- 2017c. California Natural Diversity Database (CNDDDB). State and Federally Listed Endangered, Threatened, and Rare Plants of California. State of California, The Resources Agency, Department of Fish and Game Habitat Conservation Division, Wildlife & Habitat Data Analysis Branch. URL: <http://www.dfg.ca.gov/whdab/pdfs/TEPlants.pdf>. April.
- 2017d. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 67 pp. April. Available at: <http://www.dfg.ca.gov/whdab/pdfs/SPPlants.pdf>.
2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties. June 2.
- California Native Plant Society (CNPS), Rare Plant Program. 2017. Inventory of Rare and Endangered Plants of California (online edition v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 20 November 2017].

- County of Riverside (County). 2006. Environmental Programs Department. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. URL: http://www.tlma.co.riverside.ca.us/epd/documents/Burrowing_Owl_Survey_Instructions.pdf. March 29.
1996. Ordinance 663.10. An Ordinance of the County of Riverside Amending Ordinance 663 Establishing the Riverisde County Stephens' Kangaroo Rat Habitat Conservation Plan, Plan Fee Assessment Area, and Setting Mitigation Fees.
2003. Ordinance 810.2. An Ordinance of the County of Riverside Amending Ordinance 810 to Establish the Western Riverside County Multiple Species Habitat Conservation Plan Mitigation Fee.
- Dudek and Associates (Dudek). 2003. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Final MSHCP Volume I. Prep. for County of Riverside, Transportation and Land Management Agency.
- Environmental Laboratory. 1987. USACE of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. 100 pp. with Appendices.
- Gillespie, Ian G. and Edith B. Allen. 2006. Effects of soil and mycorrhizae from native and invaded vegetation on a rare California forb. *Applied Soil Ecology* 32:1. May.
- Holland R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, State of California, Department of Fish and Game, Sacramento. 156 pp.
- Knecht, A.A. 1971. Soil Survey of Western Riverside Area, California. USDA, Soil Conservation Service, USDI, and Bureau of Indian Affairs in cooperation with UC Agriculture Experiment Station, Washington D.C. 158 pp. plus appendices and maps.
- Kollmorgen Instruments Corporation (Kollmorgen). 1994. Munsell Soil Color Charts, Revised edition. Baltimore, MD.
- Lichvar, R. 2014. *ARID WEST Regional Wetland Plant List*. http://wetland_plants.usace.army.mil/
- Nationwide Environmental Title Research (NETR). 2013. Historic Aerials online. www.historicaerials.com accessed July 13, 2015.
- North American Butterfly Association (NABA). 2017. Checklist of North American Butterflies Occurring North of Mexico, Edition 2.3. Available at: http://www.naba.org/pubs/enames2_3.html
- Oberbauer, Thomas. 2008. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Revised from 1996 and 2005. July.

- Osborne, Kendall H. 2005. Habitat Assessment and Focused Survey for Burrowing Owl (*Athene cunicularia*) on a 1134-acre site (Assessor's Parcel Nos. 958-220-001, -002, and 007; 958-290-001 through -008), Temecula, Riverside County, California. February 2.
- Principe and Associates. 2004a. Quino Checkerspot Butterfly Survey Tentative Tract Map 31947. APN 958-220-004. May 6.
- 2004b. General Biological Assessment Tentative Tract Map 31947 (Eastern Portion). July 30.
- 2003a. Focused Quino Checkerspot Butterfly Study APNs 958-220-001 and 002, 958-290-001 Thru 007. May 19.
- 2003b. Focused Coastal California Gnatcatcher Study APNs 958-220-001 and 002, 958-290-001 Thru 007. July 10.
- Reed, P.B., Jr. 1988. National List of Plant Species that Occur in Wetlands: California (Region 0). U.S. Fish and Wildlife Service Biological Report 88 (26.10). 135 pp.
- Riley, D.T. 2005. Ordinary High Water Mark Identification. RGL No. 05-05. December 5. 4 pp.
- Taggart, Travis W. 2015. The Center for North American Herpetology (CNAH): The Academic Portal to North American Herpetology. URL: <http://www.cnah.org/>
- U.S. Army Corps of Engineers (USACE). 2008a. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Eds. J.S. Wakely, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-06-16. Vicksburg, MS; U.S. Army Engineer Research and Development Center.
2007. Questions and Answers for Rapanos and Carabell Decisions. June 5. 21 pp.
- 2008b. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Eds. J.S. Wakely, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-06-16. Vicksburg, MS; U.S. Army Engineer Research and Development Center. September.
- and EPA. 2007. Jurisdictional Determination Form Instructional Guidebook. May 30. 60 pp.
- U.S. Environmental Protection Agency (EPA) and USACE. 2007. Joint Guidance to Sustain Wetlands Protection under Supreme Court Decision. 2 pp.
- U.S. Department of Agriculture (USDA). 2017. Web Soil Survey. National Resources Conservation Service. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

