

**BIOLOGICAL ASSESSMENT OF THE
POINT BROADCASTING LLC
RADIO TOWER PROJECT SITE,
ANLAUF OIL FIELDS,
SANTA PAULA, CALIFORNIA**



Prepared for:

VENTURA COUNTY PLANNING DIVISION

On behalf of:

POINT BROADCASTING LLC

MARCH 2011

Mission Statement

*To provide quality environmental consulting
services with integrity that protect and
enhance the human and natural environment*

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Prepared for:

Ventura County Planning Division

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31 March 2011

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Initial Study Biological Assessment Certification

ISBA report date(s): 31 March 2011

Case number: None. No application has been submitted at this time.

Permit type: C.U.P.

Applicant: Point Broadcasting LLC

Planning Division case planner: Christina Danko

Total parcel(s) size: 120 acres

Assessor Parcel Number(s): 040-007-008-5

Development proposal description: Point Broadcasting LLC is applying to the County of Ventura to develop one small area in the Anlauf Oil Field near Santa Paula Peak between Orcutt and Mud Canyons for a new radio tower. The project includes installing one new radio tower and related facilities. David Magney Environmental Consulting (DMEC) was contracted by Point Broadcasting LLC to conduct seasonal biological field surveys and impact assessment for the proposed radio tower.

Prepared for Ventura County Planning Division by:

As a Qualified Biologist, approved by the Ventura County Planning Division, I hereby certify that this Initial Study Biological Assessment was prepared according to the Planning Division's requirements and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visit associated with this report.

Qualified Biologist (signature): 		Date: 31 March 2011
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Name (printed): David Brown	Title: Biologist 1	Company: DMEC
Phone: 805/646-6045	email: davidbrown@magney.org	
Role: Assisted in report writing, and conducting field survey during 2010		
Other Biologist (signature): 		Date: 29 January 2010
Name (printed): Callen Huff	Title: Biologist 1	Company: DMEC
Phone: 805/646-6045	email:	
Role: Assisted in report writing. No longer with DMEC.		



INITIAL STUDY CHECKLIST

This Biological Assessment DID provide adequate information to make recommended CEQA findings regarding potentially significant impacts.

		Project Impact Degree of Effect				Cumulative Impact Degree of Effect			
		N	LS	PS-M*	PS	N	LS	PS-M*	PS
A	Endangered, threatened or rare species (includes nests)			X				X	
B	Wetland habitat	X				X			
C	Coastal habitat	X				X			
D	Wildlife movement routes	X				X			
E	Locally important species/communities		X				X		

N: No impact

LS: Less than significant impact

PS-M: Potentially significant unless mitigation incorporated.

PS: Potentially significant

* DO NOT check this box unless the Biological Assessment provided information adequate enough to develop mitigation measures that reduce the level of impact to less than significant.



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SUMMARY

Point Broadcasting LLC needs to improve its radio broadcasting abilities to better serve the Santa Clara River Valley region by installing a radio tower in the Anlauf Oil Field on the south slope of Santa Paula Ridge, northeast of the City of Santa Paula. The tower would be 105 feet (32 meters) high, and supported by a small maintenance/equipment/control building. The tower and support facility would be fenced in with a 6-foot-high (1.83 m) chain link fence. The tower and support facility will occupy approximately 2,500 square feet (762 square meters). An existing oil services road (Anlauf Road) will be regraded for a short distance to improve access for the proposed tower.

David Magney Environmental Consulting (DMEC) was contracted by Point Broadcasting LLC to conduct seasonal biological field surveys and impact assessment for the proposed radio tower. DMEC conducted spring and summer surveys. The surveys were conducted in the early summer of 2006, spring of 2007, spring and summer of 2008, and late spring of 2010. The purpose was to detect, identify, and map potential special-status resources for the proposed tower site. Potential project impact areas were surveyed for sensitive biological resources to meet Ventura County Planning Division (VCPD) requirements. This report presents the findings and results of the 2006, 2007, 2008, and 2010 surveys.

Biological resource surveys were conducted during several seasons to determine existing conditions. The biological resources were mapped and project-related impacts were assessed. Several special-status plant and wildlife species were found within the survey area, which included several potential tower sites. Through careful positioning of the proposed facilities, impacts to all special-status plant species are mostly avoided. Impacts to sensitive habitats are minimal, and considered less than significant.

Recommended mitigation measures include:

MM1: Conduct Pre-construction Surveys for Special-status Plant Species Onsite

MM2: Fence and Monitor Special-status Plants Onsite

MM3: Conduct Pre-Construction Survey to Locate and Relocate any Special-status Wildlife Species

MM4: Protect Bird Nests

SECTION 1. CONSTRUCTION FOOTPRINT DESCRIPTION

DEVELOPMENT PROPOSAL DESCRIPTION

Point Broadcasting LLC is applying to the County of Ventura to develop small areas for a new radio tower in the Anlauf Oil Field near Santa Paula Peak west of Orcutt Canyon at the head of Mud Creek Canyon, as shown in Figure 1, General Location Map of Project Site. Figure 2, Aerial Photograph of the Radio Tower Project Site, shows the current parcels and the proposed project site locations. The project includes installing a new radio tower and related facility, and regrading a short segment of an existing road to access the tower site, as illustrated on Figure 3, Map of Project Site and Proposed Facilities.

The tower will be brought to the site in pieces and construction onsite on Anlauf Road, then raised/lifted by crane and anchored to the ground.

The radio tower would be 105-feet (32-meters) tall, supported by a small maintenance/equipment/control building, satellite dish, and backup diesel generator¹. The tower will be anchored to concrete footings, without guy wire supports. The tower and support facility will be fenced in with a 6-foot-high (1.83 m) chain link fence, as shown in the schematic horizontal rendering of the proposed facility, Figure 4, Schematic of Proposed Radio Tower Facilities. Power is available at the tower site from an existing Southern California Edison Company lateral service line pole along Anlauf Road.

¹ Note: the original plans called for a propane-powered generator, which is shown on Figure 3. Instead, there will be a diesel-powered generator in the location shown on Figure 3 where the generator and propane tank is shown.

Figure 1. General Location Map of Project Site

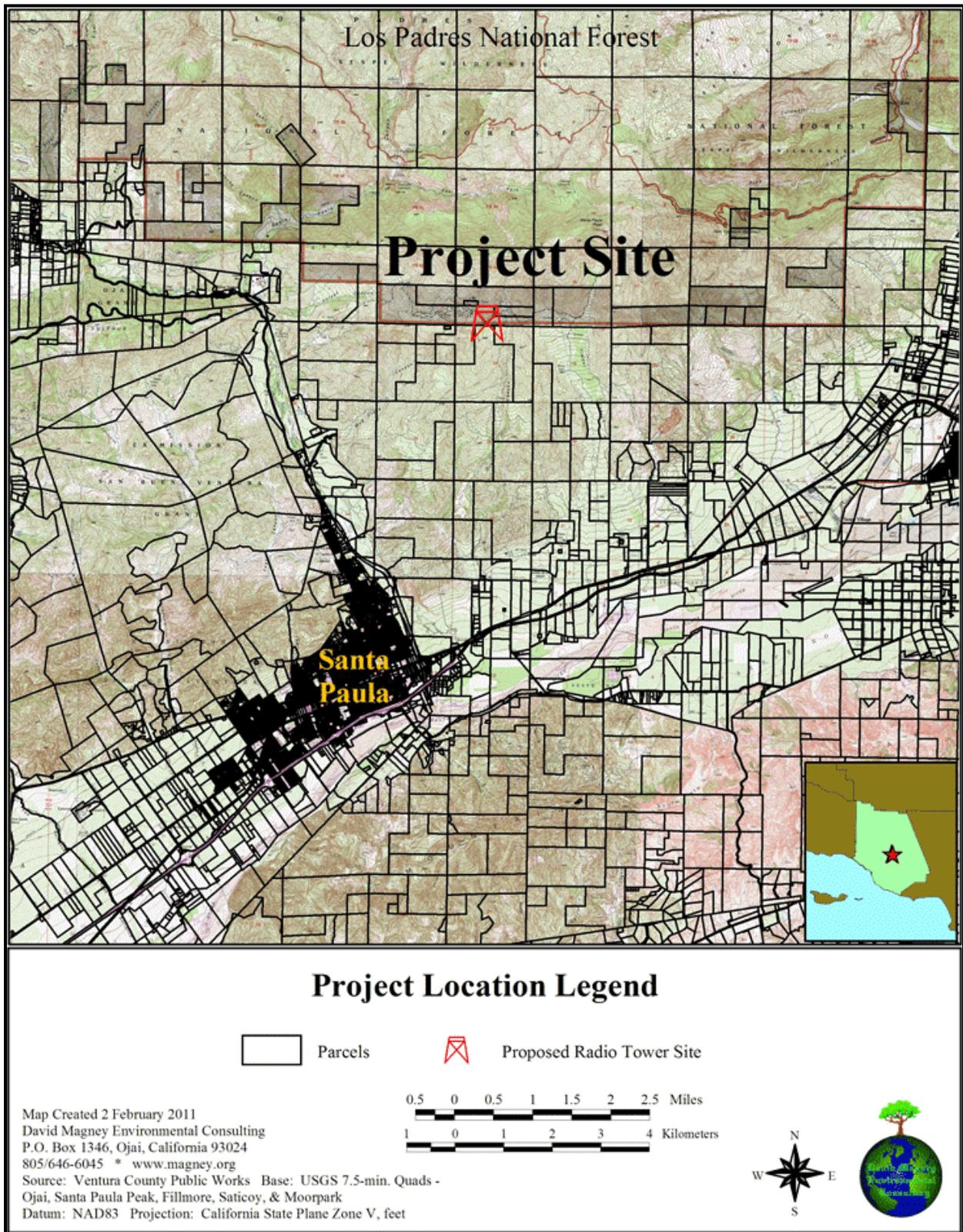


Figure 2. Aerial Photograph of the Radio Tower Project Site

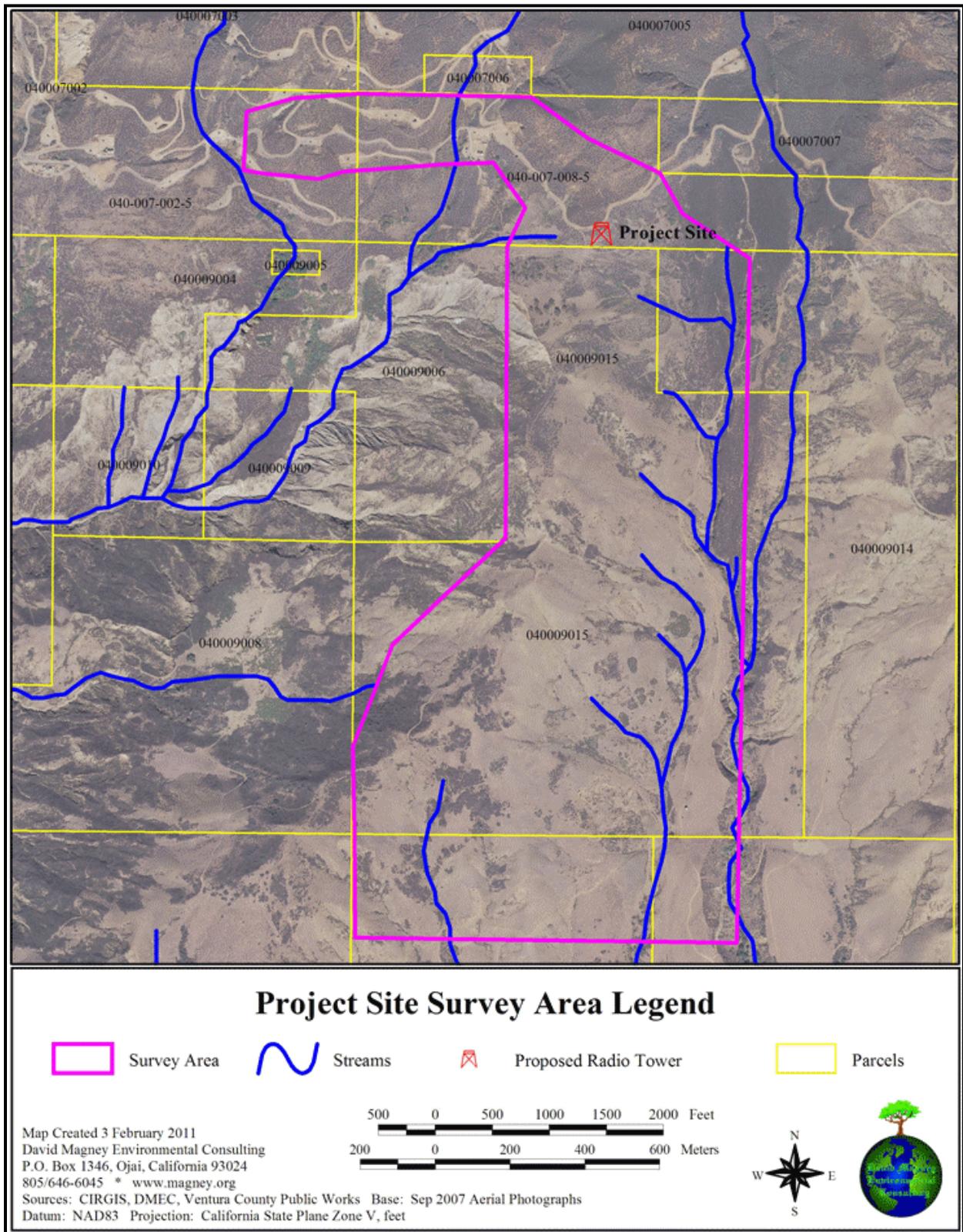


Figure 3. Map of Project Site and Proposed Facilities

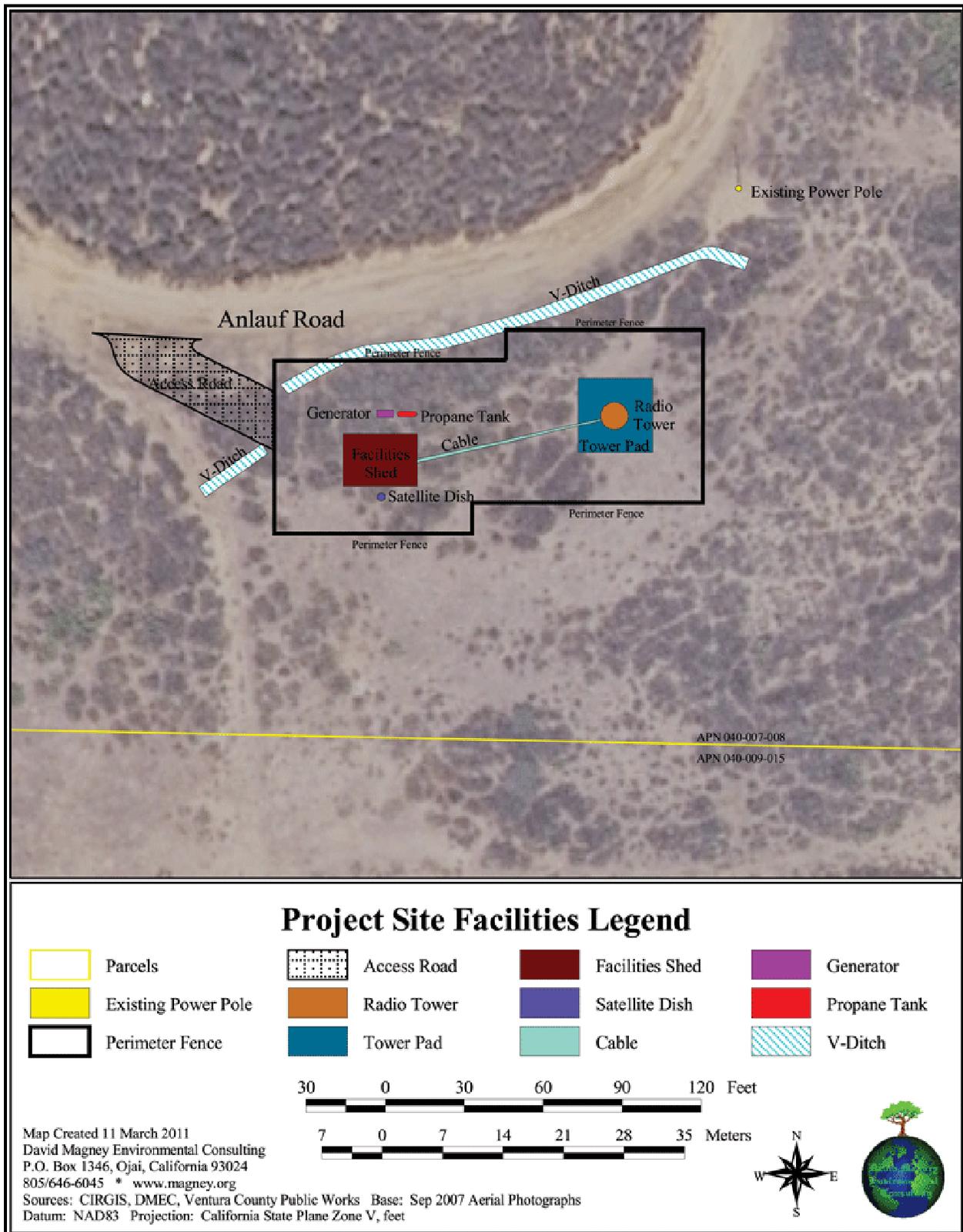
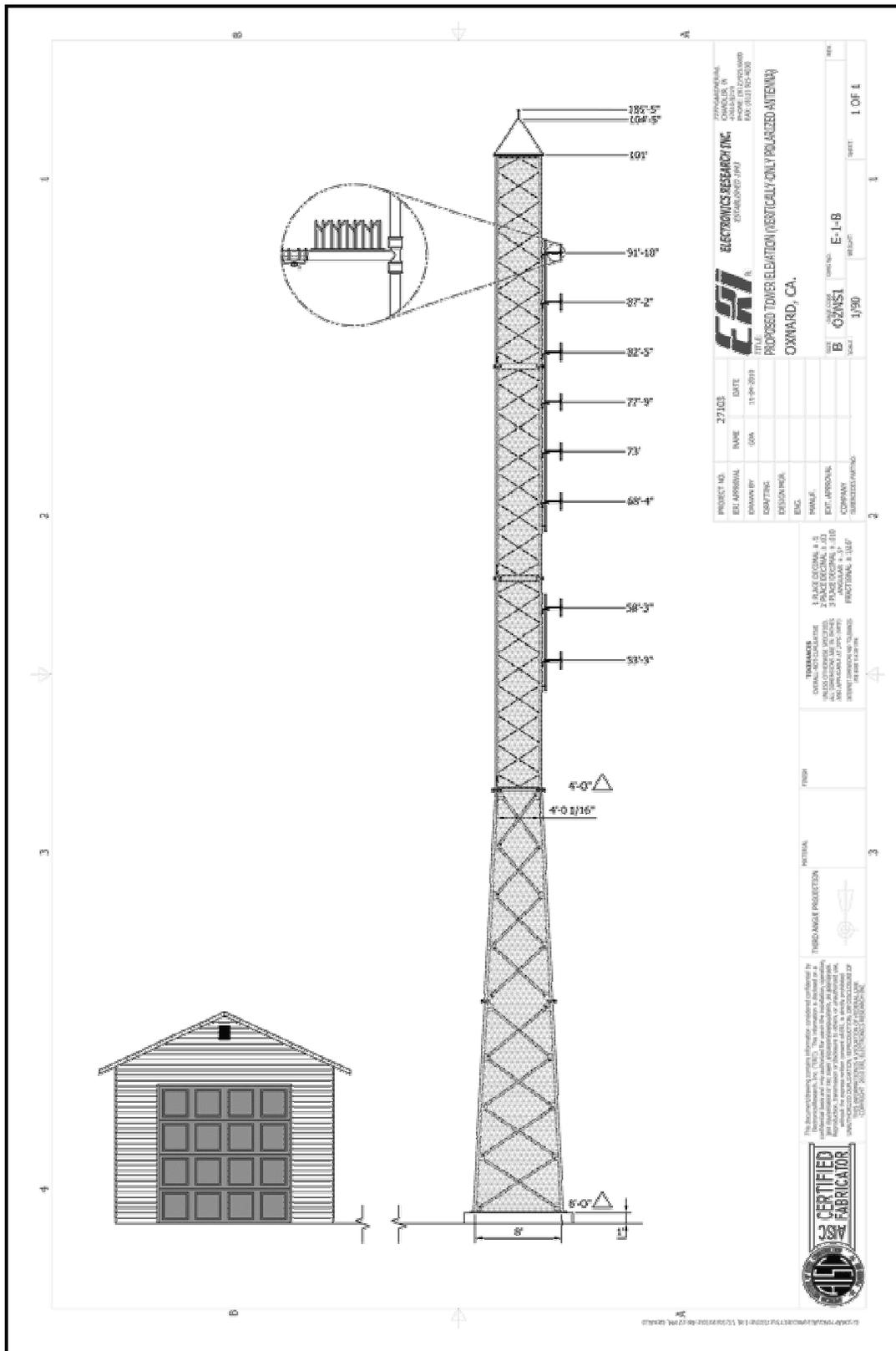


Figure 4. Schematic of Proposed Radio Tower Facility





CONSTRUCTION FOOTPRINT SIZE

The project includes installing a new radio tower and related facility, a power line cable from the facility shed to the radio tower, enclosure fencing, 100-foot fuel modification zone, and regrading an existing oil well access road from Anlauf Road, as illustrated on Figure 5, Map of Project Development Footprint.

The tower and support facility will occupy 2,375 square feet (220.64 square meters). The facilities will be enclosed in a fenced area, with the total area occupied for each major component calculated in Table 1, Proposed Project Construction Footprint. A new access road will be graded and connected to Anlauf Road for a short distance to provide permanent access to the tower and facilities. The tower will be placed on concrete footings. Vehicle access to the tower site will result in temporary disturbance to existing vegetation; however, no grading or permanent removal of natural vegetation is proposed to/from the tower sites except as illustrated in Figure 5.

Table 1. Proposed Project Construction Footprint

Project Feature	Square Feet / Meters	Acres / Hectares
Radio Tower & facilities enclosure	10,575 / 982.50	0.243 / 0.098
Access road	1,277 / 118.64	0.030 / 0.012
Construction Zone ²	~27,076 / 2 515.44	~0.622 / 0.252
Totals	~38,928 / 3 616.53	~0.895 / 0.362

DEVELOPMENT AREA SIZE

The development area size is the same as that for the construction footprint; except for the area that would be temporarily disturbed during construction. Table 2, Proposed Project Facilities Development Area, lists the features associated with development.

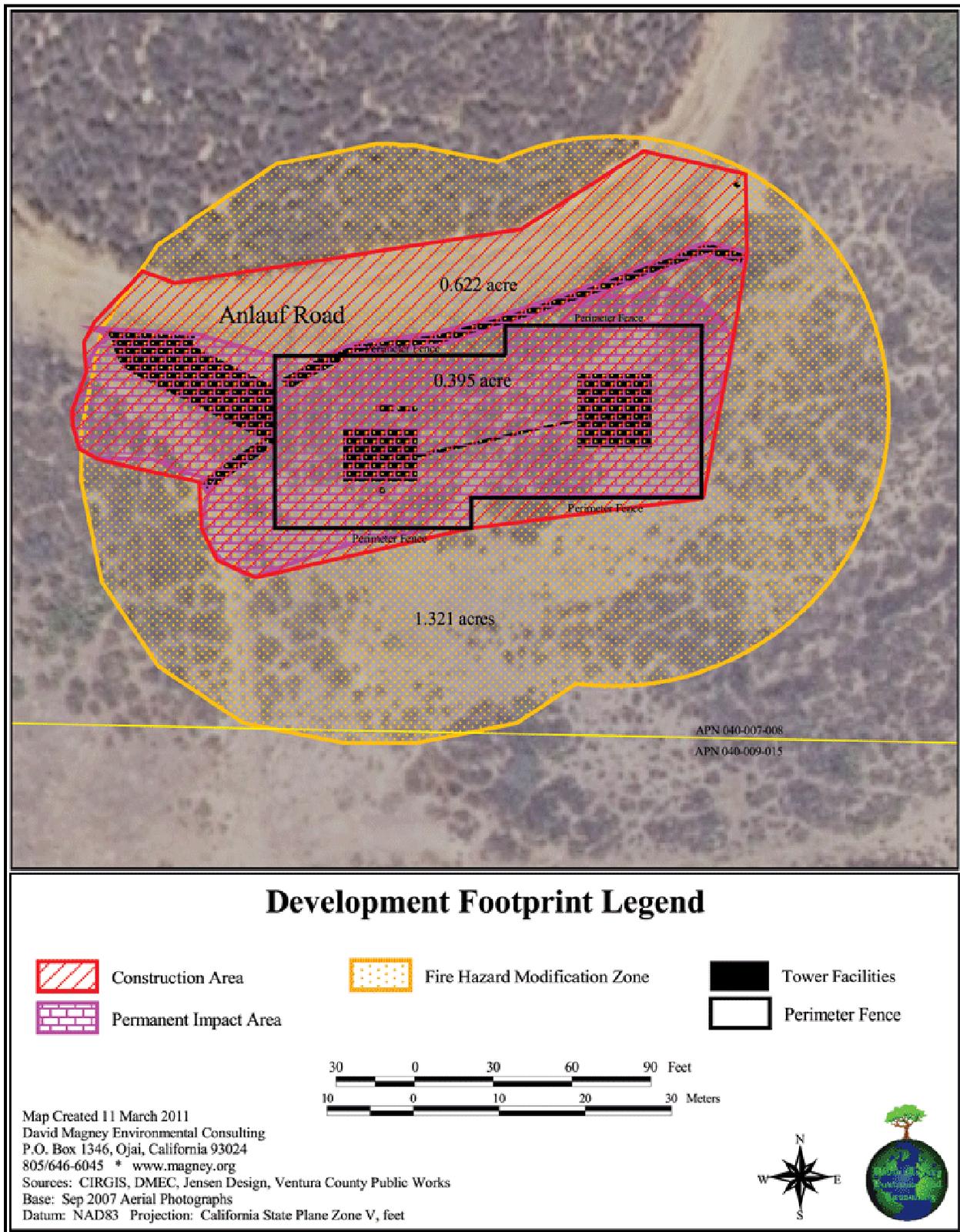
Table 2. Proposed Project Facilities Development Area

Project Feature	Square Feet / Meters	Acres / Hectares
Radio Tower & Equipment enclosure	10,575 / 982.45	0.243 / 0.098
Access road	1,277 / 118.64	0.030 / 0.012
Fuel Modification Zone ³	57,531 / 5 344.80	1.321 / 0.534
Totals	69,383 / 6 445.89	1.594 / 0.644

² Calculation includes facilities pads and Anlauf Road but excludes fuel modification zone.

³ Calculation includes facilities pads and fenced enclosure (10575 sq. ft./0.243 acre) and Anlauf Road.

Figure 5. Map of Project Development Footprint



PROJECT DESIGN FOR IMPACT AVOIDANCE OR MINIMIZATION

The selection of the preferred radio tower project site is based on examination and analysis of a number of potential sites within the survey area (SA1) with these sites having the minimum impacts on plants, wildlife and communities while meeting project objectives. Not all impacts could be avoided however; any impacts that can be mitigated have been examined.

COASTAL ZONE/OVERLAY ZONES

The project site is not within or near the coastal zone.

ZONING

The survey area covers land with different zoning; Agricultural Exclusive- 40 acres minimum parcel size (AE-40AC) and Open Space- 160 acres (OS-160AC).

The Point Broadcasting LLC radio tower project site occurs within an area that is zoned Agricultural Exclusive, 40 acres minimum parcel size (AE-40AC).

ELEVATION

The project sites are at approximately 2,850 feet above mean sea level. The tower site is at about 2,852 feet.

SECTION 2. SURVEY AREA DESCRIPTION AND METHODS

2.1 SURVEY PURPOSE

Discretionary actions undertaken by public agencies are required to demonstrate compliance with the California Environmental Quality Act (CEQA). The purpose of this Initial Study Biological Assessment (ISBA) is to gather enough information about the biological resources associated with the proposed project, and their potential to be impacted by the project, to make a CEQA Initial Study significance finding for biological resources. In general, ISBAs are intended to:

Provide an inventory of the biological resources on a project site and the values of those resources.

Determine if a proposed project has the potential to impact any significant biological resources.

Recommend project redesign to avoid, minimize, or reduce impacts to significant biological resources.

Recommend additional studies necessary to adequately assess potential impacts and/or to develop adequate mitigation measures.

Develop mitigation measures, when necessary, in cases where adequate information is available.

2.2 SURVEY AREA DESCRIPTION

Survey Area Definition (per the Ventura County Planning Division): The survey area is the location that the biologist will assess. The survey area includes the construction footprint and any other areas potentially affected by the project, such as from light, dust, noise, runoff, etc., and any required buffers, such as for wetlands. The construction footprint plus a 100-foot buffer—beyond the fire hazard brush clearance boundary—(or 20-foot from the cut/fill boundary or road fire hazard brush clearance boundary – whichever is greater) is generally the minimum size of a survey area. Required off-site improvements—such as roads or fire hazard brush clearance—are included in the survey area. Survey areas can extend off the project's parcel(s) because indirect impacts may cross property lines.

DMEC surveyed most of the Point Broadcasting LLC radio tower project site as one large survey area, which was surveyed at various levels on several dates.

Survey Area 1 (SA1)

Location

The Point Broadcasting LLC radio tower project site is located north-northeast of Santa Paula in the Anlauf Oil Field in Ventura County, California. The project site is on the south flank of Santa Paula Ridge and just inside the southern boundary of the Los Padres National Forest, at the head of Orcutt/Mud Canyons, east of Santa Paula Creek and State Route 150, and north of State Route 126 (see Figure 1).

The project site exists within the Santa Paula Peak, California USGS Quadrangle (SW $\frac{1}{4}$ of SW $\frac{1}{4}$, S14, and S $\frac{1}{2}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$, S13, T4N, R21W San Bernardino Baseline), and is at the approximate geographic coordinates of 34.422026° North latitude and 119.035743° West longitude (tower site on Clark parcel) (NAD83). The proposed tower site is at an elevation of approximately 2,852 feet above mean sea level. It includes Assessor Parcel Number 040-007-008-5 (Clark parcel). The project site consists of grassland/herblands and California Coastal Scrub habitats, as shown on Figure 2.

Survey Area Environmental Setting

The general vegetation observed in the vicinity of the project site near Santa Paula Peak and Orcutt Canyon includes grass/herbland, scrubland, woodlands, and seep/riparian. The Point Broadcasting LLC radio tower site is disturbed as a result of decades of livestock grazing and oil development (extraction). The habitats before grazing were likely predominantly California Coastal Scrub plant communities with patches of native grassland. Grazing has since introduced many nonnative and invasive plant species that are highly competitive and inhibit the establishment and growth of native indigenous plant species. Regardless, the quality of the natural vegetation is good to high.

During the July 2006 summer survey, the site was very dry, but did not appear to have been grazed recently. The previous year's growth was still quite evident, and although the herbaceous vegetation was more or less expired, most species were still identifiable to the species and subspecies/variety levels. During the March and April 2007 spring surveys, the project site had been significantly grazed, as the herbaceous vegetation was extremely low growing (stunted), and many species expected onsite were not evident. This may have also been a result of the significantly low amount of precipitation received during the 2006-2007 winter and spring. The Santa Paula Weather Station's (Station No. 047957) Period of Record Monthly Climate Summary for 1 July 1948 to 31 December 2005 reports the total average annual precipitation as 18.07 inches (available at: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?caspau+sca>). This area has only received approximately 6 inches of precipitation based on the Monthly Precipitation Summary for the 2007 Water Year (starting on October 1 and ending on September 30), which is only 33% of the total average annual precipitation (available at: http://www.cnrfc.noaa.gov/monthly_precip.php). The combination of grazing and low rain amounts appears to have decreased plant germination onsite. Precipitation returned to within normal/average conditions during 2009 and 2010.

There is no evidence from historic records that the flora of this project site has ever been surveyed, and no records of any plant collections or species distribution are known in the vicinity of this project site (Consortium of California Herbaria 2007, 2010, Magney 2010 manuscript). A total of 187 vascular plant species were observed onsite during DMEC's surveys of July 2006, March 2007, April 2007, April 2008, August 2008, and May 2010; 19 of these are special-status plant species. Although these 19 species are not federally or state listed, 6 are listed by CNPS in its statewide *Inventory* (CNPS 2001, 2010), and the remaining 13 are considered locally rare or uncommon in Ventura County by CNPS (Magney 2010), including one species that has never been recorded in Ventura County until now. The project site flora, fauna, and habitats, including special-status biological resources, are discussed in detail in the following subsections.

DMEC mapped twelve (12) ephemeral drainages, originating from the north, each bisecting the survey area. Three of the drainages discharge into Mud Creek located southwest of the survey area. The remainder discharge into Orcutt Creek, which is located along the eastern boundary of the survey area. None occur at or within 100 feet of either tower site. A further discussion of waters and wetlands located within the survey area will be addressed in Section 3.

Surrounding Area Environmental Setting

The land immediately north of the survey area is the southern most boundary of the Los Padres National Forest boundary and Sespe Wilderness. Approximately 3.5 miles (5.6 kilometers) northeast is the Sespe Condor Sanctuary.

Cover

The survey area is dominated by Grassland, Coastal Sage Scrub, Woodland, and Seep/Riparian. The Point Broadcasting LLC radio tower site is disturbed as a result of decades of livestock grazing.

98% native vegetation

0% nonnative vegetation

100 % agriculture/grazing

2% bare ground/cleared/graded

0 % buildings, paved roads, and other impervious surfaces

2.3 METHODOLOGY

Literature Survey

DMEC conducted a search of the California Department of Fish and Game's (CDFG's) California Natural Diversity Database (CNDDDB) RareFind3 (CNDDDB 2009a) for the Santa Paula Peak California USGS Quadrangle (in which the Point Broadcasting LLC radio tower project site exists), and for the eight surrounding quadrangles, including Lion Canyon, Topa Topa Mountains, Devil's Heart Peak, Fillmore, Moorpark, Santa Paula, Saticoy, and Ojai. DMEC conducted this

database search to account for special-status species tracked by CDFG in the area and with potential to occur at the project site.

DMEC also conducted a literature search of California Native Plant Society's *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2006, 2010) and *Checklist of Ventura County Rare Plants* (Magney 2010) to account for other special-status plant species not tracked by CNDDDB with potential to occur in the vicinity of the proposed project site. Projects reviewed under California Environmental Quality Act (CEQA) should consider impacts to Locally Important Species as significant. Generally, impacts to an entire population of one or more of the species listed herein would be considered significant. The CNDDDB Special Animals List (CNDDDB 2009a) was also referenced to determine if any wildlife species observed onsite are considered special-status species.

Field Survey Methods

DMEC, a County-approved biological consulting firm, conducted the first of the summer biological resources surveys on 13 July 2006 to capture the late-blooming plant species that might not be detected or would likely be unidentifiable during a spring survey. DMEC also conducted the spring biological resources surveys on 28 March 2007 and 11 April 2007 to capture the early-blooming plant species that might not have been detected or that would likely not be unidentified during a summer survey. DMEC biologists, David Magney and Cher Batchelor, conducted the July survey; Mr. Magney and William Abbott conducted the March survey; and Ms. Batchelor and Mr. Abbott conducted the April survey. Two additional biological resources surveys were conducted in 2008 to capture any additional plant species that might not have been detected during previous surveys; an additional spring survey on 18 April 2008 and a summer survey on 11 August 2008. David Magney conducted both 2008 surveys. Mr. Magney and David Brown conducted a late-spring survey on 26 May 2010. The survey dates and purposes are summarized in Table 3, Survey Date and Details.

DMEC biologists conducted the surveys of the vicinity of the project site to identify the native and naturalized flora and fauna onsite, including special-status plant and wildlife species and sensitive habitats. The project site was walked over to account for as many observable plant and wildlife species as possible onsite. Global Positioning System (GPS) units were carried to track footpaths and to mark waypoints of findings of interest. DMEC concentrated the survey efforts in and around the areas that would be directly affected by any proposed construction activities, and in wetland/riparian areas. Figure 6, Map of Biological Survey Area of the Point Broadcasting LLC Radio Tower Project Site, illustrates areas walked and surveyed by DMEC biologists.

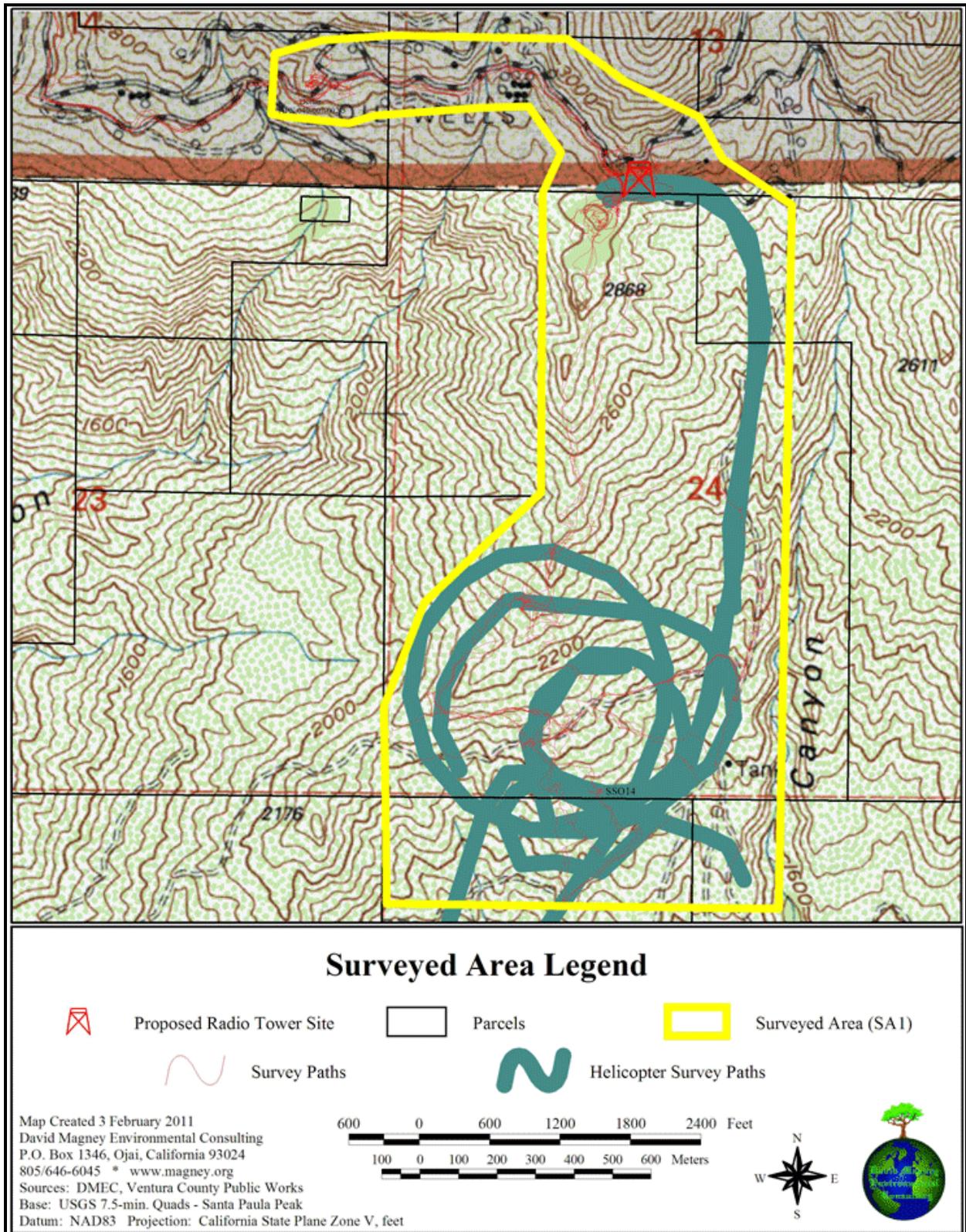
Table 3. Survey Date and Details

Survey Key	Survey Date	Survey Area Map Key	Survey Type	Time Period	Methods/Constraints	GPS	Surveyors
SD1	13 July 2006	SA1	Biological	Summer Survey	The project site was walked over. No constraints.	Garmin	David Magney and Cher Batchelor
SD2	28 March 2007	SA1	Biological	Spring Survey	The project site was walked over. No constraints.	Garmin	David Magney and William Abbott
SD3	11 April 2007	SA1	Biological	Spring Survey.	The project site was walked over. No constraints.	Garmin	Cher Batchelor and William Abbott
SD4	18 April 2008	SA1	Biological	Spring Survey	The project site was walked over. No constraints.	Garmin	David Magney
SD5	11 August 2008	SA1	Biological	Summer Survey	The project site was walked over. No constraints.	Garmin	David Magney
SD6	26 May 2010	SA1	Biological	Spring Survey	The project site was walked over. No constraints	Garmin	David Magney and David Brown
ISBA = Initial Study Biological Assessment Botanical = Botanical Survey							

Mapping Methods

Mapping of upland vegetation alliances was performed with the aid of ArcGIS programs (ArcView 3.3, ArcView 9.1, and related programs) using standard photo interpretation techniques and methods, supported by ground-truthing. A vegetation map was drawn onscreen at a scale of 1:2,000 to 1:5,000 using high-resolution georectified color aerial photographs, also used as a base layer. The polygons of this map differentiate the distinct land cover signatures related to patterns observed on the aerial photograph. These polygons were classified and attributed with different vegetation alliances after checking all available vegetation data gathered onsite by DMEC. DMEC's field data were also consulted as ground-truthing points in order to discern the boundaries of vegetation alliances that were not easily detected with the color aerial imagery.

Figure 6. Map of Biological Surveyed Areas of the Radio Tower Project Site



SECTION 3. BIOLOGICAL INVENTORY

This section describes the existing, pre-project, conditions of the project site, including topography, landscape position, site history, habitats (primarily natural vegetation), and the flora and fauna of the site.

3.1 HABITATS: PLANT COMMUNITIES, PHYSICAL FEATURES, AND WETLANDS

Plant Communities/Habitats

Locally important or rare plant communities were found within the survey area(s)

Major Plant Communities Summary

- Forest and Woodland (Formation 1.C.1. Western Temperate Forest)
 - California Forest and Woodland – Macrogroup MG0009
 - *Quercus agrifolia* Woodland Alliance (Coast Live Oak Woodland)
 - *Juglans californica* Woodland Alliance
 - *Eucalyptus globules* Semi-Natural Woodland Stands
- Riparian Shrubland (Formation 1.C.3.c Western Temperate Flooded and Swamp Forest)
 - Seep/Riparian – Macrogroup MG036 Southwestern North American Riparian, Flooded and Swamp Forest/Scrubland)
 - *Baccharis pilularis/Juncus mexicana* Shrubland Alliance (Seep)⁴
 - *Baccharis salicifolia* Shrubland Alliance (Seep)
 - *Baccharis salicifolia-Juncus* sp. Shrubland Alliance (Seep)⁵
 - *Baccharis salicifolia-Salix lasiolepis* Shrubland Alliance (Riparian)⁶
- Scrub (Formation 2.B.1. Mediterranean Scrub)
 - California Chaparral – Macrogroup MG043/Californian Xeric Chaparral Group and Californian Mesic Chaparral Group
 - *Ceanothus crassifolius* Shrubland Alliance
 - *Heteromeles arbutifolia* Shrubland Alliance
 - California Coastal Scrub – Macrogroup MG044 (Coastal Sage Scrub)
 - *Salvia leucophylla* Shrubland Alliance
 - *Hazardia squarrosa* Shrubland Alliance
 - *Malosma laurina* Shrubland Alliance
 - *Opuntia littoralis* Shrubland Alliance

⁴ Invented here; not formally described in Sawyer et al. (2009) but created by following classification protocols.

⁵ Ibid.

⁶ Ibid.

- Grassland/Herbland (Formation 2.B.2. Mediterranean Grassland and Forb Meadow)
 - California Annual and Perennial Grassland – Macrogroup MG045 (Wildflower Field Alliance)
 - *Deinandra fasciculata* Herbaceous Alliance (California Annual Grassland Alliance)
 - *Plagiobothrys nothofulvus* Herbaceous Alliance (Wildflower Field Alliance)
 - *Cryptantha clevelandii*- *Dichelostemma capitatum* Herbaceous Alliance (Wildflower Field Alliance)⁷
 - *Nassella pulchra* Herbaceous Alliance (Native Perennial Grassland)⁸
 - *Nassella pulchra* Association
 - *Bromus* Semi-Natural Stands⁹
 - Ruderal Grassland Association
- Unvegetated
 - Eroded Badlands
 - Disturbed/Roads

Descriptions of each general habitat and their plant alliances are provided in the following subsections and are summarized in Table 4, Plant Communities of the Project Site. Figure 7, Map of Plant Communities and Land Cover Types of the Survey Area, illustrates the distribution of the plant communities making up the general habitats of the Point Broadcasting LLC Radio Tower survey area.

FOREST AND WOODLAND

Forest and Woodland (Formation 1.C.1. Western Temperate Forest (Sawyer et al. 2009) describes a vegetation type dominated by woody trees and tall shrub species, forming a closed to intermittent canopy over a variety of low shrubs, vines, and herbs. The forest woodland plant communities observed at the project site are part of the Madrean Forest and Woodland Division, California Forest and Woodland Macrogroup, and Californian Broadleaf Forest and Woodland group.

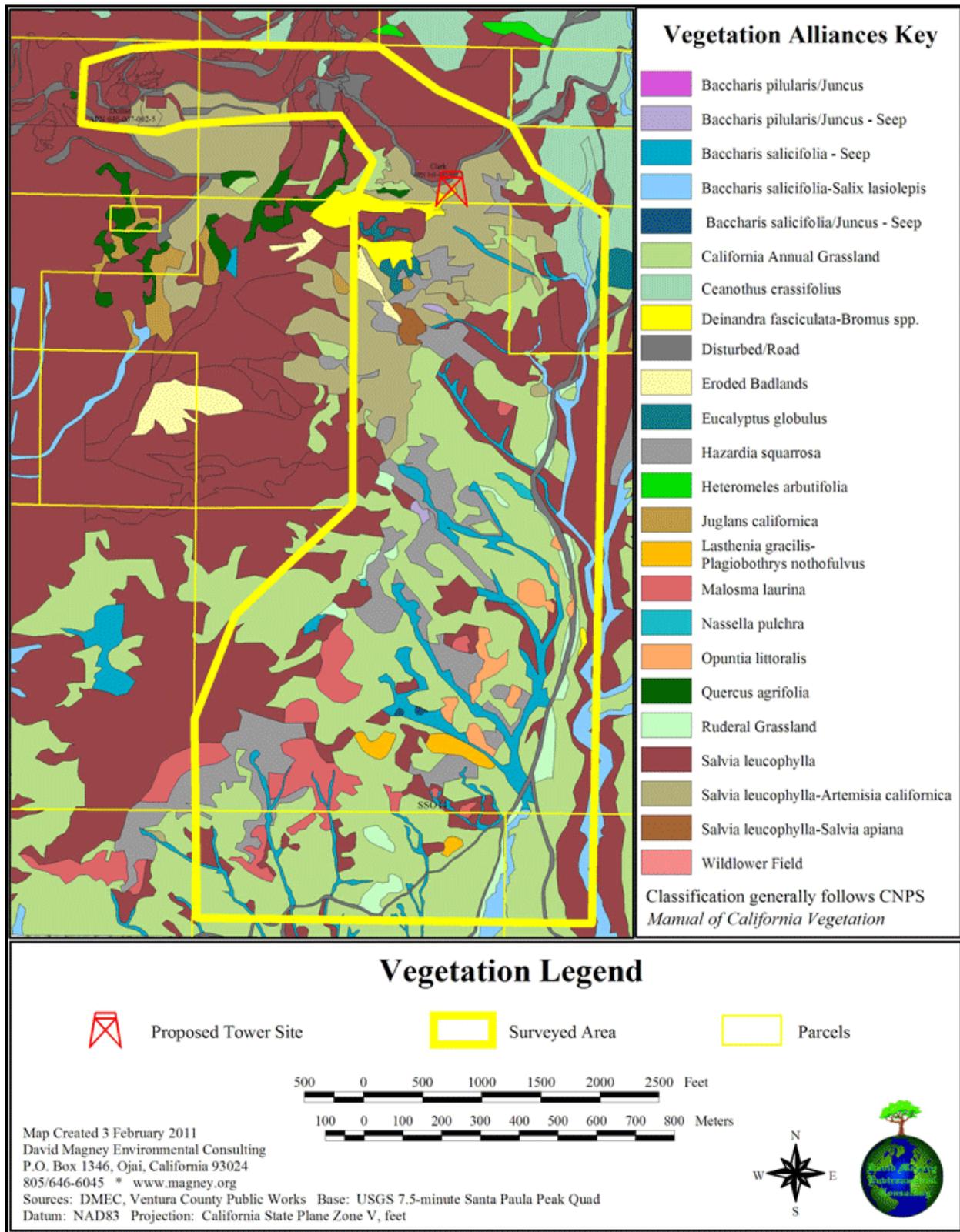
The woodlands onsite include: *Quercus agrifolia* Woodland Alliances, *Juglans californica* Woodland Alliance, and *Eucalyptus globules* Semi-Natural Stands Alliance. Each of the alliances and associations, when appropriate, are discussed below. Forest and Woodland plant communities occupy approximately 2.88 acres (1.17 ha) of the Point Broadcasting LLC Radio Tower survey area. There are approximately 328,642 acres (132,997 ha) of Forest and Woodland in Ventura County, excluding the islands (DMEC 2006).

⁷ Ibid.

⁸ Member of the California Perennial Grassland Group (Native Perennial Grassland)

⁹ Member of the Mediterranean California Naturalized Annual and Perennial Grassland Group (California Annual Grassland Alliance)

Figure 7. Map of Plant Communities and Land Cover Types of the Survey Area



***Quercus agrifolia* Woodland Alliance**

Quercus agrifolia Woodland Alliance is dominated by *Quercus agrifolia* var. *agrifolia* (Coast Live Oak), which is a broad-leaved, evergreen, wide-topped tree with furrowed, dark gray bark and spine-toothed, convex, dark green leaves. *Q. agrifolia* is the most widely distributed species of the evergreen oak in California, and it is capable of achieving large size and old age (Zedler et al. 1997). *Quercus agrifolia* Woodland Alliance occurs predominantly in canyons, on steep slopes, and on raised stream banks and terraces at elevations below 1,200 meters. It forms a continuous to open 25-meter-tall canopy, growing over an understory of occasional shrubs and an herbaceous ground layer. *Quercus agrifolia* Woodland Alliance requires >50% relative cover in the tree canopy by *Q. agrifolia*. This alliance occupies deep, sandstone or shale-derived soils on slopes and flats (Sawyer et al. 2009).

Quercus agrifolia Woodland Alliance provides habitat and food for numerous wildlife species, in particular, Acorn Woodpecker, Western Scrub-jay, Western Gray Squirrel, and California Ground Squirrel, to name just a few. Rarity ranking for this alliance is G5 S4. This alliance is included in the California Wildlife Habitats Relationship model as Coastal Oak Woodland. (Sawyer et al. 2009.)

Associate canopy contributors include *Juglans californica* var. *californica* and *Sambucus mexicana*. The understory is variable, including many of those associate shrub species listed below under California Sage Scrub associations described below.

Quercus agrifolia Woodland Alliance occupies approximately 0.27 acres (0.11 ha) of the Point Broadcasting LLC Radio Tower survey area. There are approximately 87,153 acres (35,269 ha) of *Quercus agrifolia* Woodland Alliance in Ventura County (DMEC 2006). This alliance is ranked G5 S4.

***Juglans californica* Woodland Alliance**

Juglans californica Woodland Alliance is dominated by *Juglans californica* var. *californica* (Southern California Black Walnut), a broad-leaved winter-deciduous, monoecious tree. The USFWS Wetland Inventory (1996 national list) lists *Juglans californica* as a wetland indicator status of FAC, a facultative species that is equally likely to occur in wetlands or nonwetlands (Reed 1988).

Juglans californica Woodland Alliance forms an open to closed canopy (less than 15 meters tall) growing over a common or infrequent shrub stratum and a sparse or grassy ground layer. This habitat requires deep, shale-derived, intermittently flooded/saturated soils of freshwater riparian corridors, floodplains, incised canyons, seeps, and stream or riverbanks at elevations between 150 and 900 meters (Sawyer and Keeler-Wolf 1995). *J. californica* stands occur in association with annual grassland, mesic chaparral, coastal sage scrub, oak woodland, and riparian vegetation. Holland (1986) divided stands into more open woodlands and more closed forest types. Moisture requirements appear to be similar to those of *Quercus agrifolia*; the densest forests tend to be equally dominated by these two trees (Sawyer et al. 2009.).

Juglans californica is an uncommon southern California endemic species, ranging from coastal southern California from Santa Barbara County to Los Angeles County. *J. californica* is a CNPS List 4.2 plant (limited distribution) (CNPS 2001). *Juglans californica* Alliance is a much

fragmented, declining natural community, and it is threatened by urbanization and livestock grazing, which inhibit natural reproduction.

Juglans californica Alliance occurs in the northern portion of the project site. *Juglans californica* Alliance was observed as an open canopy consisting of several large, mature trees growing over an understory of associate shrubs including *Artemisia californica*, *Hazardia squarrosa*, *Leymus condensatus*, and *Salvia leucophylla*. *Quercus agrifolia* were also observed in the walnut canopy.

Juglans californica Woodland Alliance occupies approximately 0.24 acres (0.10 ha) of the Point Broadcasting LLC Radio Tower survey area. There are approximately 87,153 acres (35,269 ha) of *Juglans californica* Woodland Alliance in Ventura County (DMEC 2006). This alliance is ranked G3 S3.2.

***Eucalyptus globulus* Semi-Natural Woodland Stands**

Eucalyptus globulus Semi-Natural Woodland Stands Alliance is dominated by *Eucalyptus globulus* var. *globulus* (Tasmanian Blue Gum). This introduced, aromatic tree has a smooth straight trunk and is native to southeastern Australia. *E. globulus* is also the most commonly cultivated and naturalized species of *Eucalyptus* in California (Hickman 1993). *Eucalyptus globulus* Alliance (Sawyer et al. 2009) forms a intermittent to continuous canopy, of less than 50 meters tall, with few other species present except infrequent shrubs growing over a sparse ground layer. This alliance occurs on all slopes, and generally of disturbed areas, at elevations below 300 meters. *Eucalyptus globulus* has California Invasive Plant Council (Cal-IPC) rank of Moderate.

Eucalyptus globulus Semi-Natural Woodland Stands Alliance occupies approximately 2.38 acres (0.96 ha) of the Point Broadcasting LLC Radio Tower survey area. There are approximately 87,153 acres (35,269 ha) of *Eucalyptus globulus* Semi-Natural Woodland Stands Alliance in Ventura County (DMEC 2006).

SEEP/RIPARIAN

Seeps and Riparian habitats consist of plant communities that are associated with streams or areas of shallow groundwater that comes to or very near the surface. The seeps and riparian habitats onsite are used as nesting and foraging habitat for several species of birds, and as cover and foraging habitat for small and large mammals, some of which may use the site as a movement corridor. Habitat function is increased by the presence of adjacent natural upland habitats, which together create high species richness and structural diversity of an area.

These seep and riparian habitats are also classified as Palustrine habitats. The Palustrine system includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived slats is below 0.5‰. Palustrine habitats can be characterized as performing various hydrologic, geomorphologic, biogeochemistry, and plant and wildlife habitat functions. The performance of these functions is largely dependent upon the maintenance of natural channel morphology and native plant communities (Cowardin et al. 1979).

The Palustrine habitat observed onsite, especially within Orcutt Canyon Creek, is Palustrine Shrub/Scrub wetland. Palustrine Scrub/Shrub habitat is dominated by woody plants less than six

meters tall. Contributing plants include true shrubs that are typically small or stunted due to environmental conditions. Palustrine Scrub-Shrub habitats represent a successional stage leading to Palustrine Forested habitats, or can be relatively stable communities (Cowardin et al. 1979).

The Seep/Riparian areas onsite include: *Baccharis pilularis/Juncus mexicana* Shrubland Alliance, *Baccharis salicifolia* Shrubland Alliance, *Baccharis salicifolia-Juncus* sp. Shrubland Alliance and *Baccharis salicifolia-Salix lasiolepis* Shrubland Alliance. Each of the alliances and associations, when appropriate, are discussed below. Seep/Riparian plant communities occupy approximately 32.73 acres (13.24 ha) of the Point Broadcasting LLC Radio Tower survey area.

***Baccharis pilularis/Juncus mexicanus* Shrubland Alliance (Seep)**

Baccharis pilularis/Juncus mexicanus Shrubland Alliance (Seep) is dominated by *Baccharis pilularis* (Coyote Brush) in the shrub canopy growing above a dense “carpet” of *Juncus mexicanus* in the herbaceous layer. *Baccharis pilularis* Shrubland Alliance is described as occurring on stabilized dunes of coastal bars, river mouths, coastline spits, coastal bluffs, open slopes, terraces, along ridges, and ecotonal areas with grasslands, and generally occurs at elevations below 1,500 meters (Sawyer et al. 2009). *Baccharis pilularis/Juncus mexicanus* Shrubland Alliance observed onsite forms an intermittent canopy of Coyote Brush (less than two meters tall) over a dense groundlayer of Mexican Rush. It includes scattered associate species such as those listed below in *Baccharis salicifolia* Shrubland Alliance. *Baccharis pilularis/Juncus mexicanus* Shrubland Alliance has not been formally described and is a unique plant community onsite that has never been observed by DMEC.

Baccharis pilularis is a bright green, native, broad-leaved evergreen shrub with small, toothed 3-veined leaves. The National Inventory of Wetland Plants (Reed 1988) does not list *Baccharis pilularis* with a wetland indicator status; however, DMEC recommends that this shrub is a FAC-species, or facultative species, equally likely to occur in wetlands or nonwetlands (the – symbol indicates lesser affinity for wetland habitats). *Juncus mexicanus* is a dark gray-green perennial graminoid (grass-like plant) from heavy rhizomes that has thick stems and leaves that resemble the stems. This is a common graminoid from the coast to montane meadows (Hickman 1993). The National Inventory of Wetland Plants (Reed 1988) lists *Juncus mexicanus* with a wetland indicator status of FACW.

Baccharis pilularis/Juncus mexicanus Shrubland Alliance (Seep) occupies approximately 0.59 acres (0.24 ha) of the Point Broadcasting LLC radio tower survey area.

***Baccharis salicifolia* Shrubland Alliance (Seep)**

Baccharis salicifolia Shrubland Alliance (Seep) is dominated by *Baccharis salicifolia* (Mulefat), a native shrub or small tree that is found at elevations below 1,250 meters. The National Inventory of Wetland Plants (Reed 1988) lists *Baccharis salicifolia* with a wetland indicator status of FACW, or facultative wetland species that is usually found in wetlands (Sawyer et al. 2009).

Baccharis salicifolia Shrubland Alliance was observed as scattered seeps onsite, which form an intermittent scrub canopy of less than five meters tall growing over a sparse ground layer. This plant community requires seasonally flooded or saturated freshwater wetland habitats, such as canyon bottoms, irrigation ditches, seeps, and moist streambanks or channels. *Baccharis*

salicifolia often occurs in pure stands or may mix, at a fine scale, with other wetland alliances. *Baccharis salicifolia* often forms ecotonal transitions between riparian and upland scrub communities (Sawyer and Keeler-Wolf 1995).

Baccharis salicifolia Shrubland Alliance occurs scattered throughout the south- and east-facing slopes of the project site with *Deinandra fasciculata* Herbaceous Alliance and *Salvia leucophylla* Alliance (described below) surrounding the seeps. Associate species to *Baccharis salicifolia* Shrubland Alliance (Seep) include: *Artemisia douglasiana* (Mugwort), *Baccharis pilularis* (Coyote Brush), *Chenopodium album*, *Conyza canadensis* (Horseweed), *Juncus mexicanus* (Mexican Rush), *Phalaris aquatica* (Harding Canarygrass), *Polypogon monspeliensis* (Rabbitsfoot Grass), *Rumex crispus* (Curly Dock), *Verbena lasiostachys* var. *lasiostachys* (Western Verbena), *Vulpia myuros* var. *hirsuta* (Foxtail Fescue), and *Xanthium strumarium* (Cocklebur).

Baccharis salicifolia Shrubland Alliance occupies approximately 21.77 acres (8.81 ha) of the Point Broadcasting LLC radio tower survey area. This alliance is ranked G5 S4.

***Baccharis salicifolia*-*Salix lasiolepis* Alliance (Riparian)**

Baccharis salicifolia-*Salix lasiolepis* Shrubland Alliance (Riparian) is co-dominated by *Baccharis salicifolia* and *Salix lasiolepis* var. *lasiolepis* (Arroyo Willow). *Salix lasiolepis* is a winter-deciduous tree with shiny dark green (upper surface) and grayish (lower surface) oblanceolate leaves. The National Inventory of Wetland Plants (Reed 1988) lists both these species with a wetland indicator status of FACW.

Baccharis salicifolia-*Salix lasiolepis* Shrubland Alliance was observed along Orcutt Canyon Creek and tributaries as a low intermittent riparian scrub corridor, less than five meters tall, growing over a variable ground layer. This plant community requires seasonally flooded or saturated freshwater wetland habitats, such as canyon bottoms, irrigation ditches, floodplains, low-gradient depositions along rivers and streams, marshes, meadows, and springs, at elevations below 1,800 meters (Sawyer and Keeler-Wolf 1995).

The emergent riparian tree species observed in the riparian corridor of Orcutt Canyon Creek include: *Juglans californica* var. *californica*, *Platanus racemosa* var. *racemosa* (California Sycamore), *Quercus agrifolia* var. *agrifolia*, and *Salix exigua* (Narrow-leaved Willow). Other associate species observed contributing to the shrub and ground layers of *Baccharis salicifolia*-*Salix lasiolepis* Shrubland Alliance include those mentioned above for *Baccharis salicifolia* Shrubland Alliance (Seep) and *Salvia leucophylla* Shrubland Alliance.

Baccharis salicifolia-*Salix lasiolepis* Shrubland Alliance occupies approximately 10.18 acres (4.12 ha) of the Point Broadcasting LLC radio tower survey area.

***Baccharis salicifolia*/*Juncus* sp. Alliance (Riparian)**

Baccharis salicifolia-*Juncus* species Shrubland Alliance (Riparian) is co-dominated by *Baccharis salicifolia* and an undetermined *Juncus* species. Emergent riparian trees and associate riparian species to this alliance onsite include those mentioned above for *Baccharis salicifolia* Alliance and *Baccharis salicifolia*-*Salix lasiolepis* Shrubland Alliance.

Baccharis salicifolia-*Juncus* species Shrubland Alliance occupies approximately 0.19 acres (0.08 ha) of the Point Broadcasting LLC radio tower survey area.

CALIFORNIA CHAPARRAL

California Chaparral is a type of shrubland that is dominated by evergreen shrubs with small, thick, leathery, dark green, sclerophyllous leaves. The shrubs of chaparral are relatively tall and dense, and are preadapted to periodic wildfires by stump sprouting or by germination from a dormant seed bank. These evergreen shrubs are also adapted to drought by deep extensive root systems, while their small thick leaf structure prevents permanent damage from moisture loss (Zedler et al. 1997). Many typical California Coastal Scrub species also grow intermixed as associates with chaparral species. Chaparral typically occurs on moderate to steep south-facing slopes with dry, rocky, shallow soils, becoming more abundant with higher elevations where temperatures are lower and moisture supplies are more ample. The Chaparral plant communities observed onsite are *Ceanothus crassifolius* Shrubland Alliance and *Heteromeles arbutifolia* Shrubland Alliance.

The California Chaparral plant alliances observed within the Point Broadcasting LLC radio tower survey area were *Ceanothus crassifolius* Shrubland Alliance and *Heteromeles arbutifolia* Shrubland Alliance directly north-northeast of survey area. California Chaparral occupies approximately 6.63 acres (2.68 ha) of the Point Broadcasting LLC radio tower survey area, mainly concentrated in the northeastern boundary. There are approximately 322,403 acres (130,472 ha) of California Chaparral in Ventura County (DMEC 2006).

***Ceanothus crassifolius* Shrubland Alliance**

Ceanothus crassifolius Shrubland Alliance is dominated by *Ceanothus crassifolius* var. *crassifolius* (Hollyleaf Ceanothus). *C. crassifolius* var. *crassifolius* is an erect, tree-like evergreen shrub that can grow to 3.5 meters tall. The twigs are round, white-to rusty-tomentose, becoming gray to brown and the flowers are sometimes with pink-tinge (Hickman 1993). This plant community occurs on slopes, often south-facing, with swallow rocky soils and at elevations below 1,100 meters. It forms an intermittent shrub canopy growing over an open to sparse groundlayer (Sawyer et al. 2009).

Ceanothus crassifolius Shrubland Alliance occupies approximately 6.63 acres (2.68 ha) of the Point Broadcasting LLC radio tower survey area.

***Heteromeles arbutifolia* Shrubland Alliance**

Heteromeles arbutifolia Shrubland Alliance is co-dominated by *Heteromeles arbutifolia* [*H. arbutifolia*] (Toyon), which is an evergreen tall shrub with oblong, leathery, sharply toothed, dark green leaves. It produces white flowers and bright red pome fruit with mealy pulp. Toyon occurs in many plant communities, at elevations below 1,300 meters (Hickman 1993). *Heteromeles arbutifolia* Shrubland Alliance requires shallow soils on steeper slopes, and forms a tall intermittent canopy over lower shrubs. It has a rarity ranking of G4 S4? (Sawyer et al. 2009); however, it is less common in Ventura County. *Heteromeles arbutifolia* is known from 27 of the 52 bioregions of Ventura County, with the northernmost occurrence of this species (in Ventura

County) on Pine Mountain Ridge (Magney 2010). *Heteromeles arbutifolia* Shrubland Alliance is part of the Californian Mesic Chaparral Group, typically associated with north-facing slopes and canyons protected from direct sunlight.

Heteromeles arbutifolia Shrubland Alliance occurs directly north-northeast of the survey area boundary. None of this alliance falls within the Point Broadcasting LLC radio tower survey area boundary. Since this alliance is shown on Figure 7, DMEC considers a discussion of the alliance was required.

CALIFORNIA COASTAL SCRUB

California Coastal Scrub (Coastal Sage Scrub) is a shrubland type dominated by facultative drought-deciduous, low-growing, soft-leaved, and grayish-green (malacophyllus) shrubs and subshrubs. California Coastal Scrub habitats typically exhibit a patchy distribution, often in close association with areas inhabited by grassland or chaparral habitats. California Coastal Scrub is a community at risk, with approximately 90 percent already lost to development (urban and agriculture); very little Coastal Sage Scrub has been protected by any legal mechanisms, such as enforceable conservation easements (Davis et al. 1985).

Due to stand variations, California Coastal Scrub is often considered part of a collection of species-specific plant alliances (Sawyer and Keeler-Wolf 1995, Sawyer et al. 2009). California Coastal Scrub generally occurs on the slopes of the project site and transitions into grassland where slopes become less steep. The plant community observed contributing to the California Coastal Scrub at the Point Broadcasting LLC radio tower project site include: *Salvia leucophylla* Shrubland Alliance, *Hazardia squarrosa* Shrubland Alliance, *Malosma laurina* Shrubland Alliance, and *Opuntia littoralis* Shrubland Alliance. These plant communities are described in the following paragraphs.

California Coastal Scrub occupies approximately 216.10 acres (87.44 ha) of the Point Broadcasting LLC radio tower survey area. There are approximately 206,455 acres (83,550 ha) of California Coastal Scrub in Ventura County (DMEC 2006).

***Salvia leucophylla* Shrubland Alliance**

Salvia leucophylla Shrubland Alliance is dominated by *Salvia leucophylla* (Purple Sage). *Salvia leucophylla* and other shrub species, such as *Artemisia californica* (California Sagebrush), typically form a continuous to intermittent canopy over a variable ground layer. This alliance grows on steeper north-facing slopes in colluvial-derived, rocky soils. It is considered part of the California Coastal Scrub alliance-collection (Sawyer et al. 2009).

Salvia leucophylla Alliance was observed as an important component of California Coastal Scrub within the surveyed area. This alliance also formed mosaics throughout the grassland habitats onsite, forming varying densities depending on the level of succession and level of disturbance (grazing). Several associate native species contribute to the *Salvia leucophylla* Alliance onsite, including: *Calystegia macrostegia* ssp. *cyclostegia* (Morning-glory), *Castilleja affinis* ssp. *affinis* (Lay-and-Collie Indian Paintbrush), *Chlorogalum pomeridianum* ssp. *pomeridianum* (Soap Lily), *Chorizanthe staticoides* var. *staticoides* (Turkish Rugging), *Dichelostemma capitatum* ssp. *capitatum* (Blue Dicks), *Encelia californica* (California Bush Sunflower), *Epilobium canum* ssp.

canum (California Fuchsia), *Eriogonum fasciculatum* var. *foliolosum* (Leafy California Buckwheat), *Eriophyllum confertiflorum* var. *confertiflorum* (Golden Yarrow), *Hazardia squarrosa* var. *squarrosa*, *Hesperoyucca whipplei* ssp. *whipplei* (Our Lord's Candle), *Leymus condensatus* (Giant Wildrye), *Lotus scoparius* var. *scoparius* (Deerweed), *Mimulus longiflorus* var. *longiflorus* (Sticky Bush Monkeyflower), *Nassella pulchra*, *Paeonia californica* (California Peony), *Pseudognaphalium californicum* (Green Everlasting), *Ribes malvaceum* var. *malvaceum* (Chaparral Currant), *Salvia apiana* (White Sage), and *Toxicodendron diversilobum* (Western Poison Oak).

Salvia leucophylla Shrubland Alliance occupies approximately 160.03 acres (64.75 ha) of the Point Broadcasting LLC radio tower survey area. *Salvia leucophylla* Shrubland Alliance occupies approximately 21,525 acres (8,711 ha) in Ventura County (DMEC 2006). This alliance has a rarity ranking of G4 S4.

***Hazardia squarrosa* Shrubland Alliance**

Hazardia squarrosa Shrubland Alliance is dominated by *Hazardia squarrosa* (Sawtooth Goldenbush). The *Hazardia squarrosa* Shrubland Alliance observed onsite was dominated by an open, low-growing, shrub canopy of *Hazardia squarrosa* var. *squarrosa* (Sawtooth Goldenbush) (2 meters) growing with a significant ground layer of annual grassland. Sawtooth Goldenbush has toothed resinous leaves and hairy stems and is in the Asteraceae (Sunflower) Family. This alliance grows on gentle to somewhat steep north-facing slopes in fine clay soils. This plant community is likely successional California Coastal Scrub alliance-collection (Sawyer et al. 2009), resulting from frequent grazing disturbance. Very few other species were observed growing with *Hazardia squarrosa* onsite except for the grassland species mentioned below in the discussion for *Deinandra fasciculata* Herbaceous Alliance.

Hazardia squarrosa Shrubland Alliance occupies approximately 36.57 acres (14.80 ha) of the Point Broadcasting LLC radio tower survey area. This alliance has a rarity ranking of G3 S3.

***Malosma laurina* Shrubland Alliance**

Malosma laurina Shrubland Alliance is dominated by *Malosma laurina* (Laurel Sumac), which is a large shrub (5 meters) known to occur predominantly in chaparral and coastal scrub communities. This evergreen shrub has a deep, extensive root system that penetrates deep moisture reserves during summer drought and has thick, curved, folded, reddish-green leaves.