USDA Soil Conservation Service. 1992. Hydric Soil Lists. Field Office Official List of Hydric Soils Map Units for San Diego Area, California. Section II Field Office Technical Guide. Davis, California.

U.S. Fish and Wildlife Service (USFWS). 2000. Southwestern Willow Flycatcher Protocol Revision. July 11.

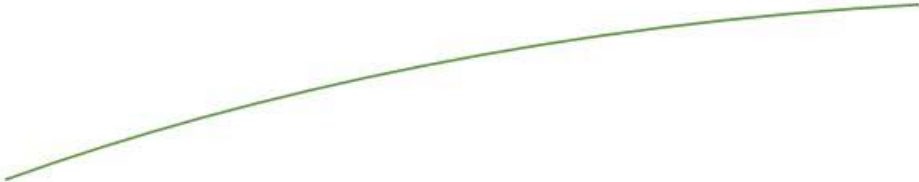
2001. Least Bell's Vireo Survey Guidelines. January 19.

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Appendix A

Plant Species Observed



Appendix A
PLANT SPECIES OBSERVED
12 OAKS WINERY RESORT

<u>FAMILY</u>	<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
Amaranthaceae	<i>Amaranthus albus</i> *	pigweed
Anacardiaceae	<i>Schinus molle</i> *	Peruvian pepper tree
Apiaceae	<i>Daucus carota</i>	Queen Anne's lace
Arecaceae	<i>Washingtonia robusta</i> *	Mexican fan palm
Asteraceae	<i>Ambrosia psilostachya</i>	western ragweed
Asteraceae	<i>Ambrosia psilostachya</i>	western ragweed
Asteraceae	<i>Artemisia californica</i>	California sagebrush
Asteraceae	<i>Baccharis salicifolia</i>	mule fat
Asteraceae	<i>Carduus pycnocephalus</i>	Italian thistle
Asteraceae	<i>Carduus pycnocephalus</i>	Italian thistle
Asteraceae	<i>Centaurea melitensis</i> *	Tocalote/Maltese star thistle
Asteraceae	<i>Corethrogyne filaginifolia</i>	California aster
Asteraceae	<i>Deinandra paniculata</i>	paniculate tarplant
Asteraceae	<i>Encelia farinosa</i>	brittlebush
Asteraceae	<i>Ericameria pinifolia</i>	pine-bush
Asteraceae	<i>Erigeron canadensis</i>	horseweed
Asteraceae	<i>Helianthus annuus</i>	annual sunflower
Asteraceae	<i>Helianthus gracilentus</i>	slender sunflower
Asteraceae	<i>Heterotheca grandiflora</i>	telegraph weed
Asteraceae	<i>Lactuca serriola</i>	wild lettuce
Asteraceae	<i>Logfia gallica</i> *	narrowleaf filago
Asteraceae	<i>Sonchus oleraceus</i>	common sowthistle
Asteraceae	<i>Sonchus spp.</i>	sow thistle
Asteraceae	<i>Xanthium strumarium</i> var. <i>canadense</i>	cocklebur
Boraginaceae	<i>Heliotropium curassavicum</i>	salt heliotrope
Brassicaceae	<i>Brassica nigra</i> *	black mustard
Brassicaceae	<i>Hirschfeldia incana</i> *	short pod mustard
Brassicaceae	<i>Rorippa nasturtium-aquatica</i>	watercress
Brassicaceae	<i>Sisymbrium sp.</i> *	tumble mustard
Cactaceae	<i>Cylindropuntia californica</i>	cane cholla
Caprifoliaceae	<i>Sambucus nigra caerulaea</i>	blue elderberry
Chenopodiaceae	<i>Chenopodium album</i> *	Lamb's quarter
Chenopodiaceae	<i>Salsola tragus</i> *	prickly Russian thistle
Cuscutaceae	<i>Cuscuta californica</i>	chaparral dodder
Cyperaceae	<i>Eleocharis sp.</i>	spikerush
Euphorbiaceae	<i>Chamaesyce sp.</i>	spurge
Euphorbiaceae	<i>Croton setigerus</i>	doveweed
Fabaceae	<i>Acmispon glaber</i>	deer weed
Fabaceae	<i>Melilotus indicus</i> *	sourclover