Malosma laurina Shrubland Alliance forms an open or continuous canopy over lower-growing shrubs with a sparse ground layer. This alliance prefers steep north- and south-facing slopes with shallow coarse soils at elevations below 400 meters (Sawyer et al. 2009). *Malosma laurina* is frost sensitive and does not grow where heavy frosts occur regularly, such as in the higher elevations of the Transverse Ranges, and is a good indicator of frost-free areas.

Malosma laurina Shrubland Alliance occurs as dense large patches amongst the vast grassland on the project site. Its primary associate species include *Artemisia californica*, *Heteromeles arbutifolia* (Toyon), and *Salvia leucophylla*, while other less predominant associates includes several of those mentioned above for *Salvia leucophylla* Alliance.

Malosma laurina Shrubland Alliance occupies approximately 14.48 acres (5.86 ha) of the Point Broadcasting LLC radio tower survey area. This alliance has a rarity ranking of G4 S4.

***Opuntia littoralis* Shrubland Alliance**

Opuntia littoralis Shrubland Alliance is dominated by *Opuntia littoralis* (Coast Prickly Pear). Coast Prickly Pear has flat elliptic stem segments with straight long yellowish spines. *Opuntia littoralis* Alliance occurs on steep south-facing slopes with shallow loamy or clay soils, oftenthat may be rocky, at elevations between sea level and 1,200 meters (Sawyer et al. 2009). *Opuntia littoralis* Shrubland Alliance (also referred to as Maritime Succulent Scrub [Holland 1986] or Southern Cactus Scrub [Magney 1992]) consists of predominantly succulent, malacophyllus species (fleshy leaved or stemmed plants), as well as drought-tolerant, deciduous shrubs of less than two meters tall. Growth of these shrub types is concentrated in the spring. This plant community forms an intermittent shrub canopy over a variable to sparse groundlayer of grasses or succulent herbs.

Opuntia littoralis Shrubland Alliance was observed onsite as large patches surrounded by the grassland communities described above. Scattered associate species to this alliance onsite include those mentioned above for *Salvia leucophylla* Alliance.

Opuntia littoralis Shrubland Alliance occupies approximately 5.03 acres (2.04 ha) of the Point Broadcasting LLC radio tower survey area. This alliance has a rarity ranking of G3 S3.

GRASSLAND/HERBLAND

Grassland/Herbland consists of low herbaceous vegetation that is dominated by annual and perennial grasses and herbs, or less often by native perennial grasses or annual forbs, with herbaceous associates including either native wildflowers or invasive ruderal species. Grasslands generally grow in well-developed soils on gentle slopes and flats. For example, grassland covers the fine-textured soils of coastal terraces, as well as the deeper soils of rolling hills at higher elevations. Areas dominated by grasses will revert to shrublands or even woodlands if disturbance frequencies are reduced (Zedler et al. 1997).

Prior to the livestock grazing onsite, the grassland plant communities inhabiting the project site likely consisted of a mosaic of predominantly native perennial bunchgrasses and flowering herbs. However, as a result of continuous disturbance (grazing) with the introduction of several competitive nonnative plant species, the predominant grassland plant communities observed at the project site are now *Deinandra fasciculata* Alliance and Bromus Semi-Natural Stands Alliance. These grassland alliances are discussed in further detail below and are mapped in Figures 6 and 7.

The grassland/herbland plant alliances observed in the Point Broadcasting LLC radio tower survey area include *Deinandra fasciculata* Herbaceous Alliance, *Plagiobothrys nothofulvus* Herbaceous Alliance, *Cryptantha clevelandii*- *Dichelostemma capitatum* Herbaceous Alliance, *Nassella pulchra* Herbaceous Alliance and *Bromus diandrus*-*Bromus hordeaceus* Semi-Natural Stands. Grassland/Herbland occupies approximately 169.05 acres (68.42 ha) of the Point Broadcasting LLC radio tower survey area.

***Deinandra fasciculata* Herbaceous Alliance (California Annual Grassland Alliance)**

The predominant native annual species contributing to the *Deinandra fasciculata* Herbaceous Alliance is *Deinandra fasciculata* (Clustered Tarweed), which is a glandular native herb in the Asteraceae (Sunflower) family. It is considered part of the California Annual and Perennial Grasslands alliance-collection (Sawyer et al. 2009). This alliance was previously referred to as the California Annual Grassland Series (Sawyer and Keeler-Wolf 1995).

Deinandra fasciculata Herbaceous Alliance is dominated by *Deinandra fasciculata* and a variety of annual grasses of several genera that are primarily Mediterranean in origin. This grassland alliance occurs on gradual slopes consisting of deep soils. *Deinandra fasciculata* is a summer-flowering annual herb. Most annual grasses germinate in the fall or early winter with the first rains, and are protected from unseasonal germination by a preference of cool temperatures (Zedler et al. 1997). Their growth is characterized as extremely plastic because they are well adapted to California's highly variable rainfall. Species richness of annual grassland is affected to a high degree by land use activity, where heavily grazed grasslands generally have lower species richness. These disturbed areas, generally at lower elevations, tend to have a higher proportion of exotic grass species. Although the introduced annual grass species have irreversibly invaded the once native perennial stands, they have become naturalized, and are often important contributors to annual grassland communities. These naturally sustained functional habitats often contribute important resources for regional fauna that scrub or woodland habitats do not.

Deinandra fasciculata Herbaceous Alliance occurs on all topographic locations, especially gradual slopes, of all slope aspects, consisting of deep soils, at elevations between sea level and 1,200 meters, and species composition varies among stands. The major factors determining grassland composition include fall temperatures and precipitation, solar (light) intensity affected by plant and litter shading, and microtopographic variations. Therefore, fine scale variation, of temporal and spatial structure found in this alliance, suggests recognition of many species-dominant alliances is not useful (Sawyer et al. 2009).

The annual grass species (introduced/naturalized grasses) observed contributing to *Deinandra fasciculata* Herbaceous Alliance, forming much of the ground layer onsite, include: *Avena barbata* (Slender Wild Oat), *Bromus diandrus* (Ripgut Grass), *Bromus hordeaceus* (Soft Chess), *Bromus madritensis* ssp. *rubens* (Red Brome), *Hordeum murinum* ssp. *glaucum* (Summer Barley), *Lolium multiflorum* (Italian Ryegrass), and *Vulpia myuros* var. *hirsuta* (Foxtail Fescue).

Associate species observed contributing to the groundlayer of the *Deinandra fasciculata* Herbaceous Alliance include: *Eremocarpus setigerus* (Dove Weed), *Filago gallica* (Woolly Filago), *Hazardia squarrosa* var. *squarrosa* (Sawtooth Goldenbush), *Lagophylla ramosissima* ssp. *ramosissima* (Branched Lagophylla), *Lotus purshianus* var. *purshianus* (Spanish Clover), and *Madia* sp. (Tarplant).

Deinandra fasciculata Herbaceous Alliance occupies approximately 156.32 acre (63.26 ha) of the Point Broadcasting LLC radio tower survey area. This alliance has a rarity ranking of G3? S3? and is considered a sensitive natural community (CDFG 2010a).

***Plagiobothrys nothofulvus* Herbaceous Alliance**

The predominant native annual species contributing to the *Plagiobothrys nothofulvus* Herbaceous Alliance is *Plagiobothrys nothofulvus* (Rusty Popcornflower), along with numerous other native annual herbs in the herbaceous layer forming an intermittent to continuous layer. Emergent shrubs may be present at lower cover. *Plagiobothrys nothofulvus* is a native herb in the Boraginaceae (Borage) family. The USFWS Wetland Inventory (1996 National List) lists *P. nothofulvus* as a FAC plant. This alliance typically grows on upland slopes with loamy soil, derived from many substrates and often subject to high levels of bioturbation. It is considered part of the California Annual and Perennial Grasslands alliance-collection (Sawyer et al. 2009). This alliance was previously referred to as the California Annual Grassland Series (Sawyer and Keeler-Wolf 1995) and Wildflower Field (Holland 1986).

Holland (1986) describes Wildflower Field as an amorphous grab bag of herb-dominated types noted for conspicuous annual wildflower displays, but notes that dominance varies from site to site and from year to year at each particular site. This plant community is found growing on fairly poor sites that are droughty and low in nutrients. Wildflower Field is typically associated with other grassland communities and may grow as a woodland ground layer. Wildflower Field occurs in valleys and on foothills of the California Floristic Province, except for the north coast and desert regions, up to about 1,500 meters in elevation.

Plagiobothrys nothofulvus Herbaceous Alliance is similar to *Deinandra fasciculata* Herbaceous Alliance in that it is characterized by low-growing, naturalized, annual grasses.

The native wildflowers observed contributing to the *Plagiobothrys nothofulvus* Herbaceous Alliance onsite include: *Amsinckia menziesii* var. *intermedia* (Rancher's Fire), *Calandrinia ciliata* (Redmaids), *Lasthenia gracilis* (Southern California Goldfields), *Lepidium nitidum* var. *nitidum* (Common Peppergrass), *Lotus purshianus* var. *purshianus* (Spanish Clover), *Lupinus nanus* (Small Lupine), *Lupinus sparsiflorus* ssp. *sparsiflorus* (Few-flowered Lupine), *Plagiobothrys acanthocarpus* (Adobe Popcornflower), *Plagiobothrys nothofulvus* (Rusty Popcornflower), and *Sisyrinchium bellum* (Blue-eyed Grass).

Plagiobothrys nothofulvus Herbaceous Alliance was observed in the openings of California Coastal Scrub habitats. Associate species observed contributing to the groundlayer of this alliance include: *Eremocarpus setigerus* (Dove Weed), *Erodium cicutarium* (Redstem Filaree), *Erodium moschatum* (Whitestem Filaree), and *Lasthenia gracilis* (California Goldfields).

Plagiobothrys nothofulvus Herbaceous Alliance occupies approximately 1.80 acre (0.73 ha) of the Point Broadcasting LLC radio tower survey area. This alliance has a rarity ranking of G4 S4.

***Cryptantha clevelandii*-*Dichelostemma capitatum* Herbaceous Alliance**

Cryptantha clevelandii-*Dichelostemma capitatum* Herbaceous Alliance is co-dominated by *Cryptantha clevelandii* (Cleveland Forget-Me-Not) and *Dichelostemma capitatum* (Blue Dicks), along with numerous other native annual herbs in the herbaceous layer forming an intermittent to continuous layer. Emergent shrubs may be present at lower cover. *Cryptantha clevelandii* is an annual native herb in the Boraginaceae (Borage) family. *Dichelostemma capitatum* is a native herb in the Liliaceae (Lily) family.

The only occurrence of *Cryptantha clevelandii*- *Dichelostemma capitatum* Herbaceous Alliance was observed in an opening of California Coastal Scrub habitat on the Point Broadcasting LLC survey area. Associate species observed contributing to the groundlayer of this alliance include: *Lasthenia gracilis* (Southern California Goldfields), *Lepidium nitidum* var. *nitidum* (Common Peppergrass), *Lotus purshianus* var. *purshianus* (Spanish Clover), *Lupinus nanus* (Small Lupine), *Sanicula crassicaulis* (Pacific Sanicle), and *Sisyrinchium bellum* (Blue-eyed Grass).

Cryptantha clevelandii- *Dichelostemma capitatum* Herbaceous Alliance occupies approximately 1.76 acre (0.71 ha) of the Point Broadcasting LLC radio tower survey area.

***Nassella pulchra* Herbaceous Alliance**

Since introduced annual grassland plant communities have largely replaced the native perennial grassland communities throughout California, grassland can now be considered native perennial grassland when perennial grass species occupy at least approximately 10% of the plant community's ground cover. The dominant or characteristically present native perennial bunchgrass species in the herbaceous layer contributing to the native perennial Grassland onsite is *Nassella pulchra* (Purple Needlegrass); therefore, this plant community is further classified as *Nassella pulchra* Herbaceous Alliance (Purple Needle Grass Grassland). *Nassella pulchra* Herbaceous Alliance occurs on all topographic locations in deep, high clay content soils, and grows at elevations between sea level and 1,300 meters. It is considered part of the California Perennial Grassland Group alliance-collection (Sawyer et al. 2009).

Nassella pulchra Herbaceous Alliance was described by Magney (1992) as Southern Coastal Needlegrass Grassland, in which native and introduced annuals grow within the open gaps between the perennials, often actually exceeding the bunchgrass in cover. It is found as small, open pockets within California Coastal Scrub areas or intergrading with chaparral and woodland communities. This plant community prefers sites with fine-textured soils that are moist during winter and very dry during summer. *Nassella pulchra* Herbaceous Alliance occurs on coastal terraces, foothills, valleys of California's south coast, and in the coastal Transverse Ranges.

Stands of this once extensive alliance now typically include nonnative annual species mixed with the perennial grasses and herbs (Sawyer and Keeler-Wolf 1995). *Nassella pulchra* Herbaceous Alliance was observed in the openings of California Coastal Scrub habitats and in successional areas (such as old road beds and trails). Associate species observed contributing to the groundlayer of this alliance include: those grasses mentioned above for California Annual Grassland Alliance, *Asclepias fascicularis* (Narrowleaf Milkweed), *Bromus carinatus* var. *carinatus* (California Brome), *Dichelostemma capitatum* ssp. *capitatum* (Blue Dicks), and *Sisyrinchium bellum* (Blue-eyed Grass).

Nassella pulchra Herbaceous Alliance occupies approximately 0.64 acre (0.026 ha) of the Point Broadcasting LLC radio tower survey area. There are approximately 15,339 acres (6,208 ha) of *Nassella pulchra* Alliance in Ventura County (DMEC 2006). This alliance has a rarity ranking of G4 S3?.

***Bromus* Semi-Natural Herbaceous Stands**

Bromus Semi-Natural Herbaceous Stands is an alliance that is dominated or co-dominant by *Bromus diandrus* (Ripgut Brome) and *B. hordeaceus* (Soft Brome), along with non-natives in the herbaceous layer, typically forming an intermittent to continuous layer. Emergent trees and shrubs may be present at the low cover. This alliance grows in all topographic settings in foothills, waste laces, and rangelands. It is considered part of the California Annual and Perennial Grasslands alliance-collection (Sawyer et al. 2009). This alliance was previously referred to as the California Annual Grassland Alliance (Sawyer and Keeler-Wolf 1995).

Ruderal Grassland Association was also found on the Point Broadcasting LLC radio tower survey area in smaller areas as a subset of California Annual Grassland Alliance. Ruderal Grassland is typically in early successional stages resulting from severe disturbance by natural or human causes, and/or is due to recurrent disturbance. These areas are dominated by pioneering introduced herbaceous plants that readily colonize disturbed ground. Only those areas that are actively disturbed by human actions, such as plowing or grading, should be called Ruderal.

No one species dominated this plant community onsite; rather, several invasive species were observed contributing to this competitive groundlayer cover. In addition to the introduced annual grass species mentioned above for *Deinandra fasciculata* Herbaceous Alliance (California Annual Grassland Alliance), the predominant invasive plant species observed contributing to Ruderal Grassland Association onsite include: *Anthemis cotula* (Mayweed), *Brassica nigra* (Black Mustard), *Carduus pycnocephalus* (Italian Thistle), *Centaurea melitensis* (Tocalote), *Chenopodium album* (Lamb's Quarters), *Hirschfeldia incana* (Summer Mustard), *Lactuca serriola* (Prickly Wild Lettuce), *Lamarckia aurea* (Goldentop), *Malva parviflora* (Cheeseweed), *Marrubium vulgare* (White Horehound), *Silybum marianum* (Milk Thistle), and *Sonchus oleraceus* (Common Sow-thistle).

Bromus Semi-Natural Herbaceous Stands occupies approximately 8.54 acres (3.46 ha) of the Point Broadcasting LLC radio tower survey area. There are approximately 34,622 acres (14,011 ha) of *Bromus* Semi-Natural Herbaceous Stands in Ventura County (DMEC 2006).

UNVEGETATED

Unvegetated is a land cover type onsite that has been disturbed by human or natural causes to the point that no or very little vegetation exists or can become established. Unvegetated include the Eroded Badlands and Disturbed/Roads. These cover types are discussed below.

Eroded Badlands

Eroded Badlands is barren land characterized by roughly eroded ridges, peaks, and mesas. These areas of severe erosion are usually found in semiarid climates and characterized by countless gullies, steep ridges, and very sparse vegetation. Badland topography is formed on poorly cemented sediments that have few deep-rooted plants because short, heavy showers sweep away surface soil and small plants. Depressions that are formed gradually deepen into gullies. Badlands exist in the northwestern portion of the study area. *Salvia leucophylla* was observed growing scattered in this habitat type onsite.



Eroded Badlands land occupies approximately 1.26 acres (0.51 ha) of the Point Broadcasting LLC radio tower survey area.

Disturbed/Road

Disturbed/Roads describes land or habitat that has been altered, either by human activities (for building and road development purposes) or by natural causes. As a result, this altered land is generally initially bare ground until natural succession begins. Habitat succession is a slow process of reestablishing original plant communities, but successional habitats are readily invaded by ruderal introduced and often invasive plant species. Disturbed areas onsite are primarily existing as dirt roads. Limited vegetation occurs in this land cover type and tends to be weedy.

Disturbed/Road land occupies approximately 14.64 acres (5.93 ha) of the Point Broadcasting LLC radio tower survey area.

Table 4. Plant Communities of the Project Site

Map Key	SVC Alliance	SVC Association	Misc.	Status	Condition	Acres Total	Acres Impacted	Comments
PC1	<i>Quercus agrifolia</i> Alliance	<i>Quercus agrifolia</i> Association	Grazed	G5, S4, Cal OWA	Intact	0.27 ac (0.11 ha)	0	A specific type of forest/ woodland alliance.
PC2	<i>Juglans californica</i> Alliance	<i>Juglans californica</i> Association	Grazed	G3, S3.2	Intact	0.24 ac (0.01 ha)	0	A specific type of forest/ woodland alliance
PC3	<i>Eucalyptus globules</i> Semi-Natural Stands	<i>Eucalyptus globules</i> Association	Grazed	-	Intact	2.38 ac (0.96 ha)	0	A specific type of forest/ woodland alliance
PC4	<i>Baccharis pilularis/ Juncus mexicana</i> Alliance	<i>Baccharis pilularis/ Juncus</i> Association	Grazed	-	Intact	0.59 ac (0.24 ha)	0	A specific type of seep/riparian scrub.
PC5	<i>Baccharis salicifolia</i> Alliance	<i>Baccharis salicifolia</i> Association	Grazed	G5, S4	Intact	21.77 ac (8.81 ha)	0	A specific type of seep/riparian scrub.
PC6	<i>Baccharis salicifolia- Salix lasiolepis</i> Alliance	<i>Baccharis salicifolia/ Salix lasiolepis</i> Association	Grazed	-	Intact	10.18 ac (4.12 ha)	0	A specific type of seep/riparian scrub.
PC7	<i>Baccharis salicifolia/ Juncus</i> Alliance	<i>Baccharis salicifolia/ Juncus</i> sp. Association	Grazed	-	Intact	0.19 ac (0.08 ha)	0	A specific type of seep/riparian scrub.
PC8	<i>Ceanothus crassifolius</i>	<i>Ceanothus crassifolius</i>	Grazed	-	Intact	6.63 ac (2.68 ha)	0	A specific type of



Map Key	SVC Alliance	SVC Association	Misc.	Status	Condition	Acres Total	Acres Impacted	Comments
	Shrubland Alliance	Association						chaparral scrub habitat.
PC9	<i>Heteromeles arbutifolia</i> Shrubland Alliance	<i>Heteromeles arbutifolia</i> Association	Grazed	-	Intact	0 ac (Found directly outside of survey area)	0	A specific type of chaparral scrub habitat.
PC10	<i>Salvia leucophylla</i> Alliance	<i>Salvia leucophylla</i> Association	Grazed	G4, S4	Intact	563.863 ac (228.185 ha)	Permanent 0.127 ac (0.052 ha)	A specific type of coastal scrub habitat.
PC10	<i>Salvia leucophylla</i> Alliance	<i>Salvia leucophylla</i> - <i>Artemisia californica</i> Association	Grazed	G4, S4	Intact	66.896 ac (27.073 ha)	Permanent 0.788 ac (0.319 ha)	A specific type of coastal scrub habitat.
PC10	<i>Salvia leucophylla</i> Alliance	<i>Salvia leucophylla</i> - <i>Eriodictyon crassifolium</i> - <i>Ceanothus cuneatus</i> Association	Grazed	G4, S4	Intact	0.384 ac (0.156 ha)	0	A specific type of coastal scrub habitat.
PC10	<i>Salvia leucophylla</i> Alliance	<i>Salvia leucophylla</i> - <i>S. apiana</i> - <i>Hesperoyucca whipplei</i> Association	Grazed	G4, S4	Intact	1.429 ac (0.578 ha)	0	A specific type of coastal scrub habitat.
PC11	<i>Hazardia squarrosa</i> Alliance	<i>Hazardia squarrosa</i> -grassland Association	Grazed	G3, S3	Intact	36.57 ac (14.80 ha)	0	A specific type of coastal scrub habitat.
PC12	<i>Malosma laurina</i> Alliance	<i>Malosma laurina</i> Association	Grazed	G4, S4	Intact	14.48 ac (5.86 ha)	0	A specific type of coastal scrub habitat.
PC13	<i>Opuntia littoralis</i> Alliance	<i>Opuntia littoralis</i> Association	Grazed	G3, S3	Intact	5.03 ac (2.04 ha)	0	A specific type of coastal scrub habitat.
PC14	<i>Deinandra fasciculata</i> Alliance	<i>Deinandra fasciculata</i> - <i>Bromus</i> spp. Association	Grazed	G3?, S3?	Intact	5.628 ac (2.278 ha)	Permanent 0.235 ac (0.095 ha)	A specific type of grassland/herbland habitat.
PC15	<i>Plagiobothrys nothofulvus</i> Alliance	<i>Plagiobothrys nothofulvus</i> Association	Grazed	G4, S4	Intact	1.80 ac (0.73 ha)	0	A specific type of grassland/herbland habitat.



Map Key	SVC Alliance	SVC Association	Misc.	Status	Condition	Acres Total	Acres Impacted	Comments
PC16	<i>Cryptantha clevelandii</i> – <i>Dichelostemma capitatum</i> Alliance	<i>Cryptantha clevelandii</i> – <i>Dichelostemma capitatum</i> Association	Grazed	-	Intact	1.76 ac (0.71 ha)	0	A specific type of grassland/herbland habitat.
PC17	<i>Nassella pulchra</i> Alliance	<i>Nassella pulchra</i> Association	Grazed	G4, S3?	Intact	0.64 ac (0.26 ha)	0	A specific type of grassland/herbland habitat.
PC18	<i>Bromus</i> Semi-Natural Stands	Ruderal Grassland Association	Grazed	-	Intact	8.54 ac (3.46 ha)	0	A specific type of grassland/herbland habitat.
PC19	Eroded Badlands	-	Eroded ridges, peaks, and mesas.	-	Intact	1.26 ac (0.51 ha)	0	Exist in the northwestern portion.
PC20	Disturbed/Roads	-	Cleared Lands	-	Disturbed	33.191 ac (13.434 ha)	Temporary 0.171 ac (0.069 ha)	Primarily existing as dirt roads.

LIC = Locally Important Plant Community
ESHA = Environmentally Sensitive Habitat Area
U = Undefined
G1 or S1 = Critically Imperiled Globally or Subnationally (state)
G2 or S2 = Imperiled Globally or Subnationally (state)
G3 or S3 = Vulnerable to extirpation or extinction Globally or Subnationally (state)
Cal OWA = Protected by the California Oak Woodlands Act

Physical Features

The survey area is located on relatively to steep south/southwest-facing slopes and is immediately south of Santa Paula Peak. Santa Paula Peak is the highest peak in the Santa Paula Ridge, which is located within a segment of the Western Transverse Range called the Topatopa Mountains.

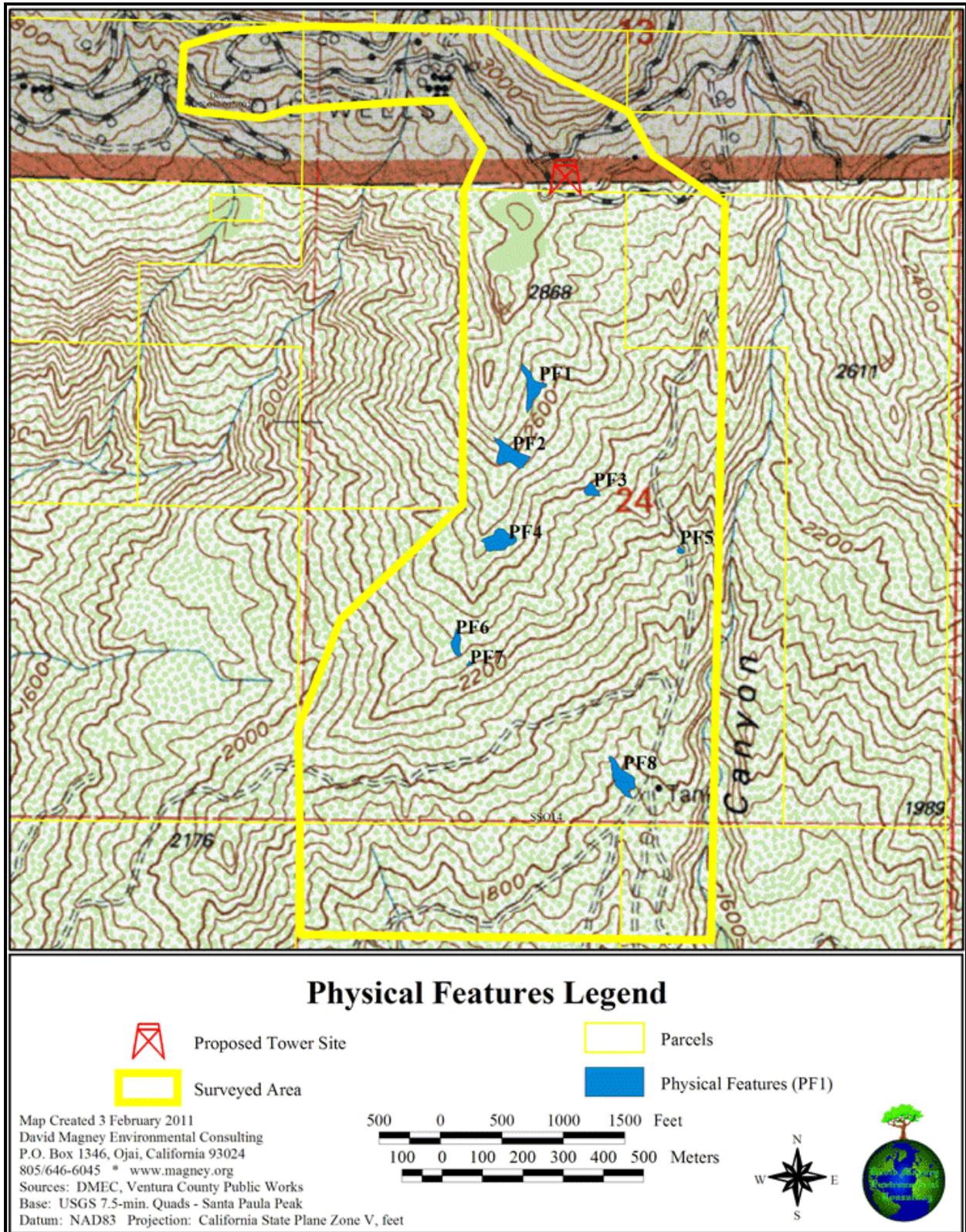
The survey area is scattered with numerous sandstone rocky outcrops and boulders. These outcrops range from single boulders to large areas of scattered boulders, which have potential for providing habitat for numerous special-status plants species and non-vascular lichens and bryophytes. Many of the boulders surveyed were rich in lichen species.

Due to the abundance of rocky outcrops over the survey area, only those noted during field surveys have been inventoried and mapped below. Table 5, Physical Features of the Survey Area, gives explanation for each of the noted physical features onsite. These features are shown on Figure 8, Physical Features on the Survey Area. None of these features occur at the tower site.

Table 5. Physical Features of the Survey Area

Map Key	Physical Feature	Comments
PF1	Scattered Rocky Outcrop	Area of scattered rocky outcrops within the survey area, many of which are covered with lichen species.
PF2	Scattered Rocky Outcrop	Rocky slope within the survey area.
PF3	Lichen Boulders	Area of scattered lichen boulders within the survey area.
PF4	Scattered Rocky Outcrop	Area of scattered rocky outcrops within the survey area, many of which are covered with lichen species.
PF5	Lichen Boulders	Area of scattered lichen boulders within the survey area.
PF6	Rocky Outcrop	Rocky outcrop pile within the survey area, many of which are covered with lichen species.
PF7	Lichen Boulders	Area of scattered lichen boulders within the survey area.
PF8	Scattered Rocky Outcrop	Area of scattered rocky outcrops near a gully within the survey area, many of which are covered with lichen species.

Figure 8. Map of Physical Features on the Survey Area



Wetlands

See Appendix A for an overview of the local, state and federal regulations protecting wetlands and riparian habitats. Wetlands are complex systems; delineating their specific boundaries, functions and values generally takes a level of effort beyond the scope of an Initial Study Biological Assessment (ISBA). The goal of the ISBA with regard to wetlands or waters of the U.S. is simply to identify whether they may exist or not and to determine the potential for impacts to them from the proposed project. This much information can be adequate for designing projects to avoid impacts to wetlands. Additional studies are generally warranted to delineate specific wetland boundaries and to develop recommendations for impact minimization or impact mitigation measures.

Protected wetlands or waters were found within the survey area(s).

Wetland Summary

DMEC mapped twelve (12) ephemeral drainages, originating to the north, each bisecting the survey area. These drainages discharge into both Mud Creek located west of the survey area and Orcutt Creek located along the eastern boundary of the survey area. All segments of creeks are generally in natural condition. Each of the stream drainages are characterized in Table 6, Waters and Wetlands of the Project Site, and mapped on Figure 9, Map of Waters and Wetlands of the U.S. on the Project Site. Mud Creek is a tributary to Santa Paula Creek and Orcutt Creek is tributary to the Santa Clara River. Santa Paula Creek is a major tributary to the Santa Clara River.

The drainages onsite contain approximately 15,976 linear feet (4,870 linear meters) of streams, most of which are considered Waters of the U.S. and under the jurisdiction of the U.S. Army Corps of Engineers (Corps) and California Department of Fish and Game. The majority of the drainages onsite are in a natural condition with only minor disturbances from grazing activities and activities associated with near by oil wells.

The Ventura County General Plan Biological Resources Policy 1.5.2-4 prohibits any development within 100 feet of riparian wetlands; see Appendix A for further discussion. Figure 9 maps the locations of the streams and drainages, which qualify as either wetland or waters of the U.S., including the required 100-foot (30.5-meter) buffer zones for each drainage. Table 7, Distance of Wetlands From the Project Site, summarizes the relative locations of the wetlands/waters features to the project site.

Table 6. Waters and Wetlands of the Project Site

Map Key	Wetland Type	Wetland Name	Wetland Status	Wetland Size	Hydrologic Status	Primary Water Source
W1	Ephemeral Drainage	Mud Creek	Corp CDFG	608 linear ft (185.32 m); ~ 0.014 acre onsite (0.006 ha); reach is ~0.033 acre (0.013 ha)	Ephemeral Drainage	Rain Fed
W2	Ephemeral Drainage	Unnamed tributary to Mud Creek	Corp CDFG	387 linear ft (118 m); ~ 0.009 acre onsite (0.004 ha); reach is ~0.2 acre (0.081 ha)	Ephemeral Drainage	Rain Fed
W3	Ephemeral Drainage	Unnamed tributary to Orcutt Cr.	Corp CDFG	1,470 linear ft (448 m); ~ 0.034 acre onsite (0.014 ha); reach is ~0.34 acre (0.138 ha)	Ephemeral Drainage	Rain Fed
W4	Ephemeral Drainage	Unnamed tributary to Orcutt Cr.	Corp CDFG	2,835 linear ft (864 m); ~ 0.065 acre onsite (0.026 ha); reach is ~0.12 acre (0.048 ha)	Ephemeral Drainage	Rain Fed
W5	Ephemeral Drainage	Unnamed tributary to Orcutt Cr.	Corp CDFG	1,293 linear ft (394 m); Total reach onsite ~ 0.03 acre onsite, (0.012 ha).	Ephemeral Drainage	Rain Fed
W6	Ephemeral Drainage	Unnamed tributary to Orcutt Cr.	Corp CDFG	1,046 linear ft (318.8 m); Total reach onsite ~ 0.024 acre onsite, (0.009 ha).	Ephemeral Drainage	Rain Fed
W7	Ephemeral Creek	Orcutt Creek	Corp CDFG	1,760 linear ft (536.5 m); ~ 0.04 acre onsite (0.016 ha); reach is ~0.71 acre (0.287 ha)	Ephemeral Creek	Fed by numerous ephemeral drainages.
W8	Ephemeral Drainage	Unnamed tributary to Orcutt Cr.	Corp CDFG	3,178 linear ft (968.7 m); Total reach onsite ~ 0.073 acre onsite, (0.029 ha).	Ephemeral Drainage	Rain Fed
W9	Ephemeral Drainage	Unnamed tributary to Orcutt Cr.	Corp CDFG	654 linear ft (199.4 m); Total reach onsite ~ 0.015 acre onsite, (0.006 ha).	Ephemeral Drainage	Rain Fed
W10	Ephemeral Drainage	Unnamed tributary to Orcutt Cr.	Corp CDFG	940 linear ft (286.5 m); Total reach onsite ~ 0.022 acre onsite, (0.009 ha).	Ephemeral Drainage	Rain Fed
W11	Ephemeral Drainage	Unnamed tributary to Orcutt Cr.	Corp CDFG	900 linear ft (274.3 m); Total reach onsite ~ 0.04 acre onsite, (0.008 ha).	Ephemeral Drainage	Rain Fed
W12	Ephemeral Drainage	Unnamed tributary to Orcutt Cr.	Corp CDFG	908.2 linear ft (276.9 m); Total reach onsite ~ 0.021 acre onsite, (0.0085 ha).	Ephemeral Drainage	Rain Fed

USACE = U.S. Army Corps of Engineers regulated
 CDFG = California Department of Fish and Game regulated
 County = Ventura County General Plan protected wetland
 WPD = Ventura County Watershed Protection District regulated stream (red-line stream)

Figure 9. Map of Waters and Wetlands of the U.S. on the Project Site

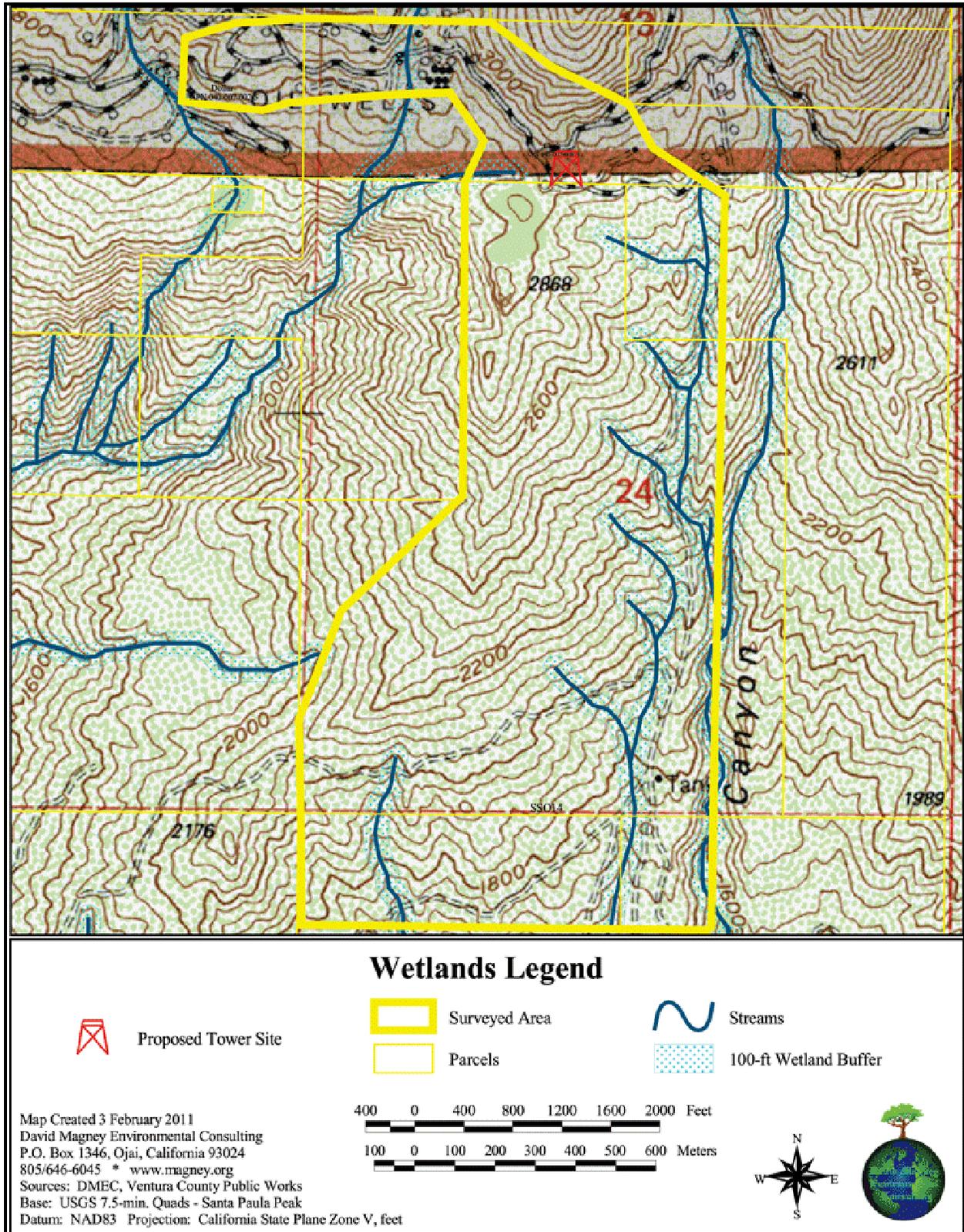




Table 7. Distance of Waters and Wetlands From the Project Site

Map Key	Wetland Significance	Wetland Distance from Project Site	Comments
W1	Not Significant	Within survey area; ~ 1,470 ft (450 m) to the northeast.	Drainage is a seasonal tributary to Mud Creek (a tributary to Santa Paula Creek). Drainage is generally in natural condition, although lacking typical riparian plants due to ephemeral drainage.
W2	Not Significant	Within survey area; ~250 ft (76 m) to the northeast.	Drainage is a seasonal tributary to Mud Creek. Drainage is generally in natural condition, although lacking typical riparian plants due to ephemeral drainage.
W3	Not Significant	Within survey area; ~4,700 ft (1,133m) to the southeast.	Drainage is a seasonal tributary to the Santa Clara River. Drainage is generally in natural condition, dominated by <i>Baccharis salicifolia</i> Alliance.
W4	Not Significant	Within survey area; ~3,500 ft (1,070m) to the southeast.	Drainage is a seasonal tributary to Orcutt Creek. Drainage is generally in natural condition, dominated by <i>Baccharis salicifolia/Salix lasiolepis</i> Alliance.
W5	Not Significant	Within survey area; ~2,700 ft (823 m) to the southeast.	Drainage is a seasonal tributary to Orcutt Creek. Drainage is generally in natural condition, dominated by <i>Baccharis salicifolia</i> Alliance.
W6	Not Significant	Within survey area; ~3,800 ft (1,160 m) to the southeast.	Drainage is a seasonal tributary to Orcutt Creek. Drainage is generally in natural condition, dominated by <i>Baccharis salicifolia</i> Alliance.
W7	Unknown	Within survey area; ~200 ft (61 m) to the east.	Orcutt Creek is a tributary to the Santa Clara River. It is generally in natural condition, dominated by <i>Baccharis salicifolia/Salix lasiolepis</i> Alliance. Lower portions of the creek have been modified (no modifications within survey area).
W8	Not Significant	Within survey area; ~1,300 ft (400 m) to the southeast.	Drainage is a seasonal tributary to Orcutt Creek. Drainage is generally in natural condition, dominated by <i>Baccharis salicifolia/Salix lasiolepis</i> Alliance.
W9	Not Significant	Within survey area; ~1,500 ft (460 m) to the southeast.	Drainage is a seasonal tributary to Orcutt Creek. Drainage is generally in natural condition, dominated by <i>Baccharis salicifolia/Salix lasiolepis</i> Alliance.
W10	Not Significant	Within survey area; ~2,000 ft (600 m) to the southeast.	Drainage is a seasonal tributary to Orcutt Creek. Drainage is generally in natural condition, dominated by <i>Baccharis salicifolia</i> Alliance.
W11	Not Significant	Within survey area; ~3,000 ft (915 m) to the southeast.	Drainage is a seasonal tributary to Orcutt Creek. Drainage is generally in natural condition, dominated by <i>Baccharis salicifolia/Salix lasiolepis</i> Alliance.
W12	Not Significant	Within survey area; ~700 ft (213 m) to the southeast.	Drainage is a seasonal tributary to Orcutt Creek. Drainage is generally in natural condition, dominated by <i>Baccharis salicifolia</i> Alliance.

Wetland Functions

Wetlands, including ephemeral drainages, provide numerous important functions. Riparian wetland habitats are part of the Palustrine and Riverine wetland classes as defined by the U.S. Fish and Wildlife Service (Cowardin et al. 1979). The Corps' Hydrogeomorphic Assessment method (HGM) has identified fourteen (14) functions for riverine-type wetlands (Smith et. al 1995), which



has been expanded upon with regional HGM Riverine models in California, mostly through funding by the Environmental Protection Agency (Lee et al. 1996, 1997, 2001, 2003).

Ephemeral streams similar to those occurring onsite have been assessed in Ventura County to determine their functional index scores (functionality) (David Magney Environmental Consulting 2009). Encroachment into the buffer zone of such wetland habitats would degrade several of the 14 measured functions, depending on the type of encroachment. Each of the 14 functions are expected to be at reference standard conditions in the upper reaches onsite, since they are all in natural condition with no (or only very minor) alterations to natural conditions, except for W1 and W2 which drain an active oil field. The functional indices are expected to be at reference standard conditions due to the generally natural condition of the drainages; however, an HGM assessment would need to be performed to determine their functional indices.

Table 8, Buffers of the Project Site Wetlands, summarizes the buffer widths, per County General Plan Policy, needed to protect wetland functions, and as illustrated on Figure 9.

Table 8. Buffers of the Project Site Waters/Wetlands

Map Key	Recommended Buffer Width	Comments
W1	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W2	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W3	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W4	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W5	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W6	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W7	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W8	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W9	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W10	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W11	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.
W12	100 feet (30.5 m)	The drainage is already located beyond a 100 feet (30.5 m) buffer.

3.2 PLANT AND ANIMAL SPECIES

This section describes the existing conditions of the flora and fauna of the Point Broadcasting LLC Radio Tower Project Site. The flora consists of the vascular and nonvascular plants and the fauna consists of the invertebrate and vertebrate animals (wildlife) observed and expected to occur onsite.

Flora

The flora of the project consists of vascular and nonvascular plants growing naturally or planted onsite. Vascular plants consist of trees, shrubs, herbs, grasses and graminoids (monocot species

not in the grass family), and ferns and fern allies. Nonvascular plants consist of fungi, lichens, and bryophytes (mosses, liverworts, and hornworts).

DMEC observed 1 moss species, 9 species of lichen, and 187 vascular plant taxa. The lichen flora of the project site is species-depauperate in isolated patches, primarily crustose lichens growing on rock outcrops. Of the 187 vascular plant taxa, 142 (76%) are native species and 45 (24%) are introduced naturalized and ornamental species. Based on this ratio of natives to nonnatives, the Point Broadcasting LLC radio tower project site is relatively disturbed in terms of native species richness, primarily because of the long history of grazing onsite.

All plant species observed during the six biological resources surveys conducted onsite are provided in a list as **Appendix B**, Plants Observed at the Point Broadcasting LLC Radio Tower Project Site.

Fauna

The fauna (wildlife) of the project consists of animals occurring naturally onsite. Animals (wildlife) consist of invertebrates (e.g. mollusks, insects, spiders), amphibians, reptiles, fishes, birds, and mammals.

Numerous species of wildlife are known to occur within the Santa Paula Peak vicinity, and DMEC expects many to frequent and inhabit existing resources based on the presence of the grassland, scrub, woodland, and riparian plant communities observed onsite. Fifty-three (53) wildlife species were observed or detected onsite, including 2 reptiles, 22 birds, 10 mammals, and 19 invertebrates. Wildlife species directly observed or reported onsite in the vicinity of the Point Broadcasting LLC radio tower project site are listed in **Appendix C**, Wildlife Observed at the Project Site. Scientific nomenclature follows Jennings (1983) and Stebbins (1985) for reptiles, National Geographic Society (2002) for birds, Burt and Grossenheider (1976) for mammals, and Arnett and Jacques (1981) and Hogue (1993) for invertebrates.

Endangered, Threatened, Rare, and Locally Important Species and Nests (INITIAL STUDY CHECKLIST A & E)

Special-status resources, including listed species or habitats, have protection through federal, state, and local laws, regulations, and policies, including the Endangered Species Act, the Clean Water Act, the California Environmental Quality Act and the Ventura County General Plan. In general, the principal reason an individual taxon (species, subspecies or variety) and its habitat is given such recognition is the documented decline, or limitation of its population size, geographical extent, and/or its distribution. In addition, several state and federal laws protect nests of almost all native birds.

See **Appendix A**, Summary of Biological Resource Regulations, for additional definitions of special-status species not included in this section and for more information on the regulations that protect birds' nests.

Endangered, threatened, rare, or locally important species were observed or have a moderate to

high potential to occur within the survey area(s). Additional research is needed to determine if other endangered, threatened, rare, or locally important species have a moderate to high potential to occur within the survey area(s).

Habitat suitable for nests of birds protected under the Migratory Bird Treaty Act does exist within the survey area(s).

Special-status Species Summary

Site surveys conducted by DMEC biologists found several special-status wildlife and plant species, as well as habitats, on the project site. The special-status species and habitats, either observed onsite or expected onsite based on habitat requirements similar to those on the Point Broadcasting LLC radio tower project site, are discussed in the following subsections. Figure 10, Map of Special-status Species and Sensitive Habitats of the Survey Area, and Figure 11, Special-status Species Observed at the Project Site, indicates the locations of special-status habitats and species observed within the project site.

Appendix D, CNDDDB Report, lists the California Natural Diversity Database (CNDDDB) species that are tracked and have been documented within a 10-mile radius of the Point Broadcasting LLC radio tower project site. **Appendix E**, Completed CNDDDB Forms, includes records for each special-status species observed in the survey area.

Definitions

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

Special-status species are plants and animals that are at least one of the following:

- Listed as *Endangered or Threatened* under Federal or California Endangered Species Acts,
- Listed as *Rare* under the California Native Plant Protection Act, or

Considered *rare* (but not formally listed) by resource agencies, professional organizations (e.g. Audubon Society, California Native Plant Society [CNPS], The Wildlife Society, NatureServe), and the scientific community.

Listed species are those taxa that are formally listed as Endangered or Threatened by the federal government (e.g. USFWS), pursuant to the Federal Endangered Species Act (ESA) or as Endangered, Threatened, or Tare (for plants only) by the State of California (i.e. California Fish and Game Commission), pursuant to the California Endangered Species Act (CESA) or the California Native Plant Protection Act, or those formally adopted by a local (e.g. county or city government) agency as of local concern or rare, or similar status. Special-status species are defined in Table 9, Definitions of Special-Status Species.

The CNPS' *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2008) categorizes rare California plants into one of five lists (1A, 1B, 2, 3, and 4) representing five levels of species status, one of which is assigned to a sensitive species to indicate its status of rarity or endangerment and distribution. Most taxa also receive a threat code extension following



the List (e.g. 1B.1, 2.3), which replaces the R-E-D Code previously used by CNPS. Table 10, California Native Plant Society Rare Plants List, provides a definition for each List code number, and Table 11, California Native Plant Society List Threat Code Extensions, defines the CNPS List Threat Code Extensions that indicates the level of endangerment within California. The CNDDDB Element Ranking system provides a numeric global and state-ranking system for all special-status species tracked by the CNDDDB. The global rank (G-rank) is a reflection of the overall condition of an element (species or natural community) throughout its global range. The state rank (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank. This Element Ranking system is defined below in Table 12, California Natural Diversity Database Element Ranking System.

Table 9. Definitions of Special-status Species

<ul style="list-style-type: none"> ○ Plants and animals legally protected under the California and Federal Endangered Species Acts or under other regulations. 	
<ul style="list-style-type: none"> ○ Plants and animals considered sufficiently rare by the scientific community to qualify for such listing; or 	
<ul style="list-style-type: none"> ○ Plants and animals considered to be sensitive because they are unique, declining regionally or locally, or are at the extent of their natural range. 	
Special-status Plant Species	Special-status Animal Species
<ul style="list-style-type: none"> ○ Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in <i>Federal Register</i> for proposed species). ○ Plants that are Category 1 or 2 candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (55 CFR 6184, February 21, 1990). ○ Plants that meet the definitions of rare or endangered species under the CEQA (<i>State CEQA Guidelines</i>, Section 15380). ○ Plants considered by CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in CNPS 2001). ○ Plants listed by CNPS as plants needing more information and plants of limited distribution (Lists 3 & 4 in CNPS 2001). ○ Plants listed by CNPS as locally rare (Lake 2004, Magney 2009, Wilken 2007). ○ Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5). ○ Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.). ○ Plants considered sensitive by other federal agencies (i.e. U.S. Forest Service, Bureau of Land Management) or state and local agencies or jurisdictions. ○ Plants considered sensitive or unique by the scientific community; occurs at natural range limits (<i>State CEQA</i> 	<ul style="list-style-type: none"> ○ Animals listed/proposed for listing as threatened/endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in <i>Federal Register</i> for proposed species). ○ Animals that are Category 1 or 2 candidates for possible future listing as threatened or endangered under Federal Endangered Species Act (54 CFR 554). ○ Animals that meet the definitions of rare or endangered species under the CEQA (<i>State CEQA Guidelines</i>, Section 15380). ○ Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5). ○ Animal species of special concern (SSC) to the CDFG. ○ Animal species that are fully protected in California (California Fish & Game Code, Sections 3511 [birds], 4700 [mammals], 5050 [reptiles, amphibians]). ○ Animals considered rare or sensitive locally by a local agency or scientific community (<i>State CEQA Guidelines</i>, Appendix G)

Guidelines, Appendix G).

Table 10. California Native Plant Society Rare Plants List (CNPS Lists)

CNPS List ¹⁰	Definition
1A	Presumed Extinct in California
1B	Rare, Threatened, or Endangered in California and elsewhere
2	Rare, Threatened, or Endangered in California, but more common elsewhere
3	Need more information (a Review List)
4	Plants of Limited Distribution (a Watch List)
VCR	Locally rare plant in Ventura County; 5 for fewer populations in county
VCU	Locally uncommon plant in Ventura County; 6-10 populations in county

Table 11. California Native Plant Society List Threat Code Extensions

CNPS Threat Code Extension	Definition
x.1	Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
x.2	Fairly endangered in California (20-80% occurrences threatened)
x.3	Not very endangered in California (<20% of occurrences threatened)

CNDDDB SEARCH RESULTS

This section addresses the special-status biological resources observed, reported, or having the potential to occur on the project site. These resources include plant and wildlife species that have been afforded special-status and/or recognition by federal and state resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (i.e. species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss.

DMEC conducted a search of the California Department of Fish and Game's (CDFG's) CNDDDB RareFind3 (CDFG 2009a) for the Santa Paula Peak California USGS Quadrangle (in which the Point Broadcasting LLC radio tower project site exists), and for the eight surrounding quadrangles, including Lion Canyon, Topatopa Mountains, Devil's Heart Peak, Fillmore, Moorpark, Santa Paula, Saticoy, and Ojai. DMEC conducted this database search to account for special-status species tracked by CDFG in the area and with potential to occur at the project site.

¹⁰ CNPS List includes statewide lists published in CNPS' *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2010) and locally rare plants of Ventura County published by the Channel Islands Chapter of CNPS (Magney 2010).

Forty-five (45) special-status elements were reported by CNDDDB, including thirteen (13) plant species, twenty-four (24) wildlife species, and eight (8) habitats. Figure 10 (Map of Special-status Species and Sensitive Habitats of the Survey Area) illustrates the local distribution of habitats onsite or adjacent to the project site, and through an inset map shows the locations at or immediately adjacent to the project site.

DMEC also conducted a search of CNPS's *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2010) to account for CNPS-listed plants not tracked on the CNDDDB database with potential to occur in the vicinity of the proposed project site. The CNDDDB Special Animals List (CDFG 2009b) was also referenced to account for other listed animal species.

Special-status Plant Species

Numerous special-status plant species are known to occur in the region, and 19 special-status plant species were observed or documented to occur within the survey area.

Table 13, Special-status Plant Species Observed and Potentially Present Onsite, summarizes the results of the CNDDDB search for 12 special-status plant species tracked for the nine quads, and provides each species' scientific/common name, status, habitat requirements, and likelihood of occurrence. Table 13 also includes an additional nineteen (19) plant species that were observed onsite and that are not tracked by CNDDDB; however, these taxa are locally rare or uncommon plant species in Ventura County by the California Native Plant Society (Magney 2010). Table 14, Special-Status Plant Habitat Requirements, gives an approximate amount of habitat acreage within the survey area on the Point Broadcasting LLC Radio Tower Project Site property and how much has potential to be impacted by the proposed project.

No federally or state listed plant species were observed onsite; however, DMEC observed nineteen (19) special-status plant species during the summer and spring field surveys. CDFG's CNDDDB Rarefind3 tracks some of these species, while others are species of local importance. Note that two special-status plant species (*Baccharis plummerae* var. *plummerae* and *Polygala cornuta* ssp. *fishiae*) were observed offsite immediately south of the project site on Lee Cole's property along the dirt road taken to access the southern portion of the Point Broadcasting LLC radio tower project site. Although these species are offsite, their existence warranted being reported. Figure 10 shows locations of the 19 special-status plant species observed within the survey area, with CNPS listing (CNPS 2006) and rarity status in Ventura County based on the Ventura County Flora project (Magney 2010 manuscript).



Table 12. California Natural Diversity Database Element Ranking System

Global Ranking (G)	
G1	Less than 6 viable element occurrences (pops for species), OR less than 1,000 individuals, OR <809.4 hectares (ha) (2,000 acres [ac]).
G2	6 to 20 element occurrences OR 809.4 to 4,047 ha (2,000 to 10,000 ac).
G3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac).
G4	Apparently secure; rank lower than G3, factors exist to cause some concern (i.e. there is some threat, or somewhat narrow habitat).
G5	Population, or stand, demonstrably secure to ineradicable due to being commonly found in the world.
GH	All sites are historic ; the element has not been seen for at least 20 years, but suitable habitat still exists.
GX	All sites are extirpated ; this element is extinct in the wild.
GXC	Extinct in the wild; exists in cultivation.
G1Q	The element is very rare, but there is a taxonomic question associated with it.
<p>Subspecies Level: Subspecies receive a T-rank attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire <u>species</u>, whereas the T-rank reflects the global situation of just the <u>subspecies</u> or <u>variety</u>. For example: <i>Chorizanthe robusta</i> var. <i>hartwegii</i> is ranked G2T1. The G-rank refers to the whole species range (<i>Chorizanthe robusta</i>), whereas the T-rank refers only to the global condition of the variety (var. <i>hartwegii</i>).</p>	
State Ranking (S)	
S1	Less than 6 element occurrences OR less than 1,000 individuals OR less than 809.4 ha (2,000 ac). S1.1 = very threatened S1.2 = threatened S1.3 = no current threats known
S2	6 to 20 element occurrences OR 3,000 individuals OR 809.4 to 4,047 ha (2,000 to 10,000 ac). S2.1 = very threatened S2.2 = threatened S2.3 = no current threats known.
S3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac). S3.1 = very threatened S3.2 = threatened S3.3 = no current threats known
S4	Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern (i.e. there is some threat, or somewhat narrow habitat). NO THREAT RANK.
S5	Demonstrably secure to ineradicable in California. NO THREAT RANK.
SH	All California sites are historic ; the element has not been seen for at least 20 years, but suitable habitat still exists.
SX	All California sites are extirpated ; this element is extinct in the wild.
Notes	
<p>1. Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take an aerial view when ranking sensitive elements rather than simply counting element occurrences.</p> <p>2. Uncertainty about the rank of an element is expressed in two major ways: by expressing the rank as a range of values (e.g. S2S3 means the rank is somewhere between S2 and S3), and by adding a ? to the rank (e.g. S2?). This represents more certainty than S2S3, but less than S2.</p>	

Figure 10. Map of Special-status Species and Sensitive Habitats of the Project Site

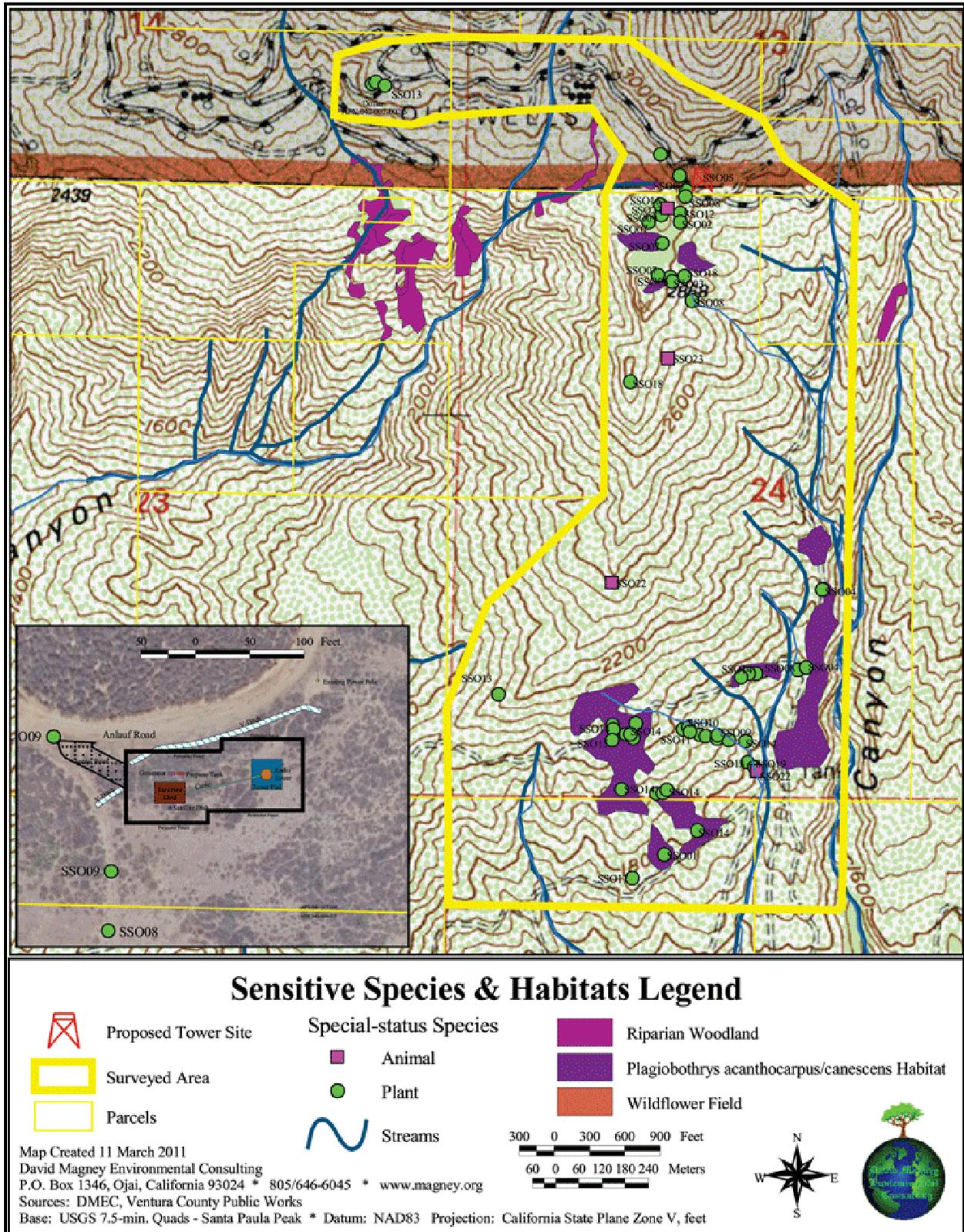




Table 13. Special-Status Plant Species Observed and Potentially Present Onsite

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status ¹¹					Habitat Requirements ¹²	Likelihood of Occurrence ¹³
				G-Rank ¹⁴	S-Rank ¹⁵	Federal Listing ¹⁶	State Listing	CNPS List/ Local Status ¹⁷		
Vascular Plants										
SSP1	CNDDB	<i>Acanthoscyphus parishii</i> var. <i>abramsii</i>	Abrams' Oxytheca	G4?T2	S2.2,	-	-	1B.2	Chaparral. Shale to sandy places. 1,150-2,060 m.	Low
SSP2	CNDDB	<i>Astragalus didymocarpus</i>	Miles'	G5T2	S2.2	-	-	1B.2	Coastal scrub. Clay soils. 20-90 m.	High

¹¹ For detailed special-status species definitions, refer to Tables 9 through 12 in the Methods Section.

¹² Required habitat according to CDFG (2009a) and Hickman (1993).

¹³ Likelihood of occurrence based on species' habitat requirements and the presence of required habitat in the project site.

Observed = Species was directly observed during DMEC's 2007, 2008, and 2010 surveys;

High = Required habitat exists at the project site and/or has been reported onsite or near by;

Moderate = Marginal required habitat exists onsite, and/or required habitat exists in surrounding areas;

Low = Required habitat does not exist at the project site nor does it exist nearby.

¹⁴ Ranking in parentheses are suggested ranking when NatureServe has not yet established a ranking.

G1 or S1 = Critically Imperiled Globally or Subnationally (state).

G2 or S2 = Imperiled Globally or Subnationally (state).

G3 or S3 = Vulnerable to extirpation or extinction Globally or Subnationally (state).

G4 or S4 = Apparently secure; factors exist to cause some concern. Not a threat rank.

G5 or S5 = Demonstrably secure to ineradicable due to being commonly found Globally or Subnationally (state). Not a threat rank.

¹⁵ SNR = Species not ranked.

¹⁶ E = Endangered; T = Threatened; R = Rare; C = Candidate.

¹⁷ VCR = a Locally Rare plant species with 5 or fewer occurrences in Ventura County, and VCU = Locally Uncommon plant species with 6 to 10 occurrences in the County (Magney 2010).



Map Key	Survey/ Source	Scientific Name	Common Name	Species Status ¹¹					Habitat Requirements ¹²	Likelihood of Occurrence ¹³
				G-Rank ¹⁴	S-Rank ¹⁵	Federal Listing ¹⁶	State Listing	CNPS List/ Local Status ¹⁷		
		<i>var. milesianus</i>	Milkvetch							
SSP3	CNDDDB	<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Ventura Marsh Milkvetch	G2T1	S1.1	E	E	1B.1	Coastal salt marshes. Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs. 1-35 m.	Low
SSP4	CNDDDB	<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's Saltscale	G5T2?	S2?	-	-	1B.2	Coastal bluff scrub, coastal scrub. Alkaline soil. 3-250 m	Moderate
SSO1	Magney 2008, NatureServe	<i>Baccharis plummerae</i> var. <i>plummerae</i>	Plummer Baccharis	G3T3	S3.2	-	-	CNPS 4, VCU	Broad-leaved upland forest, cismontane woodland, coastal scrub, chaparral. Brushy canyons and mountainsides near the sea; usually shaded north-facing slopes. 20-425 m.	Observed (S of project site on Cole's property along ranch road.)
SSO2	Magney 2008, NatureServe	<i>Calochortus catalinae</i>	Catalina Mariposa Lily	G3	S3.2	-	-	CNPS 4, VCU	Open grasslands or shrublands. <700 m.	Observed
SSO3	Magney 2008, NatureServe	<i>Calochortus clavatus</i> var. <i>clavatus</i>	Club-haired Mariposa Lily	G4T3	S3.3	-	-	CNPS 4, VCR	Chaparral, cismontane woodland, valley and foothill grassland. Generally on serpentine clay, rocky soils. 75-1,300 m.	Observed (fruits only)
SSP5	CNDDDB	<i>Calochortus palmeri</i> var. <i>palmeri</i>	Palmer's Mariposa Lily	G2T2	S2.1	-	-	1B.2	Meadows and seeps, chaparral, lower montane coniferous forest. Vernal moist places in yellow pine forest, chaparral. 600-2,245 m.	Moderate
SSP6	CNDDDB	<i>Calochortus plummerae</i>	Plummer's Mariposa Lily	G3	S3.2	-	-	1B.2	Coastal scrub, chaparral, grassland, cismontane woodland, lower montane coniferous forest. On rocky and sandy sites, with granitic or alluvial material. Common after fire. 90-1,610 m.	High



Map Key	Survey/ Source	Scientific Name	Common Name	Species Status ¹¹					Habitat Requirements ¹²	Likelihood of Occurrence ¹³
				G-Rank ¹⁴	S-Rank ¹⁵	Federal Listing ¹⁶	State Listing	CNPS List/ Local Status ¹⁷		
SSO4	Magney 2008 CNDDDB	<i>Calochortus weedii</i> var. <i>vestus</i>	Late-Flowered Mariposa Lily	G3G4T 2	S2.2	-	-	1B.2, VCR, Ventura Co. Locally Imp. Species (VCPD 2005)	Chaparral, cismontane woodland. Dry, open coastal woodland, chaparral; on serpentine. 270-1,910 m.	Observed
SSO5	Magney 2008, NatureServe	<i>Chenopodium desiccatum</i>	Aridland Goosefoot	G5	SNR	-	-	VCR	Open places; scrub, coniferous forest. <2,900 m.	Observed
SSP7	CNDDDB	<i>Delphinium umbraculorum</i>	Umbrella Larkspur	G2G3	S2S3.3	-	-	1B.3	Cismontane woodland. Mesic sites. 400-1,600 m.	Moderate
SSP8	CNDDDB	<i>Fritillaria ojaiensis</i>	Ojai Fritillary	G1	S1.2	-	-	1B.2	Broad-leaved upland forest (mesic), chaparral, lower montane coniferous forest. Rocky sites." 300-670 m.	Low
SSO6	Magney 2008, NatureServe	<i>Grindelia camporum</i> var. <i>bracteosum</i>	Bracted Gumplant	G4T4?	SNR	-	-	VCU	Sandy or saline bottomlands, fields, and roadsides. <1,400 m. Observed in grassland onsite.	Observed
SSP9	CNDDDB	<i>Horkelia cuneata</i> ssp. <i>puberula</i>	Mesa Horkelia	G4T2	S2.1	-	-	1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy, gravelly sites. 70-810 m.	High
SSO7	Magney 2008, NatureServe	<i>Juglans californica</i> var. <i>californica</i>	Southern California Black Walnut	G3	S3.2	-	-	CNPS 4, VCU	Chaparral, coastal scrub, cismontane woodland. Slopes, canyons, alluvial habitats. 50-900 m.	Observed
SSO8	Magney 2008, NatureServe	<i>Lagophylla ramosissima</i> ssp. <i>ramosissima</i>	Branched Lagophylla	G5	SNR	-	-	VCU	Variety of dry habitats. <1,600 m. Observed in grassland onsite.	Observed



Map Key	Survey/ Source	Scientific Name	Common Name	Species Status ¹¹					Habitat Requirements ¹²	Likelihood of Occurrence ¹³
				G-Rank ¹⁴	S-Rank ¹⁵	Federal Listing ¹⁶	State Listing	CNPS List/ Local Status ¹⁷		
SSP10	CNDDB	<i>Lepechinia rossii</i>	Ross' Pitcher Sage	G1	S1.2	-	-	1B.2	Chaparral. Soil derived from fine-grained, reddish sedimentary rock (Sespe Formation). 305-788 m.	Low
SSO9	Magney 2008, NatureServe	<i>Micropus californicus</i> var. <i>californicus</i>	Slender Cottonweed	G5T5	SNR	-	-	VCU	Dry or moist, bare or grassy places. <1,700 m.	Observed
SSO10	Magney 2008, NatureServe	<i>Microseris douglasii</i> ssp. <i>douglasii</i>	Douglas Microseris	G4T4	SNR	-	-	VCR	Inland clay soils; grassland, often near vernal pools or serpentine outcrops. <1,000 m.	Observed
SSO11	Magney 2008, NatureServe	<i>Microseris douglasii</i> ssp. <i>tenella</i>	Slender Douglas Microseris	G4T3T4	SNR	-	-	VCR	Inland clay soils; grassland, often near vernal pools or serpentine outcrops. <1,000 m.	Observed
SSO12	Magney 2008, NatureServe	<i>Navarretia atractyloides</i> ¹⁸	Hollyleaf Skunkweed	G5	SNR	-	-	VCR	Open, rocky or sandy areas, clayey soils. California Annual Grassland, chaparral, floodplain scrub. 90-900 m.	Observed
SSP11	CNDDB	<i>Navarretia ojaiensis</i>	Ojai Navarretia	G1	S1	-	-	1B.1	Chaparral, coastal shrub, valley and foothill grasslands. Openings in scrublands or grasslands. 275-620 m.	Moderate
SSP12	CNDDB	<i>Orobanche valida</i> ssp. <i>valida</i>	Rock Creek Broomrape	G3T1	S1.2	-	-	1B.2	Chaparral, Pinyon Juniper Woodland. On slopes of loose decomposed granite; parasitic on various chaparral shrubs. 1,705-1,820 m.	Low
SSO13	Magney 2008, NatureServe	<i>Oxalis albicans</i> ssp. <i>pilosa</i>	Hairy White Wood Sorrel	G5T4T5	SNR	-	-	VCU	Rocky sandy loam soil; coastal grassland, scrub, chaparral; <200 m.	Observed

¹⁸ Voucher specimens: *D. Magney 229-08*; *D. Magney & D. Brown 265-10 UCSB*



Map Key	Survey/ Source	Scientific Name	Common Name	Species Status ¹¹					Habitat Requirements ¹²	Likelihood of Occurrence ¹³
				G-Rank ¹⁴	S-Rank ¹⁵	Federal Listing ¹⁶	State Listing	CNPS List/ Local Status ¹⁷		
SSO14	Magney 2008, NatureServe	<i>Plagiobothrys acanthocarpus</i> ¹⁹	Greene's Allocarya	G4	SNR	-	-	VCR	Vernal pools, clay soils. <700 m.	Observed
SSO15	Magney 2008, NatureServe	<i>Plagiobothrys canescens</i>	Bracted Popcornflower	G5	SNR	-	-	VCR	Open areas; California Annual Grasslands, Coast Live Oak Woodland, Coastal Sage Scrub; <1,400 m	Observed
SSO16	Magney 2008	<i>Poa secunda</i> ssp. <i>juncifolia</i>	Rush Bluegrass	-	-	-	-	VCR	Scrub to lower Montane Forest, often in alkaline depressions. 900-3,000 m.	Observed
SSO17	Magney 2008, NatureServe	<i>Polygala cornuta</i> ssp. <i>fishiae</i>	Fish Milkwort	G5T4	S3.3	-	-	CNPS 4, VCU	Cismontane woodland, riparian woodland, chaparral. Slopes, brushy ridges, and along creeks; often w/oaks. 100-1,100 m.	Observed (S of project site on Cole's property along access road.)
SSO18	Magney 2008, NatureServe	<i>Tauschia hartwegii</i>	Hartweg Tauschia	G4	SNR	-	-	VCU	Mesic habitats, north-facing slopes; Coast Live Oak Forest, chaparral, Pine-Oak Woodland; 300-1,500 m.	Observed
SSO19	Magney 2008, NatureServe	<i>Vicia ludoviciana</i> var. <i>ludoviciana</i>	Vetch	G5TNR	SNR	-	-	VCR	Woodland margins, open shrubby areas, disturbed sites; <1,000 m.	Observed

¹⁹ Identification confirmed by Carol Witham & Rob Preston independent botanists, (Carol Witham, pers. comm., 23 April 2007 & 5 May 2007)



Table 14. Special-status Plant Habitat Requirements

Map Key	Scientific Name	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP2	<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	Yes	Yes	0.915 ac (0.371 ha)	High Occurrence Likelihood due to the coastal scrub onsite. Potential habitats impacted onsite are <i>Salvia leucophylla</i> Alliance.
SSP4	<i>Atriplex serenana</i> var. <i> davidsonii</i>	Yes	Yes	0.915 ac (0.371 ha)	Moderate Occurrence Likelihood due to the coastal scrub onsite. Potential habitats impacted onsite are <i>Salvia leucophylla</i> Alliance.
SSO1	<i>Baccharis plummerae</i> var. <i>plummerae</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. <i>B. plummerae</i> was within the southern survey area, found in <i>Deinandra fasciculata</i> Alliance. May be found in forest/woodland, riparian scrub, and coastal scrub onsite. Potential habitats impacted onsite are <i>Deinandra fasciculata</i> Alliance.
SSO2	<i>Calochortus catalinae</i>	Yes	Yes	0.915 ac (0.371 ha)	Observed by DMEC. One small population found in <i>Salvia leucophylla</i> Alliance approximately 60 feet (18.3 meters) southeast of the radio tower location. May be found in coastal scrub and grassland/herbland onsite. Potential habitats impacted onsite are <i>Salvia leucophylla</i> Alliance.
SSO3	<i>Calochortus clavatus</i> var. <i>clavatus</i>	Yes	Yes	1.150 ac (0.466 ha)	Observed by DMEC. One occurrence found in <i>Salvia leucophylla</i> Alliance approximately 500 feet (152.4 meters) directly south of the radio tower location. May be found in forest/woodland, coastal scrub, and grassland/herbland onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance
SSP5	<i>Calochortus palmeri</i> var. <i>palmeri</i>	Yes	Yes	1.150 ac (0.466 ha)	Moderate Occurrence Likelihood due to the May be found in forest/woodland, riparian scrub, coastal scrub, and grassland/herbland onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.