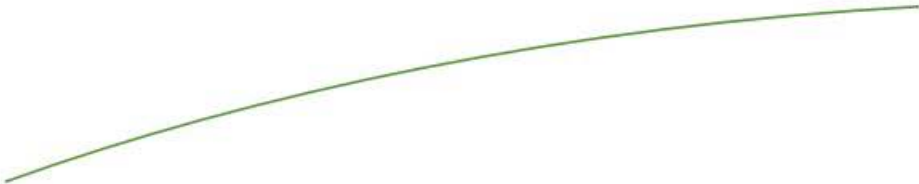
Appendix A (cont.)
PLANT SPECIES OBSERVED
12 OAKS WINERY RESORT

<u>FAMILY</u>	<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
Geraniaceae	<i>Erodium botrys</i> *	long-beak filaree
Geraniaceae	<i>Erodium cicutarium</i> *	red-stem filaree
Juncaceae	<i>Juncus mexicanus</i>	Mexican rush
Lamiaceae	<i>Salvia columbariae</i>	chia
Lamiaceae	<i>Trichostema lanceolatum</i>	vinegar weed
Liliaceae	<i>Calochortus</i> sp.	mariposa lily
Lythraceae	<i>Lythrum</i> spp.	loosestrife
Malvaceae	<i>Malvella leprosa</i>	alkali-mallow
Myrtaceae	<i>Eucalyptus</i> sp.*	eucalyptus
Poaceae	<i>Avena</i> spp.*	oat
Poaceae	<i>Bromus diandrus</i> *	ripgut grass
Poaceae	<i>Bromus madritensis</i> ssp. <i>rubens</i> *	red brome
Poaceae	<i>Cynodon dactylon</i> *	Bermuda grass
Poaceae	<i>Distichlis spicata</i>	saltgrass
Poaceae	<i>Festuca myuros</i>	rat-tail fescue
Poaceae	<i>Hordeum murinum</i> *	mouse barley
Poaceae	<i>Polypogon monspeliensis</i> *	annual beard grass
Poaceae	<i>Schismus barbatus</i> *	Mediterranean schismus
Polygonaceae	<i>Eriogonum fasciculatum</i>	California buckwheat
Polygonaceae	<i>Rumex crispus</i> *	curly dock
Polygonaceae	<i>Rumex pulcher</i>	fiddle dock
Portulacaceae	<i>Portulaca oleracea</i>	purslane
Primulaceae	<i>Anagallis arvensis</i> *	scarlet pimpernel
Salicaceae	<i>Populus fremontii</i>	western cottonwood
Salicaceae	<i>Salix gooddingii</i>	Goodding's black willow
Salicaceae	<i>Salix laevigata</i>	red willow
Salicaceae	<i>Salix lasiolepis</i>	arroyo willow
Scrophulariaceae	<i>Veronica anagallis-aquatica</i> *	water speedwell
Solanaceae	<i>Datura wrightii</i>	Jimson weed
Solanaceae	<i>Nicotiana glauca</i> *	tree tobacco
Solanaceae	<i>Solanum americanum</i>	American black nightshade
Tamaricaceae	<i>Tamarix ramosissima</i> *	saltcedar, tamarisk