Map Key	Scientific Name	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP6	<i>Calochortus plummerae</i>	Yes	Yes	1.150 ac (0.466 ha)	High Occurrence Likelihood due to the forest/woodland, coastal scrub, and grassland/herbland onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSO4	<i>Calochortus weedii</i> var. <i>vestus</i>	Yes	Yes	1.150 ac (0.466 ha)	Observed by DMEC. Two occurrences found in <i>Deinandra fasciculata</i> Alliance along the eastern boundary of the survey area near Orcutt Creek. May be found in forest/woodland, coastal scrub, and grassland/herbland onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSO5	<i>Chenopodium desiccatum</i>	Yes	Yes	1.150 ac (0.466 ha)	Observed by DMEC. One occurrence found in <i>Salvia leucophylla</i> Alliance along Anlauf [Canyon] Road west of the proposed assess road for the radio tower facilities. May be found in forest/woodland, riparian scrub, coastal scrub, and grassland/herbland onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSP7	<i>Delphinium umbracolorum</i>	Yes	Yes	0	Moderate Occurrence Likelihood due to the forest/woodlands onsite. No potential habitats are impacted onsite.
SSO6	<i>Grindelia camporum</i> var. <i>bracteosum</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. One occurrence found in <i>Hazardia squarrosa</i> Alliance located approximately 500 ft (152.4 m) directly south of the radio tower location. May also be found in grassland/herbland and unvegetated areas onsite. Potential habitat impacted onsite is <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSP9	<i>Horkelia cuneata</i> ssp. <i>puberula</i>	Yes	Yes	0.915 ac (0.371 ha)	High Occurrence Likelihood due to the forest/woodland, riparian scrub, and coastal scrub onsite. Potential habitat impacted onsite is <i>Salvia leucophylla</i> Shrubland Alliance.



Map Key	Scientific Name	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSO7	<i>Juglans californica</i> var. <i>californica</i>	Yes	Yes	0.915 ac (0.371 ha)	Observed by DMEC. Three populations/occurrences found in <i>Salvia leucophylla</i> Alliance, <i>Deinandra fasciculata</i> Alliance and Eucalyptus woodlands near the project area, ~200 ft (61 m) from radio tower location. May also be found in forest/woodland, riparian scrub, and coastal scrub onsite. Potential habitat impacted onsite is <i>Salvia leucophylla</i> Shrubland Alliance.
SSO8	<i>Lagophylla ramosissima</i> ssp. <i>ramosissima</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. Three occurrences found in <i>Deinandra fasciculata</i> and <i>Baccharis pilularis</i> Alliances onsite. One occurrence is located ~10 ft (3.1 m) west from the proposed assess road for the radio tower facilities. May also be found in grassland/herbland and unvegetated areas onsite. Potential habitat impacted onsite is <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSO9	<i>Micropus californicus</i> var. <i>californicus</i>	Yes	Yes	0.915 ac (0.371 ha)	Observed by DMEC. Two occurrences found in <i>Salvia leucophylla</i> Alliance onsite. One occurrence is located ~10 ft (3.1 m) west from the proposed assess road for the radio tower facilities. May also be found in grassland/herbland and unvegetated areas onsite. Potential habitat impacted onsite is <i>Salvia leucophylla</i> Herbaceous Alliance.
SSO10	<i>Microseris douglasii</i> ssp. <i>douglasii</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. One population found scattered in the <i>Cryptantha clevelandii</i> – <i>Dichelostemma capitatum</i> Alliance within the southern survey area. May also be found in riparian scrub and grassland/herbland onsite. Potential habitat impacted onsite is <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSO11	<i>Microseris douglasii</i> ssp. <i>tenella</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. One population found scattered in the <i>Cryptantha clevelandii</i> – <i>Dichelostemma capitatum</i> Alliance within the southern survey area. May also be found in riparian scrub and grassland/herbland onsite. Potential habitat impacted onsite is <i>Deinandra fasciculata</i> Herbaceous Alliance.



Map Key	Scientific Name	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSO12	<i>Navarretia atractyloides</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. One population was observed in <i>Salvia leucophylla</i> Alliance ~53 ft (16.2 m) southeast of the facilities shed location. May also be found in coastal scrub, grassland/herbland, and unvegetated areas onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSP11	<i>Navarretia ojaiensis</i>	Yes	Yes	0.235 ac (0.095 ha)	Moderate Occurrence Likelihood due to the coastal scrub, grassland/herbland, and unvegetated areas onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSO13	<i>Oxalis albicans</i> ssp. <i>pilosa</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. Two occurrences found in <i>Salvia leucophylla</i> Alliance and <i>Deinandra fasciculata</i> within the southern survey area. May also be found in coastal scrub and grassland/herbland onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSO14	<i>Plagiobothrys acanthocarpus</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. ~ 20 scattered occurrences found in <i>Deinandra fasciculata</i> Alliance and <i>Plagiobothrys nothofulvus</i> Alliance within the southern survey area. May also be found in coastal scrub and grassland/herbland onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSO15	<i>Plagiobothrys canescens</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. Nine populations found scattered throughout the survey area. May be found in forest/woodland, riparian scrub, coastal scrub, and grassland/herbland onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.



Map Key	Scientific Name	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSO16	<i>Poa secunda</i> ssp. <i>juncifolia</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. One occurrence found in <i>Salvia leucophylla</i> Alliance ~100ft (30.5 m) from the facilities shed location. May be found in forest/woodland, riparian scrub, coastal scrub, and grassland/herbland onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.
SSO17	<i>Polygala cornuta</i> ssp. <i>fishiae</i>	Yes	Yes	0	Observed by DMEC. One occurrence was found in immediately south of the survey area. May be found in forest/woodland and riparian scrub onsite. No potential habitat impacted onsite.
SSO18	<i>Tauschia hartwegii</i>	Yes	Yes	0.915 ac (0.371 ha)	Observed by DMEC. Two occurrences found in <i>Salvia leucophylla</i> Alliance approximately 500 feet (152.4 meters) south of the radio tower location. May be found in forest/woodland, riparian scrub, and coastal scrub onsite. Potential habitat impacted onsite is <i>Salvia leucophylla</i> Shrubland Alliance.
SSO19	<i>Vicia ludoviciana</i> var. <i>ludoviciana</i>	Yes	Yes	0.235 ac (0.095 ha)	Observed by DMEC. One occurrence found in <i>Deinandra fasciculata</i> Alliance within the southern survey area. May also be found in forest/woodland, riparian scrub, coastal scrub, grassland/herbland, and unvegetated areas onsite. Potential habitat impacted onsite are <i>Salvia leucophylla</i> Shrubland Alliance and <i>Deinandra fasciculata</i> Herbaceous Alliance.

Special-status Vascular Plants

Field surveys and habitats assessments have identified nineteen (19) vascular plant taxa that are considered rare statewide or regionally. Descriptions of each vascular plant taxon are provided below.

***BACCHARIS PLUMMERAE* A. GRAY SSP. *PLUMMERAE* (PLUMMER BACCHARIS)**

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G3T3, S3.2	List 4	VCU

Baccharis plummerae ssp. *plumnerae* is a small, broad-leaved winter-deciduous shrub generally 2 meters tall. It is a member of the Sunflower Family (Asteraceae). The plant is fine-curved, hair-covered, wand-like stems and 20 to 45-mm, oblanceolate, toothed, 3-veined (prominent), sessile leaves. The inconspicuous flowers are arranged in paniculate heads with a bell-shaped involucre, and flower heads are either staminate (5-6.5 mm long) or pistillate (6-8.5 mm long). *Baccharis plummerae* ssp. *plumnerae* generally blooms from (May) August to November. (Hickman 1993.)

Baccharis plummerae ssp. *plumnerae* is an uncommon shrub that generally only occupies rocky, well-drained, north-facing slopes in California Coastal Scrub and oak woodland plant communities of elevations below 1,000 meters (Hickman 1993). It ranges from southern coastal Santa Barbara County to coastal Los Angeles County, and on Santa Cruz and Anacapa Islands, below 425 meters in elevation (Hickman 1993, Skinner and Pavlik 1994). This plant is Locally Uncommon, with only 14 known extant populations in Ventura County (Magney 2009). *Baccharis plummerae* ssp. *plumnerae* is threatened by development.

Baccharis plummerae was observed by DMEC within the southern survey area, found in *Deinandra fasciculata* Herbaceous Alliance. Each specific occurrence is shown on Figure 10.



***CALOCHORTUS CATALINAE* S. WATSON (CATALINA MARIPOSA LILY)**

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G3, S3.2	List 4	VCU

Calochortus catalinae is a bulbiferous perennial herb with 20 to 60 cm stems (bulblet-bearing) and withering basal leaves from 10 to 30 cm. It is a member of the Lily family (Liliaceae). The inflorescence consists of 1 to 4 erect, bowl-shaped flowers with purple-spotted (near base) sepals (20 to 30 mm) and white, tinged lilac, purple-spotted, nearly glabrous (hairless) flowers. The flowers include oblong, densely branched-hairy nectaries (not depressed) and the fruit is erect and non-angled (2 to 5 cm long). *C. catalinae* blooms between February and June. (Hickman 1993.)

Calochortus catalinae is an uncommon graminoid of heavy soil in open grassland, coastal scrub, and chaparral habitats and is known below 700 meters in elevation (Hickman 1993). It occurs primarily in the southern portion of the Central Coast and the western South Coast, and is known in San Luis Obispo (historically), Santa Barbara, Ventura, Los Angeles, Orange, and San Bernardino Counties (including Santa Catalina Island and Santa Rosa Island) (CNPS 2001). Type Locality: Santa Catalina Island, without exact locality, California. *Calochortus catalinae* is threatened by development. Reports of it occurring elsewhere are erroneous. Undocumented, doubtful, and unsubstantiated reports elsewhere include San Diego and Santa Cruz Counties, or in botanic gardens. This plant is Locally Uncommon, with approximately 19 known extant populations in Ventura County (Magney 2009). *Calochortus catalinae* is threatened by development and over-collecting (by bulb collectors).

Calochortus catalinae was observed by DMEC in the survey area, with one small population found in *Salvia leucophylla* Shrubland Alliance approximately 60 feet (18.3 meters) southeast of the radio tower location. Each specific occurrence is shown on Figure 10.



***CALOCHORTUS CLAVATUS* S. WATSON SSP. *CLAVATUS* (CLUB-HAIRED MARIPOSA LILY)**

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G4T3, S3.3	List 4	VCU

Calochortus clavatus ssp. *clavatus* is a bulbiferous perennial graminoid herb from coarse, zigzag, 50- to 100-cm-long stems (generally not bulblet-bearing) with withering basal leaves (10 to 20 cm). It is a member of the Lily family (Liliaceae). The more or less umbel-like inflorescence includes 1 to 6 erect cup-shaped flowers with sepals (20 to 40 mm) marked red-brown near the base, deep yellow 40- to 50-mm petals (generally banded darker above the nectary) with club-shaped hairs near the nectaries, and deep purple anthers (8 to 10 mm). The nectaries are round, more or less depressed, and surrounded by a fringed membrane (surface densely short-knobby-hairy), and the erect fruit are 6 to 9 cm, narrowly lanceolate, and angled. *C. clavatus* ssp. *c.* generally blooms in June. (Hickman 1993.)

Calochortus clavatus ssp. *clavatus* is an uncommon graminoid that generally only occupies serpentine soils of chaparral, grassland, and cismontane woodlands of elevations below 1,300 meters (Hickman 1993). It is known in southern Outer South Coast Ranges and northern Inner South Coast Ranges, in San Benito, San Luis Obispo, Santa Barbara, Los Angeles (CNPS 2001), and Ventura Counties. This plant is Locally Uncommon, with only 7 known extant populations in Ventura County (Magney 2009). *C. clavatus* ssp. *c.* is threatened by development and over-collecting (by bulb collectors).

Calochortus clavatus ssp. *clavatus* was observed by DMEC in the survey area, with one occurrence found in *Salvia leucophylla* Shrubland Alliance approximately 500 feet (152.4 meters) directly south of the radio tower location. Each specific occurrence is shown on Figure 10.



CALOCHORTUS WEEDII ALPH. WOOD VAR. VESTUS PURDY (WEED MARIPOSA LILY)

STATUS				
Federal	State	CNDDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G3G4T2, S2.2	1B.2	VCR

Calochortus weedii var. *vestus* is a perennial graminoid that is generally 30-90 cm in length with a slender, generally branching stem from a fibrous coated bulb. It is a member of the Lily family (Liliaceae). Its leaves are basal and generally 20-40 cm long, becoming withering. The upper cauline leaf blade is generally inrolled. The inflorescence is comprised of 2 to 6 erect flowers. The flower has widely bell-shaped perianths, with sepals 20-30 mm long and petals that are less than or equal to the size of the sepals. The petals are squarish in shape and range from pale cream, purplish, or red-brown; with dark hairs. The anthers are abruptly pointed. The fruits are erect, 4-5 cm long, linear, and angled. *Calochortus weedii* var. *vestus* generally blooms in June to July. (Hickman 1993.)

Calochortus weedii var. *vestus* is a rare or infrequent herb that generally only occupies dry, open coastal woodland, and chaparral areas of elevation less than 900 meters (Hickman 1993). It is known from the Outer South Coast Ranges and the Western Transverse Ranges. This plant is Locally Uncommon, with only 18 known extant populations in Ventura County (Magney 2009) mainly found near Santa Barbara and within Santa Barbara County, California. It is a CNPS 1B.2 listed species. *Calochortus weedii* var. *vestus* is threatened by development and grazing.

Calochortus weedii var. *vestus* was observed by DMEC in the survey area, with 2 occurrences found *Deinandra fasciculata* Herbaceous Alliance along the eastern boundary of the survey area near Orcutt Creek. Each specific occurrence is shown on Figure 10.





***CHENOPODIUM DESICCATUM* A. NELSON (ARIDLAND GOOSEFOOT)**

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G5	None	VCR

Chenopodium desiccatum is an annual herb with several stems from the base, is generally 12-35 cm in length, and is a member of the Goosefoot Family (Chenopodiaceae). The leaf blade is generally 5-25 mm long, oblong to elliptic, more or less fleshy. The leaf margins are entire, with the lower surface densely powdery, and more or less glabrous above. The sepals enclose the fruit, are keeled, and powdery. The fruits are generally 1 mm in diameter, with the wall free from the horizontal seeds. *Chenopodium desiccatum* generally blooms from July to September. (Hickman 1993.)

Chenopodium desiccatum is a locally rare herb that generally only occupies open places, scrub areas, and coniferous forest of elevation less than 2,900 meters (Hickman 1993). It is known in Wyoming and Colorado. Within California, it is known in the Sierra Nevada, San Joaquin Valley, Transverse Ranges, Great Basin Floristic Province, and northern Mojave Desert from 82 collections²⁰, which qualifies it for CNPS List 4 status, or possibly List 1B status. This plant is Locally Rare, with only 1 known extant population in Ventura County²¹. The nearest known occurrence other than at the project site is in the Liebre Mountains and the Newhall area in Los Angeles County, the Santa Ynez Mountains, and in Cuyama Valley in Santa Barbara County. *Chenopodium desiccatum* is threatened by development and agriculture in Ventura County.

Chenopodium desiccatum was observed by DMEC in the survey area, with one occurrence found in *Salvia leucophylla* Shrubland Alliance directly along Anlauf [Canyon] Road west of the proposed tower. The specific occurrence is shown on Figure 10.

***GRINDELIA CAMPORUM* VAR. *BRACTEOSA* (J.T. HOWELL) M.A. LANE (BRACTED GUMPLANT)**

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G4T4?	None	VCU

Grindelia camporum var. *bracteosa* is a few-branched shrub that is that is generally 6-12 dm height and is a member of the Sunflower Family (Asteraceae). The stems are generally erect and glabrous, and appear to be white-varnished. Its cauline leaves are generally 2-3 cm long, lanceolate to ovate. The leaves are entire to serrate, stiff, and generally are light yellow to gray-green. There is one inflorescence head per stem, which is subtended by phyllary-like bracts. The involucre is 17-25 mm in diameter and hemispheric. The phyllaries are in 6-7 series, acuminate, strongly reflexed to coiled 360°, and glabrous. The ray flowers range from 0 or 25-27, with ligules 8-11 mm. The disk flowers are many, with the corolla throat more or less narrow. The fruits are 2-5 mm long, generally 2-3-

²⁰ Consortium of California Herbaria, database search for *Chenopodium desiccatum* on 24 December 2010. <http://ucjeps.berkeley.edu/>. Database query found 82 records from 76 locations/populations in 19 counties.

²¹ Flora of Ventura County manuscript, David L. Magney. Draft of 16 December 2010.



angled, white to golden-brown, tops generally flanged, and the pappus awns ranging from 2-6. *Grindelia camporum* var. *bracteosa* generally blooms in from (March) May to July. (Hickman 1993.)

Grindelia camporum var. *bracteosa* is a locally (Ventura County) uncommon to scarce shrub that generally only occupies clay or sandy roadsides, stream banks, and dry washes of elevation 150-1,400 meters (Hickman 1993). Outside of California it is known in Baja California. Within California, it is known in southwestern Great Central Valley, southern Outer South Coast Ranges, South Coast, Western Transverse Ranges, and Peninsular Ranges. This plant is Locally Uncommon, with only 7 known extant populations in Ventura County (Magney 2008). *Grindelia camporum* var. *bracteosa* is threatened by development and agriculture in Ventura County.

Grindelia camporum var. *bracteosa* was observed by DMEC in the survey area, with one occurrence found in *Hazardia squarrosa* Herbaceous Alliance located approximately 500 feet (152.4 m) directly south of the radio tower location. Each specific occurrence is shown on Figure 10.

JUGLANS CALIFORNICA S. WATSON VAR. CALIFORNICA (SOUTHERN CALIFORNIA BLACK WALNUT)

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G3, S3.2	List 4.2	VCU

Juglans californica var. *californica* is a small, broad-leaved, monoecious, winter-deciduous tree (up to 15 m tall) with one to five trunks and it is a member of the Walnut Family (Juglandaceae). It has pinnately divided leaves with 11-19 lanceolate toothed leaflets (2-8 cm long). The wind pollinated, greenish flowers, blooming between March and May, have 4-lobed sepals arranged in pendulous clusters before emerging leaves. *J. californica* produces spheric, leathery-husked, strong smelling fruit (walnuts) 2-3 cm in diameter. It has a facultative wetland indicator status (Reed 1988), equally likely to occur in wetlands as in non-wetlands. (Hickman 1993.)

Juglans californica is uncommon, but can be found locally on slopes and canyons at elevations between 50 and 900 m and is often associated with riparian habitats (Hickman 1993). It ranges from the Santa Lucia Mountains in Monterey County (where this species was once cultivated), Santa Barbara County, along the coastal portions of the Transverse Ranges, and south to the northern Peninsular Ranges in northern San Diego County. Some reported occurrences of *Juglans californica* var. *californica* are along Santa Paula Creek, Sisar Creek, and along the lower Piru Creek. *J. californica* is also known from the Santa Monica Mountains at Little Sycamore Canyon, and elsewhere in southern Ventura County (Magney 2008). This plant is on the CNPS List 4.2 and is Locally Uncommon (Magney 2009), with around 80 known extant populations in Ventura County (Magney 2008). This species requires intermittently flooded or saturated wetland soils of freshwater riparian corridors, floodplains, incised canyons, seeps, and stream banks or deep, shale-derived soils of rarely flooded upland slopes and terraces (Sawyer and Keeler-Wolf 1995).

Juglans californica var. *californica* was observed by DMEC in the survey area, with three populations/occurrences found in *Salvia leucophylla* Shrubland Alliance, *Deinandra fasciculata* Alliance Herbaceous Alliance and Eucalyptus woodlands near the project area, approximately 200 feet (61 m) from the radio tower location. Each specific occurrence is shown on Figure 10.



LAGOPHYLLA RAMOSISSIMA NUTTALL SSP. RAMOSISSIMA (BRANCHED LAGOPHYLLA)

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G5	None	VCU

Lagophylla ramosissima ssp. *ramosissima* is a stiffly erect annual herb that is generally 1-15 dm in length and is a member of the Sunflower Family (Asteraceae). The stems are generally, slender branches often many, generally sparsely leafy, herbage grayish or dull green with densely white-hirtellous to white-sericeous and yellow glands. Its lower leaves are 3-12 cm long, toothed, and early deciduous. The middle leaves are entire, deciduous, with axillary leaf clusters. And the upper leaves are bract-like, densely canescent to silvery-hairy, long-ciliate, and the uppermost glandular. The inflorescence is head to panicle like, is more or less glandular, the heads are generally closing early morning. The involucre is obconic shaped and the phyllaries 4.4-7.5 mm long, lanceolate, short hairy, densely long-ciliate, and the tip is less than the body. The ray flower ligules are 3-5.5 mm and pale yellow. The disk flower corollas are 3.5-4 mm. The fruits are 2.5-4 mm, narrowly obovate, dull, more or less black, and the midvein is generally obscure. *Lagophylla ramosissima* ssp. *ramosissima* generally blooms in from May to October. (Hickman 1993.)

Lagophylla ramosissima ssp. *ramosissima* is a locally (Ventura County) uncommon or scarce herb that generally occupies many dry habitats of elevation less than 1,600 meters (Hickman 1993). Within California, it is known in California Floristic Province and the Modoc Plateau. This plant is Locally Uncommon, with only 9 known extant populations in Ventura County (Magney 2010). *Lagophylla ramosissima* ssp. *ramosissima* is threatened by development and agriculture in Ventura County.

Lagophylla ramosissima ssp. *ramosissima* was observed by DMEC in the survey area, with three occurrences found in *Deinandra fasciculata* Herbaceous and *Baccharis pilularis* Shrubland Alliances onsite. One occurrence is located approximately 10 feet (3.1 m) west from the proposed assess road for the radio tower facility. Each specific occurrence is shown on Figure 10.



MICROPUS CALIFORNICUS FISCHER & C. MEYER VAR. CALIFORNICUS (SLENDER COTTONWEED)

STATUS				
Federal	State	CNDDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G5T5, SNR	None	VCU

Micropus californicus var. *californicus* is an annual, slender erect, gray-woolly herb and is a member of the Sunflower Family (Asteraceae). The inflorescence has up to 3-4 flower heads that are generally 4.5-6 mm wide. The pistillate chaff scales are 3-4 mm, wool dense, and loose. The pistillate flowers are approximately 4-6 in one series. The disk flowers are 1.3-2 mm. The fruits are 1.8-2.6 mm, with the pappus of disk fruit (0) 1.3-1.5 mm long. *Micropus californicus* var. *californicus* generally blooms from April to June. (Hickman 1993.)

Micropus californicus var. *californicus* is a locally uncommon or scarce herb that generally occupies dry or moist, bare or grassy places of elevation less than 1,700 meters (Hickman 1993). Within California, it is known in the California Floristic Province. This plant is Locally Uncommon, with approximately 9 known extant populations in Ventura County (Magney 2008). *Micropus californicus* var. *californicus* is threatened by development and agriculture in Ventura County.

Micropus californicus var. *californicus* was observed by DMEC in the survey area, with two occurrences found in *Salvia leucophylla* Shrubland Alliance onsite. One occurrence is located approximately 10 feet (3.1 m) west from the proposed assess road for the radio tower facility. Each specific occurrence is shown on Figure 10.

MICROSERIS DOUGLASII (DC.) SCHULTZ-BIP. SSP. DOUGLASII (DOUGLAS MICROSERIS)

STATUS				
Federal	State	CNDDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G4T4, SNR	None	VCR

Microseris douglasii ssp. *douglasii* is an annual, scruffy-pubescent, acaulescent herb generally 5-60 cm high and is a member of the Sunflower Family (Asteraceae). The leaf is generally 3-25 cm long. The inflorescences is comprised of involucre 7-16 mm long, with outer phyllaries that are deltate, and less than the inner phyllaries. There are generally around 5-100 or more flowers per inflorescence. The ligules are yellow or white. The fruits are 4-10 mm long, widest at tip. The pappus scales 1-6 mm (generally greater than fruit), becoming curved throughout and strongly inrolled, and the bristles are 3-8 mm long. *Microseris douglasii* ssp. *douglasii* generally blooms from March through April. (Hickman 1993.)

Microseris douglasii ssp. *douglasii* is a locally (Ventura County) rare herb that generally in inland clay soils, grassland, often near vernal pools or serpentine outcrops of elevation greater than 1,000 meters (Hickman 1993). Within California, it is known North Coast Ranges, Sierra Nevada Foothills, Tehachapi Mountain Area, Great Central Valley, Central Western California, and the South Coast. This plant is Locally Rare, with only 2 known extant populations in Ventura County (Magney 2008). *Microseris douglasii* ssp. *douglasii* is threatened by development and agriculture in Ventura County.

Microseris douglasii ssp. *douglasii* was observed by DMEC in the survey area, with one population found scattered in the *Cryptantha clevelandii*–*Dichelostemma capitatum* Herbaceous Alliance within the southern survey area. Each specific occurrence is shown on Figure 10.

**MICROSERIS DOUGLASII SSP. TENELLA (A. GRAY) CHAMBERS
 (DOUGLAS MICROSERIS)**

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G4T3T4, SNR	None	VCR

Microseris douglasii ssp. *tenella* is an annual, scapose herb generally 5-60 cm high and is a member of the Sunflower Family (Asteraceae). The leaf is generally 3-25 cm long. The inflorescences is comprised of involucre 7-16 mm long, with outer phyllaries that are deltate, and less than the inner phyllaries. There are generally around 5-100 (300) or more flowers per inflorescence head. The ligules are yellow or white. The fruits are 3-6.5 mm long, generally widest near middle. The pappus scales are less than 1 mm, and bristles 3-8.5 mm long. *Microseris douglasii* ssp. *tenella* generally blooms from March through April (June). (Hickman 1993.)

Microseris douglasii ssp. *tenella* is a locally (Ventura County) rare herb that generally in inland Inland clay soils, grassland, often near vernal pools or serpentine outcrops of elevation greater than 1000 meters (Hickman 1993). Within California, it is known west-central Great Central Valley, Central Western California, South Coast, and the northern Channel Islands. This plant is Locally Rare, with only 2 known extant populations in Ventura County (Magney 2008). *Microseris douglasii* ssp. *tenella* is threatened by development and agriculture in Ventura County.

Microseris douglasii ssp. *tenella* was observed by DMEC on the in the survey area, with one populations found scattered in the *Cryptantha clevelandii*–*Dichelostemma capitatum* Herbaceous Alliance within the southern survey area. Each specific occurrence is shown on Figure 10.



Photo by Carol W. Witham ©2004

**NAVARRETIA ATRACTYLOIDES (BENTHAM) HOOKER & ARNOTT
 (HOLLYLEAF SKUNKWEED)**

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G5, SNR	None	VCU

Navarretia atractyloides is an annual herb that is generally 5-29 cm high and it is a member of the Phlox Family (Polemoniceae). Its leaves are strap-shaped to lanceolate, pinnate, the cauline leaf axis is 2-6 mm wide, basal lobes are spreading, upper lobes are unequal, and are pointed tipward. The inflorescence bracts are gland-dotted or glandular-hairy, recurved, and the base is widely clasping. There are approximately 3 lobes at tip of the inflorescence that are unequal, pointed tipward, calyx lobes entire or toothed. The corolla (8-9 mm) is purple (white) with a red-veined tube, and is included in the head. The flowers lobes are less than 2 mm, stamens and style slightly exerted, and 3 stigmas. Its fruits are generally less than the calyx, dehiscent from tip, and there are 2-6 seeds per chamber. *Navarretia atractyloides* generally blooms from May to July. (Hickman 1993.)

Navarretia atractyloides is an uncommon to scarce herb that generally occupies open, rocky or sandy areas, or clayey soils. It is typically found in California Annual Grassland and openings in chaparral and oak woodland areas of elevations 90-900 meters (Hickman 1993). Within California, it ranges from North Coast Ranges, San Francisco Bay Area, South Coast Ranges, Channel Islands, Transverse Ranges, and the Peninsular Ranges. Outside California, its distributed from Oregon, to Baja California. This plant is Locally Rare, with only 5 known populations in Ventura County (Magney 2008). *Navarretia atractyloides* is threatened by development.

Navarretia atractyloides was observed by DMEC in the survey area, with one population found in *Salvia leucophylla* Shrubland Alliance approximately 53 feet (16.2 m) southeast of the proposed facility location. Each specific occurrence is shown on Figure 10.



***OXALIS ALBICANS* SSP. *PILOSA* (NUTTALL) G. EITEN (HAIRY WHITE WOOD SORREL)**

STATUS				
Federal	State	CNDDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	None	None	VCU

Oxalis albicans ssp. *pilosa* is a perennial herb that is primarily less than 40 cm and has a more or less woody taproot with no bulb and it is a member of the Wood-Sorrel Family (Oxalidaceae). The stem has slightly curved hairs. The leaves are cauline, the petiole is less than 7 cm, and the leaflets are less than 1.5 cm. The inflorescence is 1 to 3 flowered, has pedicels that are less than 2 cm, and the sepals are lanceolate (less than 6 mm). The yellow petals are approximately 8-12 mm. The fruit cylindrical can range from 6-18 mm. *Oxalis albicans* ssp. *pilosa* generally blooms from March to May. (Hickman 1993.)

Oxalis albicans ssp. *pilosa* is an uncommon to scarce herb that generally occupies rocky sandy loam soil, Coastal Grassland and Sage Scrub, and Chaparral of elevations below 200 meters (Hickman 1993). It is known from North Coast, Outer North Coast Ranges, Central Coast, San Francisco Bay Area, Outer South Coast Ranges, South Coast, and the Western Transverse Ranges. This plant is Locally Uncommon with only 9 known extant populations in Ventura County (Magney 2008). *Oxalis albicans* ssp. *pilosa* is threatened by development.

Oxalis albicans ssp. *pilosa* was observed by DMEC in the survey area, with two occurrences found in *Salvia leucophylla* Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance within the southern survey area. Each specific occurrence is shown on Figure 10.





***POA SECUNDA* SSP. *JUNCIFOLIA* (SCRIBNER) R. SORENG (RUSH BLUEGRASS)**

STATUS				
Federal	State	CNDDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	None	None	VCR

Poa secunda ssp. *juncifolia* is a perennial herb that is generally 3-12 dm high and is a member of the Grass Family (Poaceae). Its leaf ligules are generally 0.5-6 mm long. The leaves are truncate to acuminate, scabrous (those on lateral shoots 0.5-2 mm). The leaf blade is generally less than 1.5 mm wide, more or less firm, tightly folded and inrolled, retaining shape, and often glaucous. The inflorescence is generally 6-25 cm long. The spikelet is comprised of lemmas 3.5-6 mm, glabrous (rarely sparsely short-hairy on keel and marginal veins near base), with scabrous palea keels. *Poa secunda* ssp. *juncifolia* generally blooms from June to July. (Hickman 1993.)

Poa secunda ssp. *juncifolia* is a locally (Ventura County) rare herb that generally only occupies sagebrush scrub to lower montane forest, often in alkaline depressions of elevation 900-3,000 meters (Hickman 1993). Within California, it is known in High Cascade Range, High Sierra Nevada (especially east-facing slopes), and the Great Basin Floristic Province. This plant is Locally Rare, with only 4 known extant populations in Ventura County (Magney 2010). *Poa secunda* ssp. *juncifolia* is threatened by development and agriculture in Ventura County.

Poa secunda ssp. *juncifolia* was observed by DMEC in the survey area, with one occurrence found *Salvia leucophylla* Shrubland Alliance approximately 100 feet (30.5 m) from the proposed facility location. Each specific occurrence is shown on Figure 10.

***PLAGIOBOTHRYIS ACANTHOCARPUS* (PIPER) I.M. JOHNSTON (ADOBE POPCORNFLOWER)**

STATUS				
Federal	State	CNDDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G4, SNR	None	VCR

Plagiobothrys acanthocarpus is a spreading, strigose annual herb that is generally 1-4 dm in length and is a member of the Borage Family (Boragaceae). Its leaves are cauline; the lower leaves are generally 2-6 cm long. The inflorescence is bracted throughout and has pedicels that are approximately 1-2 mm. The flower calyx is 1.5-2.5 mm long and the corolla is 1-2.5 mm wide. The fruit nutlets are 1.5-2.5 mm and ovoid, with cross-ribs generally narrow. Prickles generally all over back of the nutlet, slender, long, rarely more or less zero. The bristles are more or less sparse, generally on prickles only. The scar is lateral near base, ovate to triangular, and concave. *Plagiobothrys acanthocarpus* generally blooms in from March to May. (Hickman 1993.)

Plagiobothrys acanthocarpus is a locally (Ventura County) rare to scarce herb that generally only occupies moist clay soil, vernal pools, and seasonal swales of elevation less than 2,100 meters (Hickman 1993). Within California, it is known in southern Sacramento Valley, San Joaquin Valley, San Francisco Bay Area, and South Coast (mesas near San Diego). This plant is Locally Rare, with

this occurrence being the only known extant populations in Ventura County (Magney 2010). *Plagiobothrys acanthocarpus* is threatened by development and agriculture in Ventura County.

Plagiobothrys acanthocarpus was observed by DMEC in the survey area, with around 20 scattered occurrences found in *Deinandra fasciculata* Herbaceous, *Plagiobothrys nothofulvus* Herbaceous, and the *Cryptantha clevelandii-Dichelostemma capitatum* Herbaceous Alliances within the southern survey area. Each specific occurrence is shown on Figure 10.