Appendix B

Animal Species Observed



Appendix B
ANIMAL SPECIES OBSERVED
12 OAKS WINERY RESORT

<u>FAMILY</u>	<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
INVERTEBRATES		
Apiidae	<i>Apis mellifera mellifera</i>	honey bee
Formicidae	<i>Messor spp.</i>	harvester ant
Pieridae	<i>Pieris protodice</i>	common white butterfly
Pieridae	<i>Pieris rapae</i>	cabbage white butterfly
Pompilidae	<i>Pepsis spp.</i>	tarantula hawk wasp
Riodinidae	<i>Apodemia mormo virgulti</i>	Behr's metalmark butterfly
Tenebrionidae	<i>Eleodes spp.</i>	darkling beetle
Therididae	<i>Latrodectus hesperus</i>	black Widow Spider
VERTEBRATES		
<u>Reptiles and Amphibians</u>		
Anguidae	<i>Elgaria multicarinata</i>	Southern alligator lizard
Phrynosomatidae	<i>Phrynosoma coronatum</i> †	coast horned lizard
Phrynosomatidae	<i>Sceloporus occidentalis</i>	western fence lizard
Phrynosomatidae	<i>Uta stansburiana</i>	common side-blotched lizard
Teiidae	<i>Aspidoscelis tigris</i> †	western whiptail
<u>Birds</u>		
Accipitridae	<i>Accipiter cooperii</i> †	Cooper's hawk
Accipitridae	<i>Buteo jamaicensis</i>	red-tailed hawk
Accipitridae	<i>Elanus leucurus</i> †	white-tailed kite
Alaudidae	<i>Eremophila alpestris actia</i> †	California horned lark
Ardeidae	<i>Ardea alba</i>	great egret
Caprimulgidae	<i>Chordeiles acutipennis</i>	lesser nighthawk
Cathartidae	<i>Cathartes aura</i>	turkey vulture
Charadriidae	<i>Charadrius vociferus</i>	killdeer
Columbidae	<i>Zenaida macroura</i>	mourning dove
Corvidae	<i>Corvus brachyrhynchos</i>	American crow
Corvidae	<i>Corvus corax</i>	common raven
Cuculidae	<i>Geococcyx californianus</i>	greater road runner
Emberizidae	<i>Pipilo crissalis</i>	California towhee
Emberizidae	<i>Pipilo maculatus</i>	spotted towhee
Falconidae	<i>Falco sparverius</i>	American kestrel
Fringillidae	<i>Carduelis psaltria</i>	lesser goldfinch
Fringillidae	<i>Carpodacus mexicanus</i>	house finch

Appendix B (cont.)
ANIMAL SPECIES OBSERVED
12 OAKS WINERY RESORT

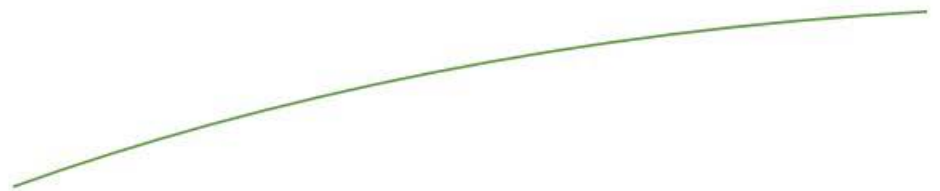
<u>FAMILY</u>	<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Birds (cont.)</u>		
Hirundinidae	<i>Petrochelidon pyrrhonota</i>	cliff swallow
Hirundinidae	<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow
Icteridae	<i>Sturnella neglecta</i>	western meadowlark
Laniidae	<i>Lanius ludovicianus</i> †	loggerhead shrike
Parulidae	<i>Dendroica petechia</i> †	yellow warbler
Passeridae	<i>Passer domesticus</i>	house sparrow
Strigidae	<i>Athene cunicularia</i> †	burrowing owl
Strigidae	<i>Bubo virginianus</i>	great horned owl
Sturnidae	<i>Sturnus vulgaris</i>	European starling
Trochilidae	<i>Calypte anna</i>	Anna's hummingbird
Tyrannidae	<i>Sayornis nigricans</i>	black phoebe
Tyrannidae	<i>Sayornis saya</i>	Say's phoebe
Tyrannidae	<i>Tyrannus verticalis</i>	western kingbird
Tyrannidae	<i>Tyrannus vociferans</i>	Cassin's kingbird
<u>Mammals</u>		
Bovidae	<i>Bovus spp.</i>	domestic cow
Canidae	<i>Canis familiaris</i>	domestic dog
Canidae	<i>Canis latrans</i>	coyote
Leporidae	<i>Lepus californicus bennettii</i> †	San Diego black-tailed jack rabbit
Leporidae	<i>Sylvilagus audubonii</i>	desert cottontail
Mephitidae	<i>Mephitis mephitis</i>	striped skunk
Sciuridae	<i>Spermophilus beecheyi</i>	California ground squirrel