***PLAGIOBOTHRYIS CANESCENS* BENTHAM (VALLEY OR BRACTED POPCORNFLOWER)**

STATUS				
Federal	State	CNDDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G5, SNR	None	VCR

Plagiobothrys canescens is annual herb that is prostrate to erect, generally 1-6 dm in length and is a member of the Borage Family (Boragaceae). It is purple-dying from its sap. Its hairs are long, rough or bristled. Its basal leaves are in a rosette (1.5-5 cm) and the cauline leaves are alternate. The inflorescence is bracted throughout. The flower calyx is 4-6 mm long, generally not circumscissile in fruit, and the corolla is 2-3 mm wide. The fruit nutlets are more or less 2 mm, round-ovoid, generally strongly arched in profile, and generally weakly attached (midrib, lateral ribs, cross-ribs narrow), the interspaces are wide, the scar is lateral near the middle, and round. *Plagiobothrys canescens* generally blooms in from March to May. (Hickman 1993.)

Plagiobothrys canescens is a locally (Ventura County) rare to scarce herb that generally only occupies open areas like California Annual Grasslands, Coast Live Oak Woodland, and Coastal Sage Scrub of elevation less than 1,400 meters (Hickman 1993). Within California, it is known in the Cascade Range Foothills, Sierra Nevada Foothills, Great Central Valley, Southwestern California, and western Mojave Desert. This plant is Locally Rare, with this occurrence being the only 4 known extant populations in Ventura County (Magney 2010). *Plagiobothrys canescens* is threatened by development and agriculture in Ventura County.

Plagiobothrys canescens was observed by DMEC in the survey area, with 9 populations found scattered throughout the survey area. Each specific occurrence is shown on Figure 10.

***POLYGALA CORNUTA* VAR. *FISHIAE* (C. PARRY) JEPSON (FISH'S MILKWORT)**

STATUS				
Federal	State	CNDDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G5T4, S3.3	List 4	VCU

Polygala cornuta var. *fishiae* is a small, broad-leaved, winter-deciduous, 25-dm tall shrub, from rhizomes, that often forms dense thickets up to 2 m wide. *Polygala cornuta* var. *fishiae* is a member of the Milkwort Family (Polygalaceae). It has decumbent to erect stems (6-25-dm long) covered with

leaves that are more than twice as long as they are wide. *P. cornuta* var. *f.* produces peaflower-shaped flowers (7-11.2 mm long), blooming May through August, which are pale with dark pink buds.

Polygala cornuta var. *fishiae* can be found on exposed slopes growing in chaparral, oak woodland, and riparian woodland habitats at elevations between 100 and 1,100 m (Hickman 1993). It ranges from Santa Barbara County, in the Outer South Coast Ranges, south through the Transverse Ranges, to the northern Peninsular Ranges in northern San Diego County. This plant is a CNPS List 4.3 species and is Locally Uncommon, with 27 known extant populations in Ventura County (Magney 2010).

Polygala cornuta var. *fishiae* was observed by DMEC immediately south of the survey area, with the only occurrence found in *Bromus* Semi-Natural Stands Alliance. Each specific occurrence is shown on Figure 10.



TAUSCHIA HARTWEGII (A.GRAY) J.F. MACBR. (HARTWEG TAUSCHIA)

STATUS				
Federal	State	CNDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G4, SNR	None	VCU

Tauschia hartwegii is a perennial herb that is generally 3-10 dm in length, minutely scabrous, and is a member of the Carrot Family (Apiaceae). The petiole is 5–25 cm, the leaf blade is generally 12-24 cm long, oblong to widely ovate. It has 1-2-ternate-pinnate, leaflets that are generally 25-60 mm long, oblong to ovate, coarsely serrate, and often lobed. The inflorescences peduncle is 2.5-8 dm, with several bractlets (5-12 mm); which are more or less lanceolate, entire, reflexed, some slightly greater than flowers, and fruits. The ray flowers are 10-30, and approximately 2-12 cm long, and unequal. The pedicels are 2-7 mm long. The flower calyx lobes are minute, the corolla is yellow, and the styles

are slender. The fruits are 4-7 mm, nearly round, with ribs thread-like, oil tubes per rib-interval 3–5, and the fruit axis are divided to base. *Tauschia hartwegii* generally blooms from March to May. (Hickman 1993.)

Tauschia hartwegii is a locally (Ventura County) uncommon herb that generally only occupies mesic habitats, N-facing slopes, Chaparral, Pine and Oak Woodlands of elevation 300-1,500 meters (Hickman 1993). Within California, it is known in northern Sierra Nevada foothills, San Francisco Bay area, and the Outer South Coast Ranges. This plant is Locally Uncommon, with only 8 known extant populations in Ventura County (Magney 2010). *Tauschia hartwegii* is threatened by development and agriculture in Ventura County.

Tauschia hartwegii was observed by DMEC in the survey area, with two occurrences found in *Salvia leucophylla* Shrubland Alliance approximately 500 feet (152.4 meters) south of the radio tower location. Each specific occurrence is shown on Figure 10.



VICIA LUDOVICIANA NUTTALL VAR. LUDOVICIANA (SLENDER VETCH)

STATUS				
Federal	State	CNDDDB	CNPS (2001, 2010)	CNPS CI (Magney 2010)
None	None	G5TNR, SNR	None	VCR

Vicia ludoviciana var. *ludoviciana* is an annual, glabrous or hairy herb and is a member of the Pea Family (Fabaceae). The stem is sprawling or low climbing. The leaves have small stipules, with 4 to 10 leaflets each (1-2.5 cm), narrowly oblong to elliptic, tip acute, 1-toothed, or sometimes truncate. The inflorescences are less than subtending the leaf, with 1-3 flowers each, near the tip, and generally crowded. The flower corolla is generally 4.5-7 mm long, and pale blue. The style hairs are at the tip and below on all sides. The fruits are 1.5-2.5 cm long, 4-7 mm wide, oblong or saber-shaped, glabrous, and are stalk-like at the base more or less 1-1.5 mm. *Vicia ludoviciana* var. *ludoviciana* generally blooms in spring. (Hickman 1993.)

Vicia ludoviciana var. *ludoviciana* is a locally (Ventura County) rare herb that generally in woodland margins, open shrubby areas, and disturbed sites of elevation greater than 1,000 meters (Hickman 1993). Within California, it is known San Francisco Bay Area, South Coast, Channel Islands, and

Peninsular Ranges. This plant is Locally Rare, with only 3 known extant populations in Ventura County (Magney 2010). *Vicia ludoviciana* var. *ludoviciana* is threatened by development and agriculture in Ventura County.

Vicia ludoviciana var. *ludoviciana* was observed by DMEC in the survey area, with one occurrence found in *Deinandra fasciculata* Herbaceous Alliance within the southern survey area. Each specific occurrence is shown on Figure 10.

Special-status Wildlife

Table 15, Special-Status Wildlife Species Observed and Potentially Present Onsite, summarizes the CNDDDB search for twenty-four (24) special-status wildlife species reported for the nine quads, and provides each species' scientific and common name, status, habitat requirements, and likelihood of occurrence. An additional six (6) native terrestrial gastropods (snails) are included in Table 15. These gastropods are locally endemic (Magney 2005, Roth and Sadeghian 2003) and the Ventura County Planning Division has placed these snails on its list of locally sensitive species.

No federally or state listed special-status wildlife were observed on the project sites; however, three (3) special-status wildlife species (all CDFG Species of Special Concern) were observed or detected near the project sites during DMEC's field surveys. Figure 10 shows locations of the observed special-status wildlife species, which include the following:

- *Neotoma lepida intermedia* (San Diego Desert Woodrat [detected by nest]);
- *Taxidea taxus* (American Badger [detected by burrow]); and
- *Accipiter cooperii* (Coopers Hawk [directly observed flying overhead]).

Of the 24 special-status wildlife species tracked by CNDDDB, within the nine-quadrangle-search and the vicinity of the Point Broadcasting LLC radio tower project site, three (3) special-status wildlife species are *likely* to occur onsite. These species have a high likelihood of occurrence onsite because required habitat exists at the project site and/or the species has been reported nearby, and they include:

- *Elanus leucurus* (White-tailed Kite);
- *Gymnogyps californianus* (California Condor); and
- *Phrynosoma blainvillii* (Coast Horned Lizard).

Wildlife Species Profiles

Birds

Field surveys and habitats assessments have identified 3 bird species that are considered rare (either statewide or regionally), and have either directly observed near the tower sites or assessed as likely occurring onsite. Descriptions of each bird species are provided below.

***Accipiter cooperii* (Cooper's Hawk)**

The Cooper's Hawk (*Accipiter cooperii*) is a diurnal raptor that is found throughout California in densely wooded habitats near water including oak woodlands and riparian forests. The Cooper's

Hawk hunts small birds and mammals. Typical breeding habitat in Southern California is riparian and oak woodlands, but may include ornamental woodlands provided by parks. An average home range size reported for this species is 512 acres (Zeiner et al. 1990).



***Elanus leucurus* (White-tailed Kite)**

The White-tailed Kite (*Elanus leucurus*) is a diurnal raptor distributed in coastal and valley lowlands in California. This species forages for rodents in open grasslands, meadows, or marshes, and needs dense-topped trees for nesting and perching. This species is generally not territorial (Zeiner et al. 1990).



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

The California Condor (*Gymnogyps californianus*) is a diurnal scavenger and has the largest wingspan of any North American bird. The California Condor can travel great distances in a short time span, but is primarily found in the mountain ranges surrounding the eastern and southern ends of the Central Valley. The California Condor eats carrion exclusively, primarily of large mammal species like deer and cows. The species roosts in large trees, snags, and cliffs. (Zeiner et al. 1990.)



Mammals

Field surveys and habitats assessments have identified 2 mammal species that are considered rare (either statewide or regionally), and have been either directly observed or detected within the Survey Area. Descriptions of each mammal species are provided below.

Neotoma lepida ssp. intermedia (San Diego Desert Woodrat)

The San Diego Desert Woodrat (*Neotoma lepida ssp. intermedia*) is an herbivorous rodent distributed in coastal scrub habitats of southern California from San Diego County to San Luis Obispo County. Woodrat nests are preferentially located in areas with large rocks and boulders to deter predation, and woodrats are primarily nocturnal. This species has a reported average home range size of 0.13 acre that includes a diurnal nest and several feeding sites (Zeiner et al. 1990). Below is a photograph of a nest from the project survey area.



Taxidea taxus (American Badger)

The American Badger (*Taxidea taxus*) is a burrowing carnivore in the Mustelid (weasel) family. This species occurs in open, arid habitats including grasslands, savannas, open desert scrub, and meadows. Badgers primarily prey on burrowing rodents. Badger home ranges vary with geographic area, season, and food distribution, but general home range size is between 395-2,100 acres (Zeiner et al. 1990). Below is a photograph of a typical burrow from the project survey area.



Reptiles

Field surveys and habitats assessments have identified one reptile species that is considered rare (either statewide or regionally), and has been assessed as likely occurring onsite.

***Phrynosoma blainvillii* (Coast Horned Lizard)**

The Coast Horned Lizard (*Phrynosoma blainvillii*) is a diurnal lizard with a distribution along the central and southern California coast and through the Sierra Nevada foothills. This species forages for ants and small beetles in open areas between shrubs. Coast Horned Lizards live in a variety of habitats including riparian areas, foothill hardwood habitats, and grasslands (Zeiner et al. 1990).



Nests

California Fish and Game Code Section 3503 protect all bird nests. All raptors, raptor nests (active or inactive), and other active bird nests are protected under Fish and Game Code Section 3503.5.

No active nest was observed during site field surveys; however, chaparral, scrub, and woodland communities provide potential habitat for nesting birds during the spring breeding and nesting season and many nests are expected to occur onsite.

Table 15. Special-status Wildlife Species Observed and Potentially Present Onsite

Map Key	Survey/ Source	Scientific Name	Common Name	Species-status ²²					Habitat Requirements	Likelihood of Occurrence ²³
				Global Rank	State Rank	Federal Listing ²⁴	State Listing	CDFG ²⁵		
SSO21	CNDDDB	<i>Accipiter cooperii</i>	Coopers Hawk	G5	S3	-	-	SC	(Nesting) woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; oaks.	Observed
SSP13	CNDDDB	<i>Actinemys marmorata</i>	Western Pond Turtle	G3G4	S3	-	-	SC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, & irrigation ditches with aquatic vegetation below 1800 meters. Needs basking sites and suitable (sandy banks or grassy open fields) upland Habitat up to 0.5 km from water for egg-laying.	Low
SSP14	CNDDDB	<i>Anaxyrus californicus</i>	Arroyo Toad	G2G3	S2S3	E	-	SC	Semi-arid regions near washes or intermittent streams, valley-foothill & desert riparian, desert wash, etc. Rivers w/sandy banks, willows, cottonwoods, & sycamores; gravelly streams in drier parts of range.	Low
SSP15	CNDDDB	<i>Antrozous pallidus</i>	Pallid Bat	G5	S3	-	-	SC	Deserts, grasslands, shrublands, woodlands, & forests. Most common in open, dry habitats w/ rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Moderate

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²² For special-status species definitions, refer to Tables 9 through 12 in the Methods Section.

²³ Likelihood of occurrence based on species' habitat requirements and presence of required habitat in project site.

Observed = Species was directly observed during

Detected = Species was detected by sign during

High = Required habitat exists at the project site and/or has been reported nearby;

Moderate = Marginal required habitat exists onsite, and/or required habitat exists in surrounding areas; or

Low = Required habitat does not exist at the project site nor does it exist nearby.

²⁴ E = Endangered; T = Threatened; C = Candidate.

²⁵ SC = A California Department of Fish and Game (CDFG) "Species of Special Concern".

Map Key	Survey/ Source	Scientific Name	Common Name	Species-status ²²					Habitat Requirements	Likelihood of Occurrence ²³
				Global Rank	State Rank	Federal Listing ²⁴	State Listing	CDFG ²⁵		
SSP16	CNDDDB	<i>Aspidoscelis tigris stejnegeri</i>	Coastal Whiptail	G5T3T4	S2S3	-	-	-	Found in deserts & semiarid areas w/ sparse vegetation & open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	Moderate
SSP17	CNDDDB	<i>Catostomus santaanae</i>	Santa Ana Sucker	G1	S1	T	-	SC	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, algae.	Low
SSP18	CNDDDB	<i>Chaetodipus californicus femoralis</i>	Dulzura Pocket Mouse	G5T3	S2?	-	-	SC	Variety of habitats including coastal scrub, chaparral, & grassland in San Diego Co. to the Bay Area. Attracted to grass-chaparral edges.	Moderate
SSP19	CNDDDB	<i>Coccyzus americanus occidentalis</i>	Western Yellow-Billed Cuckoo	G5T3Q	S1	-	E	-	(Nesting) riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow often mixed with cottonwoods, w/ lower story of blackberry, nettles, or wild grape.	Low
SSP20	CNDDDB	<i>Danaus plexippus</i>	Monarch Butterfly	G5	S3	-	-	-	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (Eucalyptus, Monterey Pine, Cypress), with nectar & water sources nearby.	Low
SSP21	CNDDDB	<i>Elanus leucurus</i>	White-Tailed Kite	G5	S3	-	-	-	(Nesting) rolling foothills/valley margins w/scattered oaks & river bottomlands or marshes next to deciduous woodland open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting & perching.	High



Map Key	Survey/ Source	Scientific Name	Common Name	Species-status ²²					Habitat Requirements	Likelihood of Occurrence ²³
				Global Rank	State Rank	Federal Listing ²⁴	State Listing	CDFG ²⁵		
SSP22	CNDDB	<i>Empidonax traillii extimus</i>	Southwestern Willow Flycatcher	G5T1T2	S1	E	E	-	Found in riparian woodlands in Southern California.	Low
SSP23	CNDDB	<i>Gila orcutti</i>	Arroyo Chub	G2	S2	-	-	SC	Los Angeles Basin south coastal streams. Slow water stream sections with mud or sand bottoms. Feed heavily on aquatic vegetation & associated invertebrates.	Low
SSP24	CNDDB	<i>Gymnogyps californianus</i>	California Condor	G1	S1	E	E	-	Require vast expanses of open savannah, grasslands, & foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 160 km from roost/nest. (CDFG 2009.) Records of California Condor in Los Angeles area between 2003 & 2006 show the main range extends from Sespe Creek & Piru Creek watersheds in eastern Ventura County & adjacent Los Angeles County, north into Tejon Ranch & west along the spine of the Coast Ranges, & southeast across Hwy. 126 onto Newhall Ranch, continuing east across I-5 near Newhall Pass (at Hwy. 14) onto the Santa Clara Divide. This divide has supported roosting condors since c. 2001. Note "avoidance" of urban portion of Santa Clarita (north of Hwy 14) by condors to reach Divide roosting site. (USFWS 2007.)	High. Condor flies over the area and likely forages onsite. Periodic foraging, tracked by CNDDB approx. 1 mile away from tower location. USFWS (2007) reports Condor occurrences surrounding the project site.
SSP25	Magney 2005	<i>Haplotrema caelatum</i>	Slotted Lancetooth Snail	G1N1	-	-	-	-	This snail is a southern California endemic, known from Santa Barbara, Ventura, Los Angeles, and San Diego Counties, and rare in Ventura County. Ventura County Planning Division has placed this snail on its list of locally sensitive species.	Moderate
SSP26	Magney 2005	<i>Helminthoglypta phlyctaena</i>	Zaca Shoulderband Snail	G1G2 N1N2	-	-	-	-	This snail is a Santa Barbara/Ventura County California endemic, known only from Santa Barbara and Ventura Counties. The Type Locality is likely near or at Zaca Lake, hence its common name. Ventura County Planning Division has placed this snail on its list of locally sensitive species.	Moderate

Map Key	Survey/ Source	Scientific Name	Common Name	Species-status ²²					Habitat Requirements	Likelihood of Occurrence ²³
				Global Rank	State Rank	Federal Listing ²⁴	State Listing	CDFG ²⁵		
SSP27	CNDDDB	<i>Helminthoglypta traskii traskii</i>	Trask Shoulderband Snail	G1G2T1	S1	-	-	-	Known from Ventura, Los Angeles, Orange, & San Diego Counties. Also reported from NW Baja California.	Moderate
SSP28	Magney 2005	<i>Helminthoglypta tudiculata convicta</i>	Southern Shoulderband Snail	G2G3N2N3	-	-	-	-	Southern California endemic, known from the Transverse Ranges of Ventura, Los Angeles, and San Bernardino Counties, possibly to Riverside County, in the Los Angeles Basin, and in the Peninsular Ranges to northwestern Baja California. Ventura County Planning Division has placed this snail on its list of locally sensitive species.	Moderate
SSP29	Magney 2005	<i>Helminthoglypta venturensis</i>	Ventura Shoulderband Snail	G1QN1	-	-	-	-	Ventura County endemic, known only from the type locality and the western end of Simi Valley, in Ventura County. Ventura County Planning Division has placed this snail on its list of locally sensitive species.	Moderate
SSP30	Magney 2005	<i>Helminthoglypta willettii</i>	Matilija Shoulderband Snail	G1	-	-	-	-	Terrestrial. A Ventura County Locally Important Species (VCPD 2005).	Moderate
SSP31	CNDDDB	<i>Lasiurus cinereus</i>	Hoary Bat	G5	S4?	-	-	-	Prefers open habitats or habitat mosaics, w/ access to trees for cover & open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths, & requires water.	Moderate
SSO22	CNDDDB	<i>Neotoma lepida intermedia</i>	San Diego Desert Woodrat	G5T3?	S3?	-	-	SC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops & rocky cliffs & slopes.	Detected (nest)
SSP32	CNDDDB	<i>Oncorhynchus mykiss irideus</i>	Southern Steelhead - Southern California ESU	G5T2Q	S2	E	-	SC	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego Co.).	Low
SSP33	CNDDDB	<i>Phrynosoma coronatum</i>	Coast Horned Lizard	G4G5	S3S4	-	-	SC	Frequents a wide variety of habitats, most common in lowlands along sandy washes w/ scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, & abundant supply of ants & other insects.	High

Map Key	Survey/Source	Scientific Name	Common Name	Species-status ²²					Habitat Requirements	Likelihood of Occurrence ²³
				Global Rank	State Rank	Federal Listing ²⁴	State Listing	CDFG ²⁵		
SSP34	CNDDDB	<i>Poliophtila californica californica</i>	Coastal California Gnatcatcher	G3T2	S2	T	-	SC	Obligate, permanent resident of coastal scrub below 760 m in southern California. Low, coastal scrub in arid washes, on mesas & slopes. Not all areas classified as coastal scrub are occupied.	Moderate
SSP35	CNDDDB	<i>Rana draytonii</i>	California Red-legged Frog	G4T2T3	S2S3	T	-	SC	Lowlands & foothills in or near permanent deep water w/ dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks permanent water for larval development must have access to aestivation habitat.	Low
SSP36	CNDDDB	<i>Rana muscosa</i>	Sierra Madre Yellow-legged Frog	G1	S1	E	-	SC	Federal listing refers to populations in the San Gabriel, San Jacinto, & San Bernardino Mountains only. Always encountered within a few feet of water. Tadpoles may require 2-4 yrs. to complete their aquatic development.	Low
SSP37	CNDDDB	<i>Spea hammondi</i>	Western Spadefoot	G3	S3	-	-	SC	Occurs primarily in grassland habitats, but can be found in valley-foothill woodlands. Vernal pools essential for breeding & egg laying.	Low
SSO23	CNDDDB	<i>Taxidea taxus</i>	American Badger	G5	S4	-	-	SC	Most abundant in drier open stages of most shrub, forest, & herbaceous habitats, w/ friable soils. Need sufficient food, friable soils & open, uncultivated ground. Prey on burrowing rodents. Dig burrows.	Detected (burrow)
SSP38	CNDDDB	<i>Thamnophis hammondi</i>	Two-Striped Garter Snake	G3	S2	-	-	SC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 2130 m elevation. Highly aquatic, found in or near permanent fresh water. Often along streams w/ rocky beds & riparian growth.	Low
SSP39	CNDDDB	<i>Thamnophis sirtalis</i> ssp.	South Coast Garter Snake	G5T1T2	S1S2	-	-	SC	Southern California Coastal Plain from Ventura County to San Diego County, & from sea level to about 850 m. Marsh & upland habitats near permanent water w/ good strips of riparian vegetation.	Low
SSP40	CNDDDB	<i>Vireo bellii pusillus</i>	Least Bell's Vireo	G5T2	S2	E	E	-	(Nesting) summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 600 m. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, <i>Baccharis</i> , mesquite.	Low

Table 16. Special-status Wildlife Habitat Requirements

Map Key	Scientific Name (Common Name)	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSO21	<i>Accipiter cooperii</i> (Cooper's Hawk)	Yes	Yes	1.150 ac (0.466 ha)	Observed. Forages in the coastal scrub and grassland habitats onsite.
SSP15	<i>Antrozorous pallidus</i> (Pallid Bat)	Yes	Yes	1.150 ac (0.466 ha)	Moderate Occurrence Likelihood due to the coastal scrub and grassland habitats onsite.
SSP16	<i>Aspidoscelis tigris stejnegeri</i> (Coastal Whiptail)	Yes	Yes	1.150 ac (0.466 ha)	Moderate Occurrence Likelihood due to the coastal scrub and grassland habitats onsite.
SSP18	<i>Chaetodipus californicus femoralis</i> (Dulzura Pocket Mouse)	Yes	Yes	1.150 ac (0.466 ha)	Moderate Occurrence Likelihood due to the coastal scrub and grassland habitats onsite.
SSP21	<i>Elanus leucurus</i> (White-tailed Kite)	Yes	Yes	1.150 ac (0.466 ha)	High Occurrence Likelihood due to the grassland and coastal scrub onsite that make suitable foraging habitat.
SSP24	<i>Gymnogyps californianus</i> (California Condor)	Yes	Yes	1.150 ac (0.466 ha)	High Occurrence Likelihood due to the grassland and coastal scrub onsite that make suitable foraging habitat. Birds documented as foraging in the Anlauf Oil Field and beyond by USFWS.
SSP25	<i>Haplotrema caelatum</i> (Slotted Lancetooth Snail)	Yes	Yes	0.915 ac (0.371 ha)	Moderate Occurrence Likelihood due to the coastal scrub habitat onsite.
SSP26	<i>Helminthoglypta phlyctaena</i> (Zaca Shoulderband Snail)	Yes	Yes	0.915 ac (0.371 ha)	Moderate Occurrence Likelihood due to the coastal scrub habitat onsite.
SSP27	<i>Helminthoglypta traskii traskii</i> (Trask Shoulderband Snail)	Yes	Yes	0.915 ac (0.371 ha)	Moderate Occurrence Likelihood due to the coastal scrub habitat onsite.
SSP28	<i>Helminthoglypta tudiculata convicta</i> (Southern Shoulderband Snail)	Yes	Yes	0.915 ac (0.371 ha)	Moderate Occurrence Likelihood due to the coastal scrub habitat onsite.
SSP29	<i>Helminthoglypta venturensis</i> (Ventura Shoulderband Snail)	Yes	Yes	0.915 ac (0.371 ha)	Moderate Occurrence Likelihood due to the coastal scrub habitat onsite.
SSP30	<i>Helminthoglypta willetii</i> (Matilija Shoulderband Snail)	Yes	Yes	0.915 ac (0.371 ha)	Moderate Occurrence Likelihood due to the coastal scrub habitat onsite.
SSP31	<i>Lasiurus cinereus</i> (Hoary Bat)	Yes	Yes	0.915 ac (0.371 ha)	Moderate Occurrence Likelihood due to the coastal scrub habitat onsite.



Map Key	Scientific Name (Common Name)	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSO22	<i>Neotoma lepida</i> ssp. <i>intermedia</i> (San Diego Desert Woodrat)	Yes	Yes	0.915 ac (0.371 ha)	Detected (nest). Lives in the coastal scrub habitat onsite.
SSP33	<i>Phrynosoma blainvillii</i> (Coast Horned Lizard)	Yes	Yes	0.915 ac (0.371 ha)	High Occurrence Likelihood due to the coastal scrub habitat onsite.
SSP34	<i>Polioptila californica californica</i> (Coastal California Gnatcatcher)	Yes	Yes	0.915 ac (0.371 ha)	Moderate Occurrence Likelihood due to the coastal scrub habitat onsite.
SSO23	<i>Taxidea taxus</i> (American Badger)	Yes	Yes	1.150 ac (0.466 ha)	Detected (burrow). Lives in grassland and coastal scrub habitat onsite.



Special-status Habitats

Table 17, Special-status Habitats Observed at, and Known Near, the Project Site, summarizes the twelve (12) sensitive habitat types that were observed at or reported, on or near the project site. Table 17 provides the habitat’s name, status, and whether it was observed onsite.

These observed habitats, and respective alliances (plant communities), are discussed in detail above in the Habitat Descriptions subsection above in Section 3. Table 4, Plant Communities of the Project Site, includes the plant alliance names described in the Habitat Descriptions subsection of this report for each sensitive habitat observed. Figure 10 shows the distribution of sensitive habitats observed onsite.

Table 17. Special-status Habitats Observed at, and Known Near, the Project Site

Scientific Name	Sensitivity Status ²⁶		Observed Onsite?
	Global Rank	State Rank	
California Walnut Woodland (<i>Juglans californica</i> Woodland Alliance)	G2	S2.1	Observed
California Coastal Scrub (<i>Salvia leucophylla</i> , <i>Hazardia squarrosa</i> , <i>Malosma laurina</i> , and <i>Opuntia littoralis</i> Scrubland Alliances)	G3	S3.2	Observed
Coast Live Oak Woodland (<i>Quercus agrifolia</i> Woodland Alliance)	G4	S4	Observed
Southern California Steelhead Stream	G?	SNR	Not Observed
Southern Coast Live Oak Riparian Forest	G4	S4	Not Observed
Southern Cottonwood Willow Riparian Forest	G3	S2.1	Not Observed
Southern Mixed Riparian Forest	G2	S2.1	Not Observed
Southern Riparian Scrub (<i>Baccharis pilularis</i> / <i>Juncus mexicana</i> , <i>B. salicifolia</i> , <i>B. salicifolia</i> / <i>Juncus</i> , <i>B. salicifolia</i> / <i>Salix lasiolepis</i> Scrubland Alliances)	G3	S3.2	Observed (Seep areas)
Southern Sycamore Alder Riparian Woodland	G4	S4	Not Observed
Southern Willow Scrub	G3	S2.1	Not Observed
Valley Needlegrass Grassland (<i>Nassella pulchra</i> Grassland Alliance)	G1	S3.1	Observed
Wildflower Field (<i>Plagiobothrys nothofulvus</i> and <i>Cryptantha clevelandii</i> - <i>Dichelostemma capitatum</i> HerbaceousAlliances)	G2	S2.2	Observed

²⁶ For special-status species definitions, refer to Tables 9 through 12 in the Methods Section.

3.3 WILDLIFE MOVEMENT AND CONNECTIVITY

Wildlife movement or connectivity features, or evidence thereof, were not found within the project footprint.

DMEC finds that the project site functions as core habitat²⁷ rather than as a linkage, corridor, route, chokepoint, or stepping stone corridor. Figure 11, Map of Regional Wildlife Habitat and Corridors in the Survey Area, illustrates the core wildlife habitat, wildlife habitat (non-core), and landscape linkages in relation to the location of the project site. The wildlife habitats and corridors illustrated on Figure 11 are based primarily on research conducted by the South Coast Wildlands Project (Penrod et al. 2004). Based on maps provided by CDFG's BIOS MAPS (available at: <http://imaps.dfg.ca.gov>), and Figure 11, the project site is located along a major wildlife corridor (the Los Padres to Point Mugu Landscape Linkage) between Santa Monica Mountains and Los Padres National Forest via South Mountain. However, the total project area is mapped as existing within core wildlife habitat (Figure 11). Core wildlife habitat areas extend far west into the Los Padres National Forest to the north of State Route (SR) 150 and into Sulphur Mountain to the south of SR 150. Another major wildlife linkage corridor runs the length of the Santa Clara River, connecting with natural habitats to the north and south of the river.

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information.

A **wildlife corridor**, or landscape linkage, is a piece of habitat (usually linear in nature) that connects two or more core habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. The small size of the total project site (0.102 acre in total) and their placements within core habitat rather than the rugged or disturbed areas associated with a wildlife corridor, suggests that wildlife would be able to move unobstructed around the radio tower.

A **travel route** is a landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and to provide access to necessary resources (e.g. water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from

²⁷ Core habitat is basically defined as a large intact area of habitat that can and does sustain viable populations of wildlife species. The size of a habitat patch necessary to sustain viable wildlife populations depends primarily on the target species. In this instance, the target species for the use of the term "Core Habitat" are areas suitable for sustaining a viable population of Mountain Lion.

one area to another. It contains adequate food, water, and/or cover while moving between habitats and provides a relatively direct link between target habitat areas.

Figure 12, Map of Wildlife Travel Routes in the Survey Area, presents the ridgelines, creeks, existing roads, and paths used by local and frequenting wildlife. Although the project site is heavily grazed by cattle, the landscape provides wildlife habitat that supports numerous travel routes and resources for wildlife movement for species including San Diego Desert Woodrat, Long-eared Woodrat, Botta's Pocket Gopher, American Badger, Audubon Cottontail, California Ground Squirrel, Coyote, Gray Fox, and Mule Deer. DMEC expects large mammals such as Mountain Lion (*Puma concolor*), Bobcat (*Lynx rufus*), and Black Bear (*Ursus americanus*) to use the resources, travel routes, and, habitats onsite as well. (Note: The wildlife/cattle paths mapped on Figure 12 are delineated by DMEC based on recognizable paths via aerial photography, field surveys, direct observation of wildlife use, and wildlife sign [scat and tracks] as evidence of activity in specific portions of the project site.) DMEC finds that the project area will not obstruct any wildlife travel routes.

The project area is located approximately 7 miles from the Hopper Mountain National Wildlife Refuge, a major breeding and roosting site for the California Condor population in Southern California. The USFWS has expressed concern that the radio tower could present a possible collision hazard for the California Condors if guywires were present on the tower (Joseph Brandt, personal communication). The proposed tower has been designed without guywires, thus removing the potential collision hazard that could obstruct California Condor movement in the vicinity of the project site (see Figure 4, Schematic of Proposed Radio Tower Facility).

Figure 11. Map of Regional Wildlife Habitat and Corridors in the Survey Area

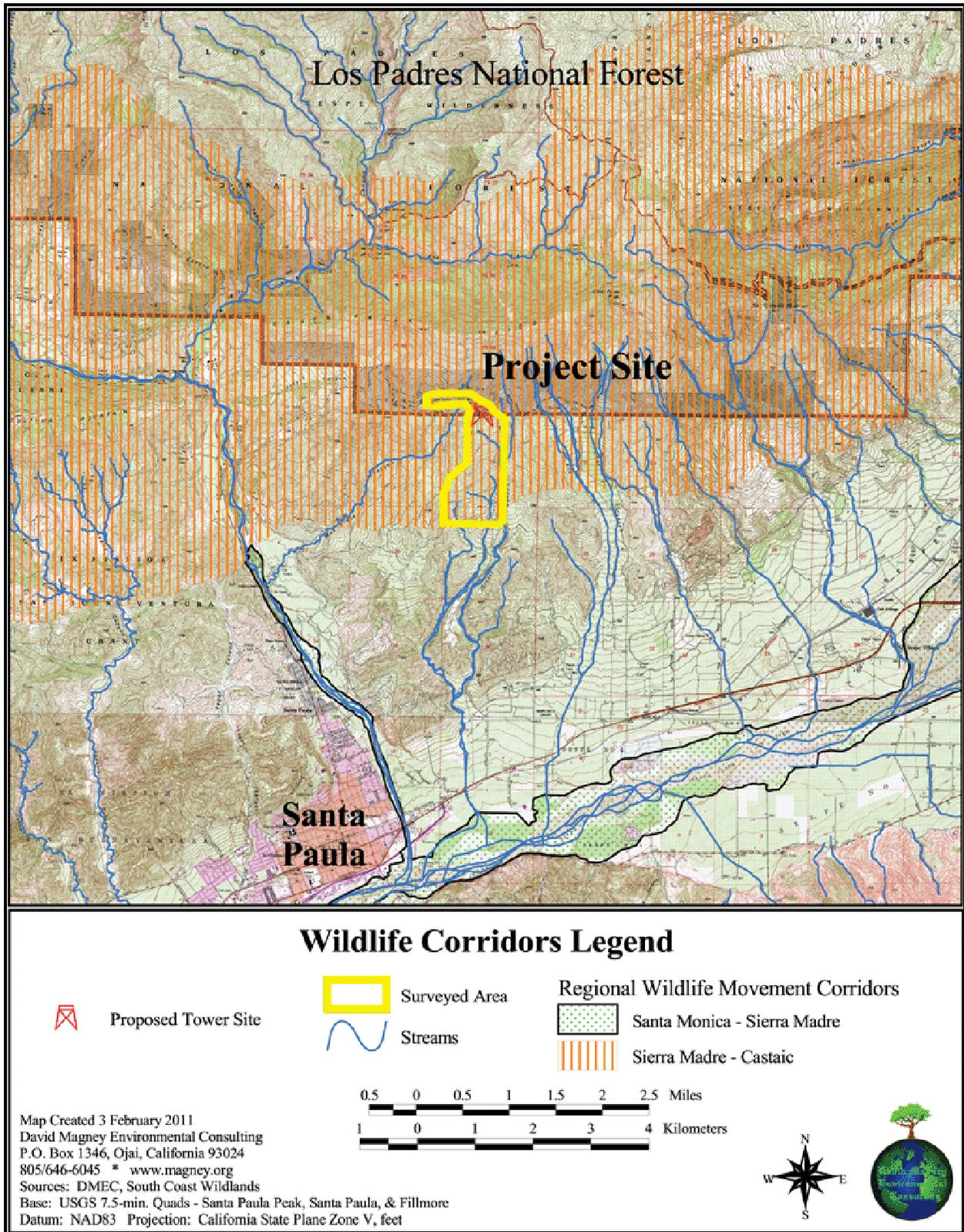
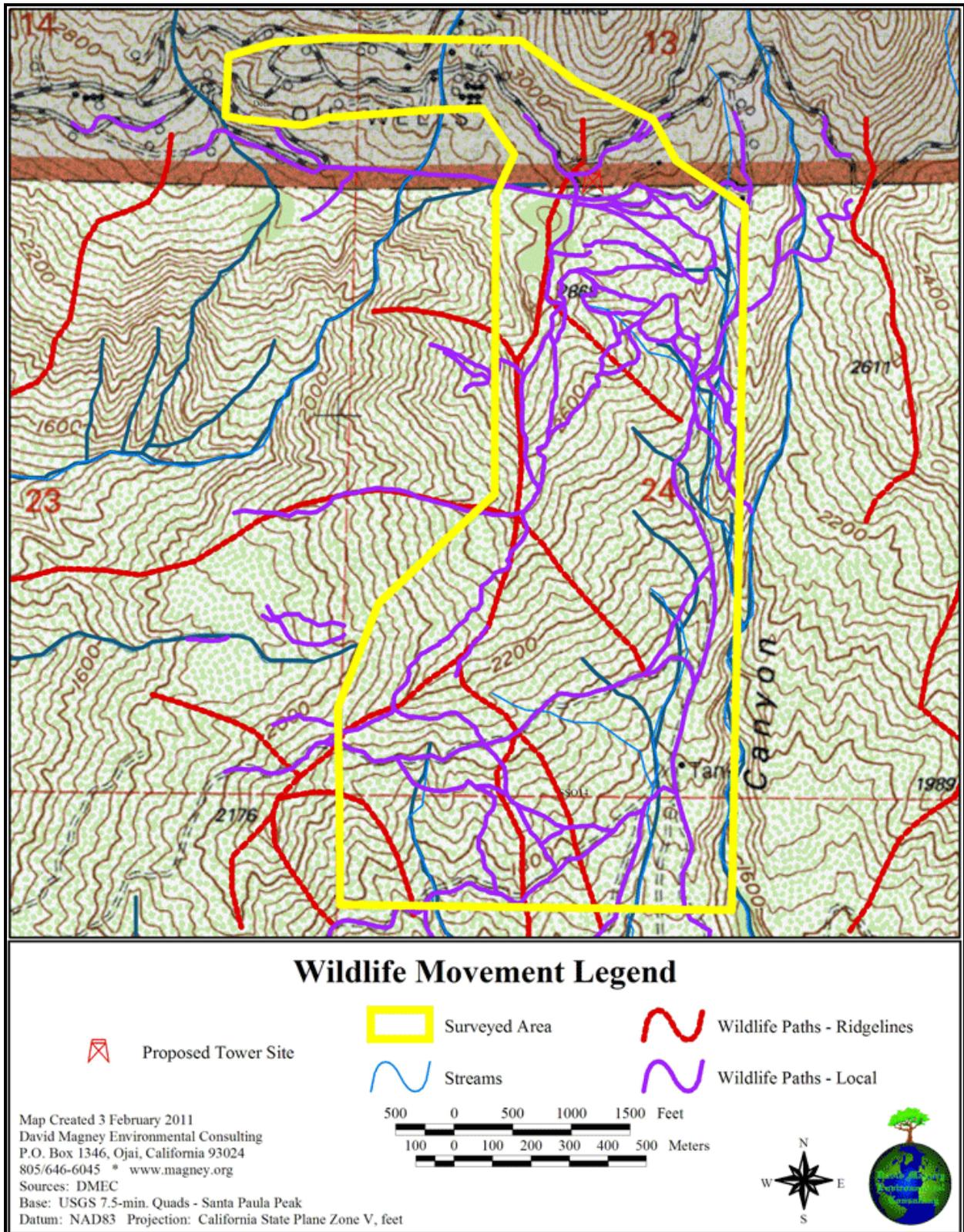


Figure 12. Map of Wildlife Travel Routes in the Survey Area



SECTION 4. IMPACT ASSESSMENT

4.1 SUFFICIENCY OF BIOLOGICAL DATA

Additional information is needed to make CEQA findings and develop feasible mitigation measures: None

Additional biology related surveys or permits are needed prior to issuance of land use permit: Possibly. See Mitigation Measure Impacts and Mitigation 1 (MM1: Conduct Pre-construction Surveys to Locate and Relocate Any Special-status Plant Species Onsite), Mitigation Measure 3 (MM3: Conduct Pre-construction Surveys to Locate and Relocate Any Special-status Wildlife Species Onsite), Mitigation Measure 4 (MM4: Protect Bird Nests) all require supplemental surveys.

4.2 IMPACTS AND MITIGATION

The Point Broadcasting LLC radio tower project construction footprint was identified based on accessibility and impacts to biological resources onsite. The proposed construction footprint would permanently impact approximately 0.297 acre (0.120 ha), with an additional 0.99 acre (0.401 ha) impacted at each site by fire hazard modification (100-foot fuel modification zones), totaling 1.287 acres. The proposed construction footprint, based on engineer designs, is intended to provide adequate space for a radio tower pad and related facilities (equipment shelter, generator, satellite, and parking area). Some of the disturbance area includes Anlauf Road and an old oil service road at the tower site. The tower will be constructed/assembled on the old oil service road.

The proposed development of the project site will result in impacts to biological resources. Small areas of *Salvia leucophylla* Alliance and *Deinandra fasciculata* Alliance would be impacted. The total direct impacts from these activities are summarized in Table 18, Existing Habitats and Land Cover on the Project Site and Expected Impacts. These impacts are identified and quantified below. Specific mitigation measures are recommended for every significant impact to reduce the level of impact to less-than-significant.

The natural vegetation impacted by the proposed development is shown on Figure 13, Map of Project Impacts to Natural Vegetation and Special-status Species.



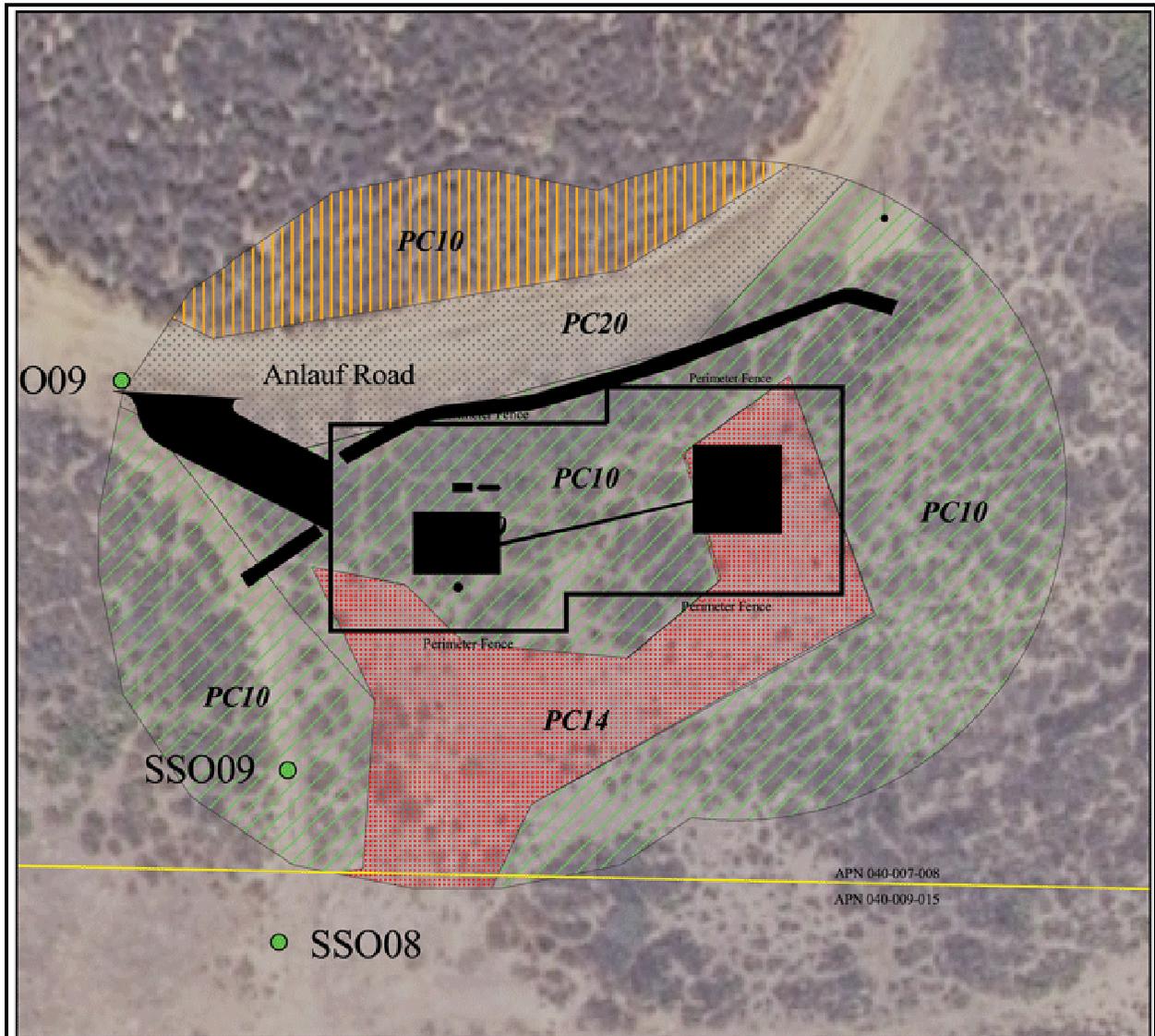
Table 18. Existing Habitats and Land Cover on the Project Site and Expected Impacts

Existing Habitats and Land Cover Observed	Total Onsite	Permanent Onsite Impact	Temporary Onsite Impact	Total Impact
<i>Quercus agrifolia</i> Alliance	0.27 ac (0.11 ha)	0	0	0
<i>Juglans californica</i> Alliance	0.24 ac (0.01 ha)	0	0	0
<i>Eucalyptus globules</i> Semi-Natural Stands	2.38 ac (0.96 ha)	0	0	0
<i>Baccharis pilularis</i> / <i>Juncus mexicana</i> Alliance	0.59 ac (0.24 ha)	0	0	0
<i>Baccharis salicifolia</i> Alliance	21.77 ac (8.81 ha)	0	0	0
<i>Baccharis salicifolia</i> - <i>Salix lasiolepis</i> Alliance	10.18 ac (4.12 ha)	0	0	0
<i>Baccharis salicifolia</i> / <i>Juncus</i> Alliance	0.19 ac (0.08 ha)	0	0	0
<i>Ceanothus crassifolius</i> Shrubland Alliance	6.63 ac (2.68 ha)	0	0	0
<i>Heteromeles arbutifolia</i> Shrubland Alliance	0 ac (Found directly outside of survey area)	0	0	0
<i>Salvia leucophylla</i> Alliance	564.23 ac (228.34 ha)	0.127 acre (0.052 ha)	same	0.127 acre (0.052 ha)
<i>Salvia leucophylla</i> - <i>Artemisia</i> <i>californica</i> Alliance	66.90 ac (27.07 ha)	0.788 acre (0.319 ha)	same	0.788 acre (0.319 ha)
<i>Salvia leucophylla</i> - <i>Salvia</i> <i>apiana</i> - <i>Hesperoyucca whipplei</i> Alliance	1.43 ac (0.58 ha)	0	0	0
<i>Hazardia squarrosa</i> Alliance	36.57 ac (14.80 ha)	0	0	0
<i>Malosma laurina</i> Alliance	14.48 ac (5.86 ha)	0	0	0
<i>Opuntia littoralis</i> Alliance	5.03 ac (2.04 ha)	0	0	0



Existing Habitats and Land Cover Observed	Total Onsite	Permanent Onsite Impact	Temporary Onsite Impact	Total Impact
<i>Deinandra fasciculata</i> Alliance	5.63 ac (2.28 ha)	0.235 acre (0.095 ha)	same	0.235 acre (0.095 ha)
<i>Plagiobothrys nothofulvus</i> Alliance	1.80 ac (0.73 ha)	0	0	0
<i>Cryptantha clevelandii</i> – <i>Dichelostemma capitatum</i> Alliance	1.76 ac (0.71 ha)	0	0	0
<i>Nassella pulchra</i> Alliance	0.64 ac (0.26 ha)	0	0	0
<i>Bromus</i> Semi-Natural Stands	8.54 ac (3.46 ha)	0	0	0
Eroded Badlands	1.26 ac (0.51 ha)	0	0	0
Disturbed/Roads	14.64 ac (5.93 ha)	0	0.171 ac (0.069 ha)	0.171 ac (0.069 ha)
Acreage Totals	443.28 ac (179.40 ha)	1.150 ac (0.466 ha)	0.171 ac (0.069 ha)	1.321 ac (0.535 ha)

Figure 13. Map of Project Impacts to Natural Vegetation and Special-status Species



Habitat and Special-status Species Impacts Legend

- Parcels
- Project Facilities
- Perimeter Fence

Vegetation Associations

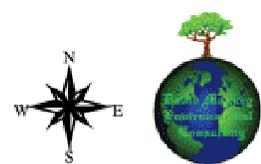
- Deinandra fasciculata-Bromus spp.*
- Disturbed/Road
- Salvia leucophylla*
- Salvia leucophylla-Artemisia californica*

Special-status Species

- Animal
- Plant

Map Created 11 March 2011
 David Magney Environmental Consulting
 P.O. Box 1346, Ojai, California 93024
 805/646-6045 * www.magney.org

Sources: CIRGIS, DMEC, Ventura County Public Works Base: Sep 2007 Aerial Photographs
 Datum: NAD83 Projection: California State Plane Zone V, feet



**A. Endangered, Threatened, or Rare Plant or Animal Species,
or Their Habitats**

Project: PS-M; Cumulative: PS-M

Summary of Impacts to Special-status Plant Species

The Point Broadcasting LLC project site contains suitable habitat for thirty-one (31) special-status plants. Nineteen (19) of these species have been directly observed within the surveyed area, and the proposed project could potentially have significant impacts on three (3) of these species, but is mitigateable.

Definition of Significance for Special-status Plant Species

The following criteria were used to determine if the proposed project would result in significant impacts on special-status plants.

If any individuals of any federally or state listed plant species is impacted, the impact is considered significant and requires mitigation.

If any plants on CNPS Lists 1A, 1B, 2, or 3 (CNPS 2001, 2010) are impacted, the impact is considered significant and requires mitigation.

If the plant is on CNPS List 4 (CNPS 2001, 2010), Ventura County Rare or Uncommon lists (Magney 2010), direct impacts may be considered significant and may require mitigation. If the project would eliminate an entire population or impact the population to the extent that it would no longer be viable, then the impact would be considered significant.

If the proposed project will eliminate all occurrences of a CNPS-listed plant within the survey area, the impact is considered significant.

If the proposed project will eliminate a portion of occurrences of a CNPS-listed (including locally rare and uncommon) plant within the survey area such that viability is no longer possible, the impact is considered significant.

If the proposed project will eliminate all occurrences of a locally rare plant within the survey area and viability is still possible, then the impact may be less than significant.

If any species of lichen or bryophyte tracked by the CNDDDB is impacted, the impact is considered significant.

If any species of lichen is listed by the California Lichen Society is impacted, the impact is considered significant.

If any species of plant (lichen, bryophyte, or vascular plant) that is rare statewide or in Ventura County, regardless of whether it is on any statewide or national list, is impacted by the proposed project, the impact may be considered significant and mitigation may be required. Significance Thresholds 4 and 6 (listed above) apply here as well.

Project Impacts

No federally or state listed plant species were observed on the Point Broadcasting LLC radio tower project site; however, thirty-one (31) special-status vascular and non-vascular plant species have the potential to occur in the vicinity of the radio tower project site. Of these 31 special-status plant species, twelve (12) that are tracked by CDFG's RareFind3 (CNDDDB 2009a) have potential to occur onsite. A total of nineteen (19) special-status plants were observed in the Survey Area, all of which are rare and uncommon in Ventura County (Magney 2010).

IMPACT 1. POTENTIAL DIRECT IMPACTS TO SPECIAL-STATUS PLANT SPECIES OBSERVED ONSITE

There are four (4) special-status plants species that occur adjacent to the construction footprint: *Lagophylla ramosissima* ssp. *ramosissima* (Branched Lagophylla, VCU), *Micropus californicus* var. *californicus* (Slender Cottonweed, VCU), *Chenopodium dessicatum* (Airdland Goosefoot, VCR), and *Oxalis albicans* ssp. *pilosa* (Hairy White Wood Sorrel, VCU). The locations of the species as shown on Figure 13, Project Impacts to Natural Vegetation and Special-status Species.

***Chenopodium dessicatum* (Airdland Goosefoot – SSO05):** One population was observed along Anlauf Road adjacent to *Salvia leucophylla* Alliance outside the expected construction footprint. This occurrence is outside the construction footprint of the radio tower facilities and access road. This plant is locally rare, with only one (1) known population in Ventura County²⁸.

***Lagophylla ramosissima* ssp. *ramosissima* (Branched Lagophylla – SSO08):** Three occurrences were found in *Deinandra fasciculata* and *Baccharis pilularis* Alliances onsite. One occurrence is located ~82 ft (25 m) south of the proposed radio tower facilities (limits of grading). This plant is locally uncommon, with only six (6) known populations in Ventura County²⁹.

***Micropus californicus* var. *californicus* (Slender Cottonweed – SSO09):** Two occurrences found in disturbed areas of *Salvia leucophylla* Alliance onsite. One occurrence is located 3 ft (0.91 m) northwest of the proposed radio tower access road on the edge of Anlauf Road and the second occurrence was found ~26 ft (7.92 m) south of the tower site grading limits. These two occurrences that represent one small population. This plant is locally uncommon, with only nine (9) known populations in Ventura County³⁰.

***Oxalis albicans* ssp. *pilosa* (Hairy White Wood Sorrel):** Three occurrences/one population found in *Salvia leucophylla* Alliance in the Survey Area north of Anlauf Road and well outside the tower site construction area. This plant is locally uncommon, with only six (6) known populations in Ventura County³¹.

²⁸ Flora of Ventura County manuscript, David L. Magney. Draft of 16 December 2010.

²⁹ Ibid.

³⁰ Ibid.

³¹ Ibid.

Significance Finding – Project Impacts: Potentially Significant but Mitigable. The project site has been designed to avoid any impacts on these species to a significant extent (see Figure 13). However, given their proximity to the site impact area, construction activities including grading and building could negatively impact these species in a significant way if adequate care is not taken to clearly identify these species and avoid them.

Implementation of Mitigation Measure 1 (MM1: Conduct Pre-construction Surveys to Locate and Relocate Any Special-status Plant Species Onsite) would reduce the project-level impacts to less-than-significant levels for the three special-status species adjacent to the construction footprint (*Lagophylla ramosissima* ssp. *ramosissima*, *Micropus californicus* var. *californicus*, *Chenopodium dessicatum* and *Oxalis albicans* ssp. *pilosa*) by making certain that the exact location of all populations of these species are known before potential impacts to these species by project construction begin. Implementation of Mitigation Measure 2 (MM: Fence and Monitor Special-status Plants Onsite) would make certain that all populations of these special-status plant species are clearly fenced to avoid any inadvertent impacts by construction impacts where feasible and that avoidance is adequately enforced by supervision of a qualified biologist.

Significance Finding – Cumulative Impacts: Potentially Significant but Mitigable. Cumulative impacts take into consideration the cumulative contribution the proposed project has on special-status plant species found onsite that have been impacted by other projects in the past within Ventura County and California. All potential and identified significant cumulative impacts to special-status plant species found onsite will be mitigated through general and specific mitigation measures described below.

Implementation of Mitigation Measure 1 (MM1: Conduct Pre-construction Surveys to Locate and Relocate Any Special-Status Plant Species Onsite) would reduce the project-level impacts to less-than-significant levels for the three special-status species adjacent to the construction footprint (*Lagophylla ramosissima* ssp. *ramosissima*, *Micropus californicus* var. *californicus*, *Chenopodium dessicatum* and *Oxalis albicans* ssp. *pilosa*) by making certain that the exact location of all populations of these species are known before potential impacts to these species by project construction begin. Implementation of Mitigation Measure 2 (MM2: Fence and Monitor Special-status Plants Onsite) would make certain that all populations of these special-status plant species are clearly fenced to avoid any inadvertent impacts by construction impacts and that avoidance is adequately enforced by supervision of a qualified biologist.

Avoidance and Minimization Measures:

The area designated for placement of the radio tower and related facilities has a relatively small construction footprint and have been placed in such a manner that all direct impacts to special-status plant species have been avoided. In addition, this area will have temporary fencing around it during construction and will have permanent fencing after construction so as to not contribute to any additional impacts outside of the construction footprint.



MITIGATION MEASURE 1: CONDUCT PRE-CONSTRUCTION SURVEYS FOR SPECIAL-STATUS PLANT SPECIES ONSITE

Impact & Mitigation Goal: Since the location or presence of all special-status plant species with the potential to occur onsite is not known, seasonal surveys of the project construction site shall be conducted prior to development (ground disturbance). If any special-status plant species are located onsite not addressed in this Biological Assessment, impacts on any of the special-status species will need to be assessed and appropriate feasible mitigation actions taken in consultation with the VCPD Biologist.

Mitigation Action: Prior to site disturbance activities associated with the proposed project, supplemental seasonal field surveys for special-status plant species shall be conducted to clearly determine and to mark off the exact locations and numbers of plants onsite in the development footprint. A qualified botanist familiar with knowledge of the flora of the region surrounding the Point Broadcasting LLC project shall conduct the surveys. Surveys should be conducted in the spring prior to construction to flag locations of special-status plants within and immediately adjacent to the project site.

If construction, or the completed project, does not significantly impact special-status plant species observed onsite, then no additional mitigation may be necessary. If any individuals of special-status species considered of local importance are impacted, the impact would be considered significant and mitigation or avoidance would be required. In addition, if an entire population of a locally important species will be lost due to construction activities, and no portion of the population remains viable, this impact would also be considered significant and mitigation or avoidance would be required. If a special-status plant species, or if an entire population is found to exist within the areas of impact, the location of the project or aspects of the project should be relocated, or (1) prior to construction, the extent of the species should be fully delineated to determine the extent of the impacts to the population and individual plants resulting from the proposed project, and (2) a detailed mitigation plan shall be developed and implemented.

If mitigation is required for impacts to special-status plant species, a detailed mitigation plan should be developed and implemented to minimize impacts and to ensure successful mitigation for impacts to special-status plant species. Mitigation ratios for any significant impacts to special-status plant species is recommended generally at a 10:1 ratio; however this ratio may vary depending upon the status of the species impacted and how well the species is expected to be reestablished. The mitigation plan should include but not be limited to the following measures:

- Flagging off plants to be avoided outside of the development envelope;

- Preserving the topsoil within the construction footprint as a seed bank to promote special-status species revegetation;

- Collecting seeds of special-status plant species in the immediate vicinity of the project site, to ensure that the genetic integrity of the local landscape remains intact;

- Sowing the seed back onsite (and outside of any potential fuel modification zones) after construction activities have been completed. A qualified botanist should be present during implementation of mitigation measures to aid in successful mitigation;

Maintain and monitor restoration/planting sites for a minimum of five (5) years to determine mitigation success or failure, and implement remedial measures if necessary to satisfy mitigation objectives.

Monitoring & Timing: Pre-construction surveys completed two weeks prior to any disturbance and impacts to any special-status plant species are minimized. If any individuals of special-status species considered of local importance are impacted, a qualified biologist shall develop a detailed mitigation plan.

Standard of Success: Prior to construction any special-status plants within and immediately adjacent to the project site are to be located and flagged for protection.

Mapped Information: None

MITIGATION MEASURE 2. FENCE AND MONITOR SPECIAL-STATUS PLANTS ONSITE

Impact & Mitigation Goal: To avoid direct losses of special-status plant species onsite occurring adjacent to the construction footprint where construction activities and grading activities are expected, as illustrated in Figure 14, Map of Proposed Protective Fencing.

Mitigation Action: Create a protection zone by fencing off special-status plant species occurring adjacent to the construction activities. Install temporary protective fencing around the special-status plant species occurrences, such as orange mesh safety fence often used to cordon off areas at construction and excavation sites.

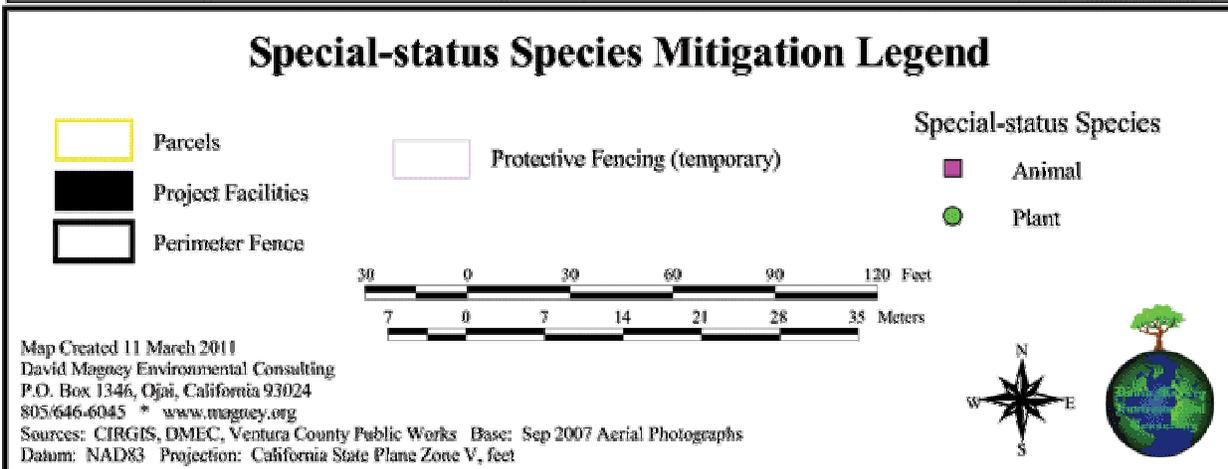
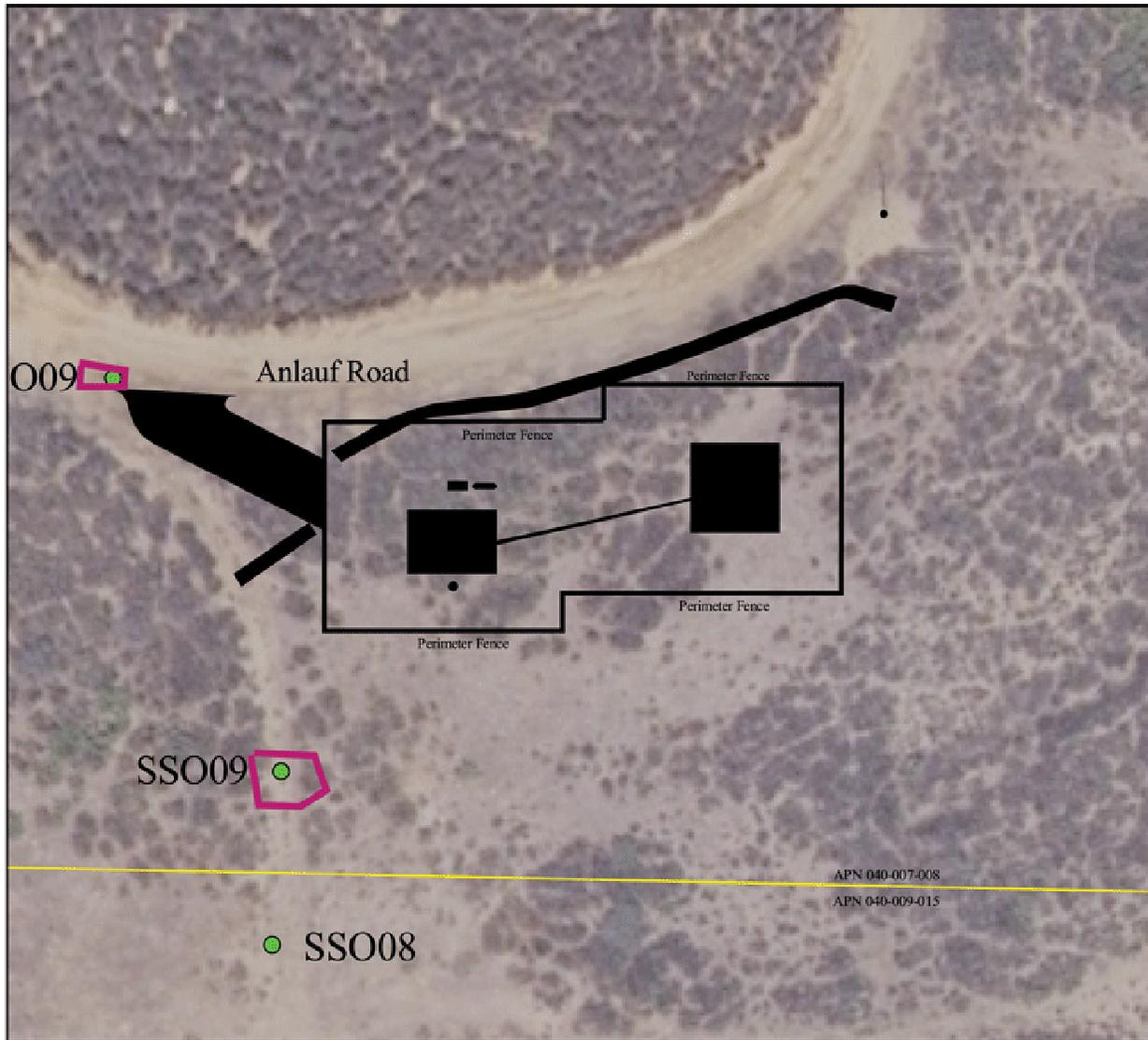
Monitoring & Timing: The protective fencing shall be installed prior to any onsite grading activities and maintained during the construction activities. The fencing can be removed after the completion of the construction activities onsite.

A qualified biologist shall monitor the construction activities onsite to ensure that no impacts occur outside the defined construction footprint or within the fenced protection zone.

Standard of Success: This mitigation will be considered successful if the protective fencing have been installed and maintained in good order, and no incursions into the protection zone have occurred during the entire construction period as determined by monitoring of a qualified biologist.

Mapped Information: The location of the temporary protective fencing and zone area shall be synonymous with boundaries identified in Figure 14. This location and zone shall be mapped as a part of all grading plans.

Figure 14. Map of Proposed Protective Fencing



IMPACT 2. POTENTIAL LOSS OF LOCALLY RARE PLANTS OBSERVED ONSITE

A total of nineteen (19) locally important plant species not tracked by CNDDDB were directly observed within the survey area for the Point Broadcasting LLC radio tower. Of these species, six (6) species are CNPS *Inventory of Rare and Endangered Plants of California* listed and fourteen (14) considered Locally Important, Rare or, Uncommon in Ventura County [Magney 2010]. Any additional grading or construction onsite not described in this report could reduce habitat that is likely to support these species.

Special-status Plants Observed and Potentially Present Onsite, Table 13, summarizes all special-status and locally important plant species for the Point Broadcasting LLC project site. Table 13 provides each species' scientific and common names, status, habitat requirements, and likelihood of occurrence. Table 14, Special-status Plant Habitat Requirements, gives an approximate amount of habitat acreage within the survey area on the Point Broadcasting LLC project site and how much has potential to be impacted by the proposed project. Figure 10 shows locations of the 17 special-status plant species observed within the survey area.

Twelve (12) vascular plants are tracked by CNDDDB in the vicinity of the Point Broadcasting LLC project site. Of these tracked species, DMEC determined that three (3) of the plants have a high likelihood and four (4) have a moderate likelihood of occurring within the survey area. These species are listed below.

A few special-status plants described under Impact 1 are also located elsewhere on the survey area outside of the construction footprint area. They will be listed here again so that all occurrences within the survey area are included.

CNPS Listed:

Six (6) CNPS Listed plant species **observed** in the Point Broadcasting LLC radio tower project site survey area include: *Baccharis plummerae* var. *plummerae* (Plummer Baccharis), *Calochortus catalinae* (Catalina Mariposa Lily), *Calochortus clavatus* var. *clavatus* (Club-haired Mariposa Lily), *Calochortus weedii* var. *vestus* (Late-Flowered Mariposa Lily), *Juglans californica* var. *californica* (Southern California Black Walnut), and *Polygala cornuta* ssp. *fishiae* (Fish's Milkwort).

Locally Important:

Thirteen (13) locally important special-status plant species **observed** on the Point Broadcasting LLC radio tower project site survey area are: *Chenopodium desiccatum* (Aridland Goosefoot), *Grindelia camporum* var. *bracteosum* (Bracted Gumplant), *Lagophylla ramosissima* ssp. *ramosissima* (Branched Lagophylla), *Micropus californicus* var. *californicus* (Slender Cottonweed), *Microseris douglasii* ssp. *douglasii* (Douglas Microseris), *Microseris douglasii* ssp. *tenella* (Slender Douglas Microseris), *Navarretia atractyloides* (Hollyleaf Skunkweed), *Oxalis albicans* ssp. *pilosa* (Hairy White Wood Sorrel), *Plagiobothrys acanthocarpus* (Greene's Allocarya), *Plagiobothrys canescens* (Bracted Popcornflower), *Poa secunda* ssp. *juncifolia* (Rush

Bluegrass), *Tauschia hartwegii* (Hartweg Tauschia), and *Vicia ludoviciana* var. *ludoviciana* (Vetch).

Significance Finding – Project Impacts: Potentially Significant but Mitigable. Implementation of Mitigation Measure 1 (MM1: Conduct Pre-construction Surveys to Locate and Relocate Any Special-status Plant Species Onsite) would reduce the project-level impacts to less-than-significant levels for any special-status plant species that have the likelihood of occurring onsite.

Significance Finding – Cumulative Impacts: Potentially Significant but Mitigable. Mitigation Measure 1 would reduce the cumulative impacts to less-than-significant levels for any special-status plant species that have the likelihood of occurring onsite.

Avoidance and Minimization Measures: The design and placement of the construction footprint have been placed in such a manner that all direct impacts to special-status plant species have been avoided. In addition, these areas are to have temporary fencing around them during construction so as to not contribute to any additional impacts out side of the construction footprint.

IMPACT 3. LOSS OF ANY THREATENED OR ENDANGERED PLANTS POSSIBLE TO OCCUR ONSITE

A number of special-status plants were tracked by CDFG's RareFind3 (CNDDDB 2009a) that have the potential to occur on the Point Broadcasting LLC radio tower project sites, but were not directly observed during the field surveys on site. All of these species are considered to possibly occur in the survey area as a result of suitable habitat onsite. Any additional grading or construction onsite not described in this report could reduce habitat that is likely to support these species.

Twelve (12) vascular plants are tracked by CNDDDB in the vicinity of the Point Broadcasting LLC radio tower project site. Of these tracked species, DMEC determined that three (3) of the plants have a high likelihood and four (4) have a moderate likelihood of occurring within the survey area on the project site.

Three (3) special-status plant species having a **high** likelihood of occurring on the site: *Astragalus didymocarpus* var. *milesianus* (Miles' Milkvetch), *Calochortus plummerae* (Plummer's Mariposa Lily), and *Horkelia cuneata* ssp. *puberula* (Mesa Horkelia).

Four (4) special-status plant species having a **moderate** likelihood of occurring on the site: *Atriplex serenana* var. *davidsonii* (Davidson's Saltscale), *Calochortus palmeri* var. *palmeri* (Palmer's Mariposa Lily), *Delphinium umbraculorum* (Umbrella Larkspur), and *Navarretia ojaiensis* (Ojai Navarretia).

While these plants were not directly observed onsite, any additional grading or construction onsite not described in this report would reduce habitat that may to support these species.

Significance Finding – Project Impacts: Potentially Significant but Mitigable. Implementation of Mitigation Measure 1 (MM1: Conduct Pre-construction Surveys to Locate and Relocate Any Special-status Plant Species Onsite) would reduce the project-level impacts to less-than-significant levels for any special-status plant species that have the likelihood of occurring onsite.

Significance Finding – Cumulative Impacts: Potentially Significant but Mitigable. Mitigation Measure 1 would reduce the cumulative impacts to less-than-significant levels for any special-status plant species that have the likelihood of occurring onsite.