†Sensitive species



Appendix C

Explanation of Status Codes for Plant and Animal Species



Appendix C EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

U.S. Fish and Wildlife Service (USFWS)

BCC Birds of Conservation Concern
FE Federally listed endangered
FT Federally listed threatened

California Department of Fish and Wildlife (CDFW)

SE State listed endangered
ST State listed threatened
SSC State species of special concern

Multiple Species Habitat Conservation Plan (MSHCP) Covered

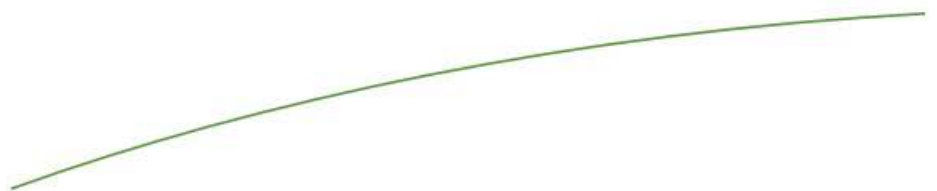
MSHCP Covered indicates that the species is part of a proposed list of species (146 total) considered at this time to be adequately conserved by the Western Riverside MSHCP, provided that participants meet all conditions listed in the Final MSHCP.

California Native Plant Society (CNPS) Codes

Lists	List/Threat Code Extensions
1A = Presumed extinct.	.1 = Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.	.2 = Fairly endangered in California (20 to 80 percent occurrences threatened)
2 = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.	.3 = Not very endangered in California (less than 20 percent of occurrences threatened, or no current threats known)
3 = Distribution, endangerment, ecology, and/or taxonomic information needed. Some eligible for state listing.	A "CA Endemic" entry corresponds to those taxa that only occur in California.
4 = A watch list for species of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.	All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no threat code extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences are considered in setting the Threat Code.

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Appendix D
HANS No. 408 Documentation





COUNTY OF RIVERSIDE
TRANSPORTATION AND LAND MANAGEMENT AGENCY
Environmental Programs Department

Carolyn Syms Luna
Director

October 6, 2005

D.R. Horton
C/O Mike Richter
119 N. Maple St., Ste.A
Corona, CA 92880

Dear Horton:

Re: JPR 05-03-04-03 Determination Letter
HANS No. 408
PAR Number: 00495
Case No. TR31947
Assessor's Parcel Number(s): 958-290-001 thru 008 and 958-220-001, 002, 006, & 007

This letter is to inform you that the HANS determination for the subject property was forwarded to the Regional Conservation Authority (RCA) for Joint Project Review (JPR) pursuant to Section 6.6.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). As stated on the attached "RCA JPR Review", the RCA has concurred with the County that partial conservation is described for this property (exhibit attached).

Julie Fitch of the Environmental Programs Department (EPD) will be calling you to schedule a HANS II meeting to determine if compensation is warranted as per Section 6.1.1 of the MSHCP. Negotiation of incentives must be concluded within 120 days. Notwithstanding, you may proceed with the planning process for the remainder of the property. Please note that this determination does not preclude compliance with any conditions incorporated into your final project approval.

If you have questions concerning the attached comments, please contact the EPD at (951) 955-6892.

Sincerely,

ENVIRONMENTAL PROGRAMS DEPARTMENT

Michael Richard
Ecological Resources Specialist

MR

xc: Karin Watts-Bazan, Deputy County Counsel
Ken Graff, RCA
Greg Neal, EPD
Julie Fitch, EPD



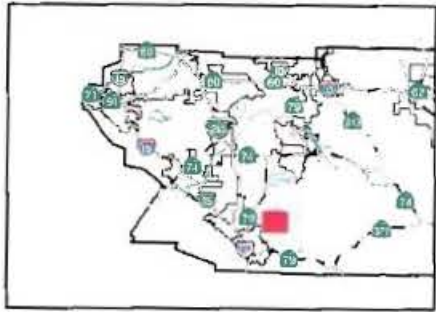
MSHCP HANS- PAR00495 - Intake 408

Bachelor Mtn Quadrangle

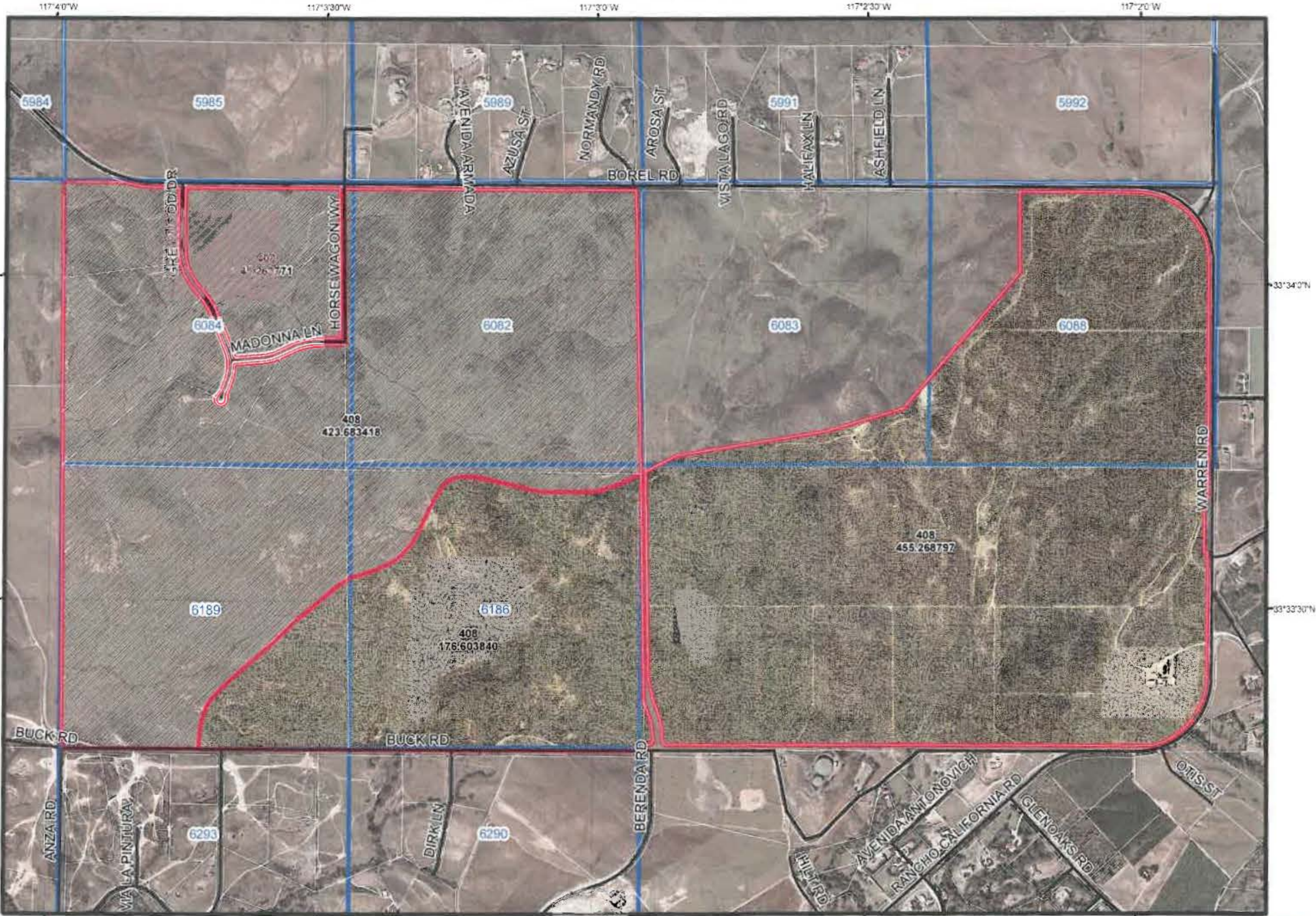
- Parcel
- Criteria Cells
- Roads
- HANS Designations**
- Development
- Pending
- Proposed MSHCP Conservation Area

FINAL

Date: 9-21-2005



The County of Riverside assumes no warranty or legal responsibility for the information contained on this map. Data and information represented on this map is subject to updates, modifications and may not be complete or appropriate for all purposes. County GIS and other sources should be queried for the most current information. Do not copy or resell this map.



Rebecca Korinek
S:\Environmental\HANS\Intake Projects\Intake401-500\Intake408\MXD\HANS_2004_Intake_408.mxd



Harness, Teresa

From: Karl Osmundson <KarlO@helixepi.com>
Sent: Wednesday, September 19, 2018 5:13 PM
To: Poonamallee, Matthew; Harness, Teresa
Cc: Andrea Arcilla
Subject: Confirming MSHCP/Biology Report & BUOW Report Re-Submittal/Upload - 12 Oaks Winery Resort (APN 964-160-001,-004,-005; EPD Case No. TR37377)

Hi Teresa & Matthew,

I wanted to once again confirm successful upload of the Final MSHCP/Biology Report and Final Burrowing Owl (BUOW) Report for the 12 Oaks Winery Resort Project (APN 964-160-001,-004,-005; EPD Case No. TR37377).

As we've discussed with Matthew, these reports have been final since March 2018, when they were revised in response to comments dated February 20, 2018.

We subsequently met in May 2018 with Matthew and Don to discuss the revisions reflected in the final reports and also the need for a DBESP, which we finalized in August 2018.

One of the ongoing tasks during this time period was our updated 2018 protocol-level surveys for least Bell's vireo, which were negative (no vireo).

The March 2018 Final MSHCP/Biology Report was finalized assuming (the expected) negative findings for vireo, although some of the survey dates and conditions could not be captured in the final report.

Nevertheless, the August 2018 DBESP does capture the final vireo survey information and can be referenced for the record.

We are also happy to supply the 45-day vireo survey report that was sent to the USFWS, if requested.

Please accept this e-mail for the record as confirmation of negative findings for the 2018 vireo surveys and that the complete survey information can be found in the DBESP document.

Sincerely,

Karl

Karl L. Osmundson
Principal Biologist / Biology Group Manager

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942
619.462.1515 tel
760.519.5954 cell
619.462.0552 fax
KarlO@helixepi.com
helixepi.com | [LinkedIn](#) | [Facebook](#) | [Twitter](#)

Please consider the environment before printing this email.

Harness, Teresa

From: Harness, Teresa
Sent: Friday, September 21, 2018 12:29 PM
To: 'Shelbyh@helixepi.com'
Subject: Planning Department has received a biological report

This email is to inform you that the Planning Department has received a biological report regarding the below referenced case:

Report Name: General Biological Resources Assessment Report
Report Date: 3/1/18
Case Number: TR37377
Assessor's Parcel Number(s): 964-160-001, 964-160-002, 964-160-004, 964-190-001, 964-190-008
PDB Number: PDB180004 Revised 1-030118
Biologist Assigned: Given to Ecological Resource Specialist staff for review.

Submit along with proper identification title of report and case number, assessor parcel numbers to be viewed in PDF format through:

The County of Riverside; RCIT Secure File Transfer
Server located at website: <https://ftp.co.riverside.ca.us/>
Public: Log in using the username of: rivcodocs
Password is: P@ssw0rd (the "0" is zero)
In search (it's labeled "Filter") box type in: Biology
Check the box: Find
It will bring up a folder: BB_Planning/Biology

- **It is important to submit directly to: BB_Planning/Biology**
- **If not then it cannot be confirmed that the report has been submitted correctly.**

Upload each biological report individual with a Title name of report.
(Use same title in the email subject line; one at a time: see below)

NO ZIP files or locked files accepted.

Select Green button to: "Add Files" from your computer; select your file(s) to be added, hit "Open."
Select Gray button (labeled "Start") to upload your report.
Hit the "Logout" button in the top right when completed with the upload.

Once report has been submitted then please notify me: THarness@RIVCO.org

Place the report's title and case number in the SUBJECT line of your email

****** Please call the RCIT-Helpdesk for any assistance (951) 955-9900.**

*Thank you,
Teresa Harness, Office Assistant III*



County of Riverside

Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92501
Telephone: (951) 955-6892
Fax: (951) 955-1811
Email: tharness@rivco.org
Planning Department Website: <http://planning.rctlma.org/>
[County of Riverside California](#)

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