Avoidance and Minimization Measures: The design and placement of the construction footprint have been placed in an area in such a manner that all direct impacts to special-status plant species have been avoided. In addition, these areas are to have temporary fencing around them during construction so as to not contribute to any additional impacts out side of the construction footprint.

Summary of Impacts to Special-status Wildlife Species

Table 16, Special-status Wildlife Species Habitat Requirements, shows seventeen (17) special-status wildlife species observed or determined to have a high or moderate likelihood of occurrence on the Point Broadcasting LLC survey area. Three (3) special-status wildlife species were observed on the Point Broadcasting LLC project survey area. These species were either directly observed or detected by DMEC biologists.

Twenty-four (24) special-status wildlife species were located in the vicinity of the project sites by CDFG's RareFind3 (CNDDDB 2009a). Of these 17 special-status wildlife species, 15 are known or have the potential to occur onsite or in the vicinity of the project sites. An additional six (6) native terrestrial gastropods (snails) are included in Table 17. These gastropods are locally endemic (Magney 2005, Roth and Sadeghian 2003) and the Ventura County Planning Division has placed these snails on its list of locally sensitive species.

Wildlife species **observed** near the project site includes: *Accipiter cooperii* (Cooper's Hawk) [observed by DMEC], *Neotoma lepida intermedia* (San Diego Desert Woodrat) [detected by DMEC] and *Taxidea taxus* (American Badger) [detected by DMEC]. Each of these species is discussed below.

Cooper's Hawk (*Accipiter cooperi*): Construction (including grading, building, and fuel modification) onsite would reduce the habitats that support this species on the project site. Habitat types impacted by the proposed construction onsite for the Cooper's Hawk are *Salvia leucophylla* Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance. 1.15 acre of these habitats is estimated to be directly impacted by the proposed project, which represents 0.36% of the 316 acres of these habitats for this species that were surveyed for this project.

San Diego Desert Woodrat (*Neotoma lepida intermedia*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project sites. The habitat type impacted by the proposed construction onsite for the San Diego Desert Woodrat is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project sites.

American Badger (*Taxidea taxus*): Construction (including grading, building, and fuel modification) onsite would reduce the habitats that support this species on the project sites. Habitat types impacted by the proposed construction onsite for the American Badger are

Salvia leucophylla Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance. 1.15 acre of these habitats is estimated to be directly impacted by the proposed project, which represents 0.36% of the 316 acres of these habitats for this species that were surveyed for this project.

Three (3) special-status wildlife species have a **high likelihood** of occurring in the project survey area: *Elanus leucurus* (White-tailed Kite) *Gymnogyps californianus* (California Condor), and *Phrynosoma blainvillii* (Coast Horned Lizard).

White-tailed Kite (*Elanus leucurus*): Construction (including grading, building, and fuel modification) onsite would reduce the habitats that support this species on the project site. Habitat types impacted by the proposed construction onsite for the White-tailed Kite are *Salvia leucophylla* Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance. 1.15 acre of these habitats is estimated to be directly impacted by the proposed project, which represents 0.36% of the 316 acres of these habitats for this species that were surveyed for this project.

California Condor (*Gymnogyps californianus*): Construction (including grading, building, and fuel modification) onsite would reduce the habitats that support this species on the project site. Habitat types impacted by the proposed construction onsite for the California Condor are *Salvia leucophylla* Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance. 1.15 acre of these habitats is estimated to be directly impacted by the proposed project, which represents 0.36% of the 316 acres of these habitats for this species that were surveyed for this project.

California Horned Lizard (*Phrynosoma blainvillii*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project site. The habitat type impacted by the proposed construction onsite for the California Horned Lizard is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project site.

Eleven (11) special-status wildlife species have a **moderate likelihood** of occurring on the site: *Antrozous pallidus* (Pallid Bat), *Lasiurus cinereus* (Hoary Bat), *Chaetodipus californicus femoralis* (Dulzura Pocket Mouse), *Aspidoscelis tigris stejnegeri* (Coastal Whiptail), *Haplotrema caelatum* (Slotted Lancetooth Snail), *Helminthoglypta phlyctaena* (Zaca Shoulderband Snail), *Helminthoglypta traskii traskii* (Trask Shoulderband Snail), *Helminthoglypta tudiculata convicta* (Southern Shoulderband Snail), *Helminthoglypta venturensis* (Ventura Shoulderband Snail), *Helminthoglypta willettii* (Matilija Shoulder-band Snail) and *Polioptila californica californica* (Coastal California Gnatcatcher).

Pallid Bat (*Antrozous pallidus*): Construction (including grading, building, and fuel modification) onsite would reduce the habitats that support this species on the project site. Habitat types impacted by the proposed construction onsite for the Pallid Bat are *Salvia leucophylla* Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance. 1.15 acre of these habitats is estimated to be directly impacted by the proposed project, which represents 0.36% of the 316 acres of these habitats for this species that were surveyed for this project.



Hoary Bat (*Lasiurus cinereus*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project site. The habitat type impacted by the proposed construction onsite for the Hoary Bat is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project site.

Dulzura Pocket Mouse (*Chaetodipus californicus femoralis*): Construction (including grading, building, and fuel modification) onsite would reduce the habitats that support this species on the project site. Habitat types impacted by the proposed construction onsite for the Cooper's Hawk are *Salvia leucophylla* Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance. 1.15 acre of these habitats is estimated to be directly impacted by the proposed project, which represents 0.36% of the 316 acres of these habitats for this species that were surveyed for this project.

Coastal California Gnatcatcher (*Polioptila californica californica*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project site. The habitat type impacted by the proposed construction onsite for the Coastal California Gnatcatcher is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project site.

Coastal Whiptail (*Aspidoscelis tigris stejnegeri*): Construction (including grading, building, and fuel modification) onsite would reduce the habitats that support this species on the project site. Habitat types impacted by the proposed construction onsite for the Coastal Whiptail are *Salvia leucophylla* Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance. 1.15 acre of these habitats is estimated to be directly impacted by the proposed project, which represents 0.36% of the 316 acres of these habitats for this species that were surveyed for this project.

Slotted Lancetooth Snail (*Haplotrema caelatum*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project site. The habitat type impacted by the proposed construction onsite for the Slotted Lancetooth Snail is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project site.

Zaca Shoulderband Snail (*Helminthoglypta phlyctaena*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project site. The habitat type impacted by the proposed construction onsite for the Zaca Shoulderband Snail is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project site.

Trask Shoulderband Snail (*Helminthoglypta traskii traskii*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project site. The habitat type impacted by the proposed construction onsite for the Trask Shoulderband Snail is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is

estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project site.

Southern Shoulderband Snail (*Helminthoglypta tudiculata convicta*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project site. The habitat type impacted by the proposed construction onsite for the Southern Shoulderband Snail is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project site.

Ventura Shoulderband Snail (*Heminthoglypta venturensis*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project site. The habitat type impacted by the proposed construction onsite for the Ventura Shoulderband Snail is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project site.

Matilija Shoulderband Snail (*Helminthoglypta willettii*): Construction (including grading, building, and fuel modification) onsite would reduce the habitat that supports this species on the project site. The habitat type impacted by the proposed construction onsite Matilija Shoulderband Snail is *Salvia leucophylla* Shrubland Alliance. 0.915 acre of this habitat is estimated to be directly impacted by the proposed project, which represents 0.57% of the 160 acres of potential habitat for this species on the project site.

Significant project impacts for special-status wildlife species are defined using the following criteria:

If the proposed construction activities (including grading, building, and fuel modification) renders uninhabitable more than 10% of the total potential habitat for the wildlife species existing on the project site.

Temporary harm to, or permanent loss of, any listed special-status wildlife species onsite is considered a significant impact.

Temporary harm to, or permanent loss of, any non-listed special-status wildlife species onsite is considered a significant impact.

Temporary harm to, or permanent loss of, observed and expected native breeding birds within the project area is considered a significant impact. Take (killing, disturbance, harassing, etc.) of active bird nests is prohibited by California Fish and Game Code Section 3503, and the Migratory Bird Treaty Act protects migratory birds.

IMPACT 4. LOSS OF HABITAT FOR SPECIAL-STATUS WILDLIFE OBSERVED OR LIKELY TO OCCUR ONSITE

Two distinct plant community types are going to be impacted by the development zone: *Salvia leucophylla* Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance. Both of these plant communities provide habitat for special-status wildlife species.

For special-status wildlife species, we define a significant project impact of the proposed construction as whether the impact on these plant communities by construction activities (including grading, building, and fuel modification) affects greater than 10% of the total potential habitat for the wildlife species existing in the survey area. That is, if 10% or more occupied or suitable habitat is impacted by the proposed project, the impact would be considered significant and mitigation required, if feasible.

The total acreage of potential habitat in the survey area and the percentage of this habitat directly impacted by proposed construction activities is listed above for each special-status wildlife species observed or considered highly or moderately likely to occur on the project site. By our analysis, none of the special-status wildlife species will have greater than 10% of their total potential habitat on the project site directly impacted by construction activities and thus there will be no significant project impacts on any of the special-status wildlife species.

Significance Finding – Project Impacts: Less Than Significant. Direct and indirect project impacts are below the significance threshold and are less than significant.

Significance Finding – Cumulative Impacts: Less Than Significant. Direct and indirect project impacts are below the significance threshold and are less than significant.

Avoidance and Minimization Measures: The proposed project will affect 0.004% of the 323 acres of *Salvia leucophylla* Shrubland Alliance and *Deinandra fasciculata* Herbaceous Alliance that makes up the potential special-status wildlife species habitat in the project survey area. DMEC does not consider this to be a significant impact by the defined significance threshold.

IMPACT 5. POTENTIAL TEMPORARY OR PERMANENT HARM TO INDIVIDUALS OF SPECIAL-STATUS SPECIES BY CONSTRUCTION ACTIVITIES

Temporary harm to, or permanent loss of, any special-status wildlife species onsite is considered a significant impact; therefore, all potential impacts to special-status wildlife species should be avoided and minimized to the maximum extent possible. Mobile species such as birds and bats and large species such as Badger seem likely to avoid the development zone of the proposed project; however, this should not be assumed. Likewise, there are several non-volant special-status species such as the *Helminthoglypta* and *Haplotrema* snail species and San Diego Desert Woodrat that may occur in the proposed development zone and be unable to escape or avoid the impact of construction activities of their own accord.

Significance Finding – Project Impacts: Potentially Significant but Mitigable. Mitigation Measure 3 (Conduct Pre-construction Surveys to Locate and Relocate Any Special-status Wildlife Species Onsite) would mitigate for this potential significant impact of temporary harm to or permanent loss of any individuals of special-status wildlife species due to construction activities (including grading, building, and fuel modification).

Significance Finding – Cumulative Impacts: Potentially Significant but Mitigable. Mitigation Measure 3 would mitigate for this potential significant impact of temporary harm to or permanent loss of any individuals of special-status wildlife species due to construction activities.



Avoidance and Minimization Measures: Pre-construction surveys will locate any special-status wildlife species in the construction zone and avoid significant impacts by removing them from the construction zone.

MITIGATION MEASURE 3: CONDUCT PRE-CONSTRUCTION SURVEYS TO LOCATE AND RELOCATE ANY SPECIAL-STATUS WILDLIFE SPECIES ONSITE

Impact & Mitigation Goal: Avoid loss of any wildlife species individuals.

Mitigation Action: Prior to grading or site-clearing activities, a qualified biologist shall survey the construction areas of the site to determine if wildlife species are foraging, frequenting, or nesting on or adjacent to the construction areas. If any wildlife species are observed foraging, frequenting, denning, or nesting during construction activities, the wildlife biologist shall allow the wildlife species to escape or shall relocate the wildlife species to a preserved area with similar required habitat. Active bird nests must be avoided.

Monitoring & Timing: Pre-construction surveys completed two weeks and immediately prior to any disturbance would ensure that impacts to any special-status wildlife species are minimized. Special-status wildlife species found within the construction zone shall be captured and relocated onsite.

Standard of Success: Avoidance of impacts to individual wildlife species.

Mapped Information: None

IMPACT 6. LOSS OF AND DISTURBANCE TO BREEDING AND NESTING BIRDS DURING CONSTRUCTION

The potential for temporary harm to, or permanent loss of, observed and expected **breeding birds** within the project area exists, especially with use of heavy equipment during construction. For example, birds (migratory or nesting birds) may be harmed or lost due to vegetation clearing with the use of heavy equipment or brush clearing. Take (killing, disturbance, harassing, etc.) of active bird nests is prohibited by California Fish and Game Code Section 3503, and the Migratory Bird Treaty Act protects migratory birds.

Significance Finding – Project Impacts: Potentially Significant but Mitigable. Mitigation Measure 5 (Protect Bird Nests) will reduce project impacts to less-than-significant levels.

Significance Finding – Cumulative Impacts: Potentially Significant but Mitigable. Mitigation Measure 5 (Protect Bird Nests) will reduce cumulative impacts to less-than-significant levels.

Avoidance and Minimization Measures: Mitigation Measure 4 (Protect Bird Nests), described below, includes avoidance measures.

MITIGATION MEASURE 4: PROTECT BIRD NESTS

Impact & Mitigation Goal: Avoid the potential loss of protected native birds and their nests.

Mitigation Action: Avoid violating the Migratory Bird Treaty Act or California Fish and Game Code §3503.

Supplemental Surveys. A qualified biologist shall survey the construction site prior to nesting season to identify any nests of birds that would be directly or indirectly affected by the construction activities. If nests were found prior to nesting season, then an additional survey two weeks prior to initiation of site disturbance would be required to further identify any nests that would be directly or indirectly affected by the construction activities. Bird nesting typically occurs from February through August. Some bird species nest outside this period.

Netting. If the survey prior to the nesting season identified no nests onsite, barrier nets can be placed over vegetation to prohibit any nesting onsite during the construction period. This would result in only a temporal (one season) loss of nesting habitat onsite. The nets shall be made of fine mesh so to allow light and invertebrates to pass through but prevent birds from passing through the mesh and establishing nests within the construction zone.

Active Nests. To protect any active nest sites, the following restrictions on construction are required between February and August (or until nests are no longer active as determined by a qualified biologist). Clearing limits shall be established a minimum of 300 feet in any direction from any occupied nest (or as otherwise deemed appropriate by the monitoring biologist). Access and land surveying shall not be allowed within 100 feet of any occupied nest (or as otherwise deemed appropriate by the monitoring biologist). Onsite nests shall be avoided until vacated. Any encroachment into the 300/100-foot-buffer area around the known nest shall only be allowed if it is determined by a qualified biologist that the proposed activity would not disturb the nest occupants. Construction during the non-nesting season shall occur at the sites only if a qualified biologist has determined that fledglings have left the nest. Occupied nests adjacent to the construction site(s) may need to be avoided for short durations to ensure nesting success. Any nest permanently vacated for the season need not be protected.

Monitoring & Timing: Survey of site prior to nesting season to identify any nests of birds that would be directly or indirectly affected by the construction activities and possibly a pre-construction survey of the construction site two weeks prior to initiation of site disturbance.

Standard of Success: Avoidance of nesting birds and implementing avoidance measures.

Mapped Information: None

Summary of Impacts to Special-status Habitats

B. Wetland Habitats

Project: LS; Cumulative: LS

There are no impacts to wetland habitats on the project site as the project sites are both at least 100 feet away from any wetlands in the survey area.



Significance Finding for Point Broadcasting LLC Project Impacts on Wetlands – Project Impacts: Less Than Significant.

Significance Finding for Point Broadcasting LLC Project Impacts on Wetlands – Cumulative Impacts: Less Than Significant

C. Coastal Habitats
N/A

Project: N/A Cumulative:

The project site is not located within or adjacent to the coastal zone, nor is there significant habitat connectivity between the survey area and the coastal zone.

D. Wildlife Movement and Connectivity (migration corridors) Project: LS; Cumulative: LS

IMPACT 7. DISRUPTION OF WILDLIFE MOVEMENT AND CONNECTIVITY

The project site is mapped by South Coast Wildlands (Penrod et al. 2006) as existing within core wildlife habitat. The project site should be considered to be core habitat rather than as a wildlife corridor. DMEC finds that the proposed project will not significantly impact regional wildlife corridors in the vicinity of the project site.

The radio tower and support facilities will be automated and there will be no significant human presence or disturbance associated with them. Therefore, the proposed project should not cause any significant disturbance to wildlife movement through the project area. The tower has been designed without guywires so that it will not pose collision hazards to the California Condor or other bird species moving through the project area.

Significance Finding for Point Broadcasting LLC Project as a Wildlife Corridor – Project Impacts: Less Than Significant. DMEC finds that the project site functions as core habitat rather than as a linkage, corridor, route, chokepoint, or stepping stone corridor. Wildlife movement would not be affected by this project.

Significance Finding for Point Broadcasting LLC Project as a Regional Wildlife Corridor – Cumulative Impacts: Less Than Significant. DMEC finds that the project site functions as core habitat rather than as a linkage, corridor, route, chokepoint, or stepping stone corridor.

E. Locally Important Species/Communities

Project: LS Cumulative: LS

The radio tower project site will impact *Deinandra fasciculata* Alliance (California Annual Grassland Alliance) and *Salvia leucophylla* Alliance (California Coastal Scrub Alliance) are locally sensitive communities. The project site will impact 0.15% of *Deinandra fasciculata* Alliance



(0.235 acre of 156.32 acres in the survey area) and 0.57% of *Salvia leucophylla* Alliance (0.915 acre of 160.03 acres in the survey area). DMEC determines that the project impacts on these communities at both project and cumulative levels is less-than-significant.

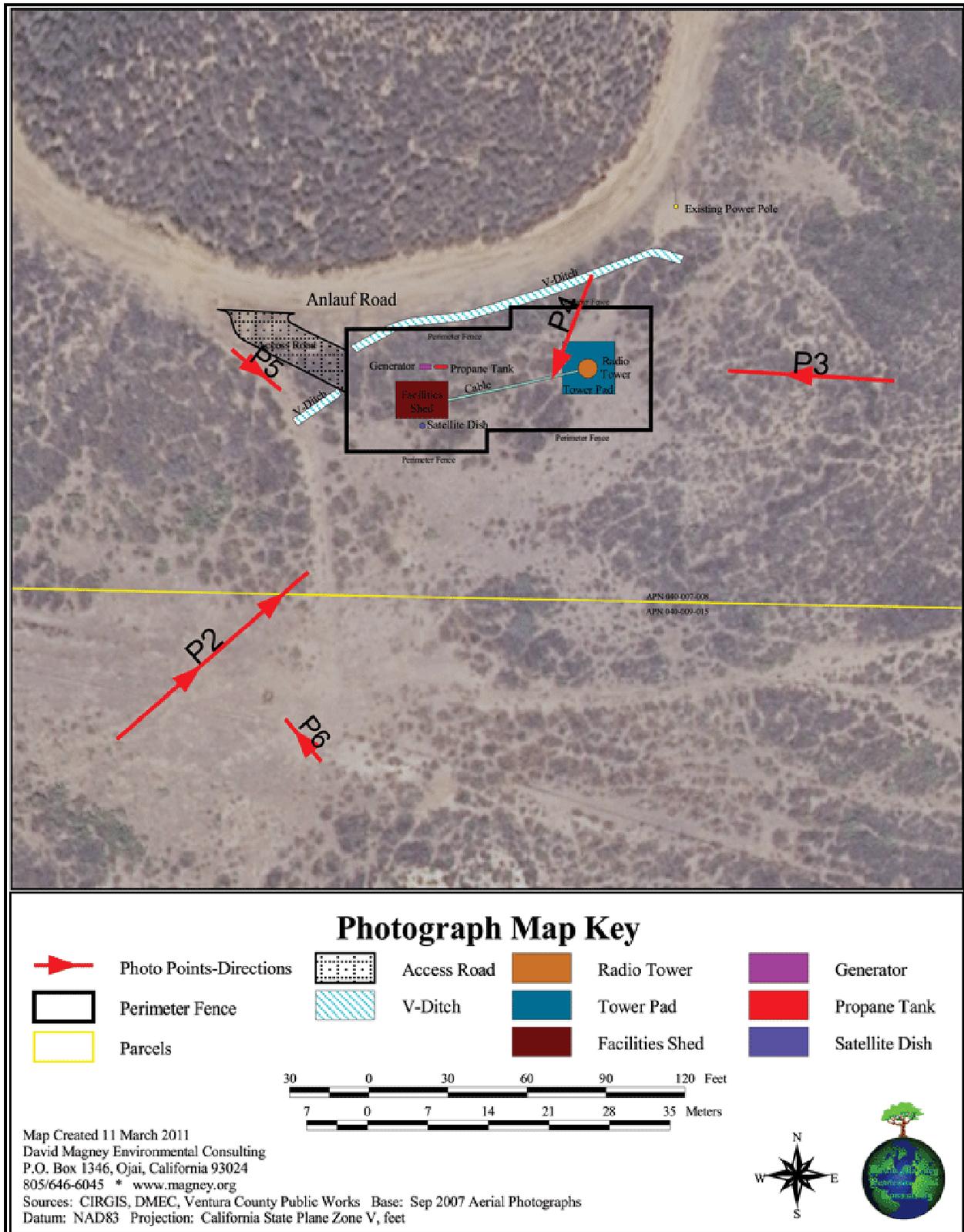
Significance Finding for Point Broadcasting LLC Project Impacts on Locally Important Species/Communities – Project Impacts: Less Than Significant.

Significance Finding for Point Broadcasting LLC Project Impacts on Locally Important Species/Communities – Cumulative Impacts: Less Than Significant

SECTION 5. PHOTOGRAPHS

This section includes selected photographs of the two proposed radio tower site along Anlauf Road in the Anlauf Oil Field on the south slope of Santa Paula Ridge.

Figure 15. Key Map of Photograph Views



Location	
South slope of Santa Paula Ridge	
Map Key	
P1	
Direction	
Vertical	
Description	
Aerial photo of survey area. Tower site is in center of photo, showing perimeter fence location. Taken September 2007.	
Location	
Clark parcel tower site	
Map Key	
P2	
Direction	
East-northeast	
Description	
View of radio tower site taken from unused oil service road. Taken 18 April 2008.	

Location	
Tower site	
Map Key	
P3	
Direction	
West	
Description	
View of radio tower site taken from approximate location of proposed radio tower pad. Taken 18 April 2008.	
Location	
Tower site	
Map Key	
P4	
Direction	
South-southwest	
Description	
View of radio tower site taken from just below Anlauf Road. Taken 18 April 2008.	

Location	
Tower site	
Map Key	
P5	
Direction	
Southeast	
Description	
View of tower existing access road, which will be used to assemble the tower. Taken 12 August 2008.	
Location	
Tower site	
Map Key	
P6	
Direction	
Northeast	
Description	
View of tower site of Wildflower Field vegetation dominated by <i>Sisyrinchium bellum</i> (Blue-eyed Grass). Taken 18 April 2008.	



SECTION 6. ACKNOWLEDGEMENTS

This report was written by David Magney, David Brown, and Callen Huff (earlier draft). Mr. Magney and Cher Batchelor conducted the biological resources survey in July 2006. Mr. Magney and William Abbott conducted the biological resources survey in March 2007. Mr. Abbott and Ms. Batchelor conducted the biological resources survey in April 2007. Mr. Magney and Steve Hoskinson conducted the biological resources survey in April 2008 and Mr. Magney surveyed again in August 2008. Mr. Magney and Mr. Brown conducted the biological resources survey in May 2010. Mr. Magney and Mr. Abbott mapped all vegetation onsite and delineated recommended access routes.

Carol Witham and Robert Preston provided identification confirmation on *Plagiobothrys acanthocarpus* and *P. canescens*.

Erik Nagy (Jensen Design and Survey, Inc.), Miles Sexton (Point Broadcasting LLC), and John Hearne (Getting Air), provided information about the project site and details about the proposed project.

SECTION 7. CITATIONS

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PERSONAL COMMUNICATION

- Personal communication with Carol Witham and Rob Preston, independent botanists, email correspondence of 23 April 2007 and 5 May 2007 (cwitham@ncal.net) regarding *Plagiobothrys acanthocarpus* identification.
- Personal communication with Joseph Brandt, USFWS California Condor Biologist, e-mail correspondence of 13 January 2010 regarding concerns with radio tower design as potential condor collision hazard.



APPENDICES

APPENDIX A – SUMMARY OF BIOLOGICAL RESOURCE REGULATIONS

APPENDIX B– PLANT SPECIES OBSERVED ONSITE

APPENDIX C – WILDLIFE SPECIES OBSERVED AND EXPECTED ONSITE

APPENDIX D - CNDDDB REPORT

APPENDIX E – COMPLETED CNDDDB FORMS



APPENDIX A – SUMMARY OF BIOLOGICAL RESOURCE REGULATIONS



Summary of Biological Resource Regulations

The Ventura County Planning Division, as “lead agency” under CEQA for issuing discretionary land use permits, uses the relationship of a potential environmental effect from a proposed project to an established regulatory standard to determine the significance of the potential environmental effect. This Appendix summarizes important biological resource regulations which are used by the Division’s biologists (consultants and staff) in making CEQA findings of significance:

- Sensitive Status Species Regulations
- Nesting Bird Regulations
- Plant Community Regulations
- Waters and Wetlands Regulations
- Coastal Habitat Regulations
- Wildlife Migration Regulations
- Locally Important Species/Communities Regulations

Sensitive Status Species Regulations

Federally Protected Species

Ventura County is home to 29 federally listed endangered and threatened plant and wildlife species. The U.S. Fish and Wildlife Service (USFWS) regulates the protection of federally listed endangered and threatened plant and wildlife species.

FE (Federally Endangered): A species that is in danger of extinction throughout all or a significant portion of its range.

FT (Federally Threatened): A species that is likely to become endangered in the foreseeable future.

FC (Federal Candidate): A species for which USFWS has sufficient information on its biological status and threats to propose it as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

FSC (Federal Species of Concern): A species under consideration for listing, for which there is insufficient information to support listing at this time. These species may or may not be listed in the future, and many of these species were formerly recognized as "Category-2 Candidate" species.

The USFWS requires permits for the ‘taking’ of any federally listed endangered or threatened species. Take is defined by the USFWS as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct; may include significant habitat modification or degradation if it kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering.”

The Endangered Species Act (ESA) does not provide statutory protection for candidate species or species of concern, but USFWS encourages conservation efforts to protect these species. USFWS can set up voluntary Candidate Conservation Agreements and Assurances, which provide non-Federal landowners (public and private) with the assurance that if they implement various conservation activities to protect a given candidate species, they will not be subject to additional restrictions if the species becomes listed under the ESA.

State Protected Species

The California Department of Fish and Game (CDFG) regulates the protection of endangered, threatened, and fully protected species listed under the California Endangered Species Act. Some species may be jointly listed under the State and Federal Endangered Species Acts.

SE (California Endangered): A native species or subspecies which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

ST (California Threatened): A native species or subspecies that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as "rare" on or before January 1, 1985, is a "threatened species."



SFP (California Fully Protected Species): This designation originated from the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians, reptiles, and birds. Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations.

SR (California Rare): A species, subspecies, or variety of plant is rare under the Native Plant Protection Act when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. Animals are no longer listed as rare; all animals listed as rare before 1985 have been listed as threatened.

SSC (California Species of Special Concern): Animals that are not listed under the California Endangered Species Act, but which nonetheless 1) are declining at a rate that could result in listing, or 2) historically occurred in low numbers and known threats to their persistence currently exist.

The CDFG requires permits for the taking of any State-listed endangered, threatened, or fully protected species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the California Fish and Game Commission determines to be endangered or threatened. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

The California Native Plant Protection Act protects endangered and rare plants of California. Section 1908, which regulates plants listed under this act, states: "no person shall import into this state, or take, possess, or sell within this state, except as incident to the possession or sale of the real property on which the plant is growing, any native plant, or any part or product thereof, that the commission determines to be an endangered native plant or rare native plant, except as otherwise provided in this chapter."

The California Endangered Species Act does not provide statutory protection for California species of special concern, but they should be considered during the environmental review process.

California Native Plant Society Listed Species

Plants with CNPS listings 1A, 1B and 2 should always be addressed in CEQA documents. Plants with CNPS listings 3 and 4 do not explicitly qualify for legal protection, but can be addressed in CEQA documents depending on the circumstances and opinion of the biologist conducting the assessment.

CNPS 1A: Plants presumed to be extinct because they have not been seen or collected in the wild in California for many years. This list includes plants that are both presumed extinct in California, as well as those plants which are presumed extirpated in California. A plant is extinct in California if it no longer occurs in or outside of California. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

CNPS 1B: Plants that are rare throughout their range with the majority of them endemic to California. Most of the plants of List 1B have declined significantly over the last century.

CNPS 2: Plants that are rare throughout their range in California, but are common beyond the boundaries of California. List 2 recognizes the importance of protecting the geographic range of widespread species.

Plants identified on CNPS Lists 1A, 1B, and 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. They should be fully considered during preparation of environmental documents relating to CEQA.

CNPS 3: A review list for plants for which there is inadequate information to assign them to one of the other lists or to reject them.

CNPS 4: A watch list for plants that are of limited distribution or infrequent throughout a broader area in California and their vulnerability or susceptibility to threat appears relatively low at this time.

Global and Subnational Rankings

Though not associated directly with legal protections, species have been given a conservation status rank by NatureServe, an international non-profit conservation organization that is the leading source for information about rare and endangered species and threatened ecosystems. The Ventura County Planning Division considers the following ranks as sensitive for the purposes of CEQA impact assessment (G = Global, S = Subnational or State):

G1 or S1 - Critically Imperiled

G2 or S2 – Imperiled

G3 or S3 - Vulnerable to extirpation or extinction



Locally Important Species

Locally important species' protections are addressed in a separate Appendix document, "Locally Important Species/Communities Regulations."

For lists of some of the species in Ventura County that are protected by the above regulations, go to www.ventura.org/rma/planning/bio_resources/index.htm.

Nesting Bird Regulations

The Federal Migratory Bird Treaty Act (MBTA) and the California Department of Fish and Game (CDFG) Code (3503, 3503.5, 3511, 3513 and 3800) protect most native birds. In addition, the federal and state endangered species acts protect some bird species listed as threatened or endangered. Project-related impacts to birds protected by these regulations would occur during the breeding season, because unlike adult birds, eggs and chicks are unable to escape impacts.

The MBTA implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and Russia for the protection of migratory birds, which occur in two of these countries over the course of one year. The Act maintains that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (Title 50 of the Code of Federal Regulations, Section 10.13 as updated by the 1983 American Ornithologists' Union (AOU) Checklist and published supplements through 1995 by the USFWS).

CDFG Code 3513 upholds the MBTA by prohibiting any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA. In addition, there are CDFG Codes (3503, 3503.5, 3511, and 3800) which further protect nesting birds and their parts, including passerine birds, raptors, and state "fully protected" birds.

NOTE: These regulations protect almost all *native nesting birds*, not just sensitive status birds.

Plant Community Regulations

Plant communities are provided legal protection when they provide habitat for protected species, when the community is in the coastal zone and qualifies as environmentally sensitive habitat area (ESHA), or when the community qualifies as locally important.

Global and Subnational Rankings

Though not associated directly with legal protections, plant communities have been given a conservation status rank by NatureServe, an international non-profit conservation organization that is the leading source for information about rare and endangered species and threatened ecosystems. The Ventura County Planning Division considers the following ranks as sensitive for the purposes of CEQA impact assessment (G = Global, S = Subnational or State):

- G1 or S1 - Critically Imperiled
- G2 or S2 - Imperiled
- G3 or S3 - Vulnerable to extirpation or extinction

CDFG Rare

Rare natural communities are those communities that are of highly limited distribution. These communities may or may not contain rare, threatened, or endangered species. Though the Native Plant Protection Act and the California Endangered Species Act provide no legal protection to plant communities, CDFG considers plant communities that are ranked G1-G3 or S1-S3 (as defined above) to be rare or sensitive, and therefore these plant communities should be addressed during CEQA review.

Environmentally Sensitive Habitat Areas

The Coastal Act specifically calls for protection of "environmentally sensitive habitat areas" or ESHA, which it defines as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of

their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments” (Section 30107.5).

ESHA has been specifically defined in the Santa Monica Mountains. For projects in this location, the Coastal Commission, the agency charged with administering the Coastal Act, has developed a specific three-part test for determining whether habitat there should be considered coastal sage scrub/chaparral ESHA. A memo from a Coastal Commission biologist outlining this test can be found at:

www.ventura.org/rma/planning/pdf/bio_resources/ESHA_Santa_Monica_Mountains.pdf.

Locally Important Communities

The Ventura County Initial Study Assessment Guidelines defines a locally important community as one that is considered by qualified biologists to be a quality example characteristic of or unique to the County or region, with this determination being made on a case-by-case basis. The County has not developed a list of locally important communities, but has deemed oak woodlands to be a locally important community.

Waters and Wetlands Regulations

Numerous agencies control what can and cannot be done in or around streams and wetlands. If a project affects an area where water flows, ponds or is present even part of the year, it is likely to be regulated by one or more agencies. Many wetland or stream projects will require three main permits or approvals (in addition to CEQA compliance). These are:

- 404 Permit (U.S. Army Corps of Engineers)
- 401 Certification (Regional Water Quality Control Board)
- Streambed Alteration Agreement (California Department of Fish and Game)

In addition, the Ventura County General Plan calls for protection of wetlands and there are several other federal, state and local permits that could be required when a project involves disturbance to wetlands or waters. For a more thorough explanation of wetland permitting, see the Ventura County’s “Wetland Project Permitting Guide” at www.ventura.org/rma/planning/pdf/prog_servs/bio_resources/FinalPDF.pdf.

404 Permit (U.S. Army Corps of Engineers)

Most projects that involve streams or wetlands will require a 404 Permit from the U.S. Army Corps of Engineers (USACE). Section 404 of the federal Clean Water Act is the primary federal program regulating activities in wetlands. The Act regulates areas defined as “waters of the United States.” This includes streams, wetlands in or next to streams, areas influenced by tides, navigable waters, lakes, reservoirs and other impoundments. For nontidal waters, USACE jurisdiction extends up to what is referred to as the “ordinary high water mark” as well as to the landward limits of adjacent Corps-defined wetlands, if present. The ordinary high water mark is an identifiable natural line visible on the bank of a stream or water body that shows the upper limit of typical stream flow or water level. The mark is made from the action of water on the streambank over the course of years.

Permit Triggers: A USACE 404 Permit is triggered by moving (discharging) or placing materials—such as dirt, rock, geotextiles, concrete or culverts—into or within USACE jurisdictional areas. This type of activity is also referred to as a “discharge of dredged or fill material.”

401 Certification (Regional Water Quality Control Board)

If your project requires a USACE 404 Permit, then you will also need a Regional Water Quality Control Board (RWQCB) 401 Certification. The federal Clean Water Act, in Section 401, specifies that states must certify that any activity subject to a permit issued by a federal agency, such as the USACE, meets all state water quality standards. In California, the state and regional water boards are responsible for certification of activities subject to USACE Section 404 Permits.

Permit Trigger: A RWQCB 401 Certification is triggered whenever a USACE 404 Permit is required, or whenever an activity could cause a discharge of dredged or fill material into waters of the U.S. or wetlands.

Streambed Alteration Agreement (California Department of Fish and Game)

If your project includes alteration of the bed, banks or channel of a stream, or the adjacent riparian vegetation, then you may need a Streambed Alteration Agreement from the California Department of Fish and Game (CDFG). The California Fish and Game Code, Sections 1600-1616, regulates activities that would alter the flow, bed, banks, channel or associated riparian areas of a river, stream or lake—all considered “waters of the state.” The law requires any person, state or local governmental agency or public utility to notify CDFG before beginning an activity that will substantially modify a river, stream or lake.

Permit Triggers: A Streambed Alteration Agreement (SAA) is triggered when a project involves altering a stream or disturbing riparian vegetation, including any of the following activities:

- Substantially obstructing or diverting the natural flow of a river, stream or lake
- Using any material from these areas
- Disposing of waste where it can move into these areas

Some projects that involve routine maintenance may qualify for long-term maintenance agreements from CDFG. Discuss this option with CDFG staff.

Ventura County General Plan

The Ventura County General Plan contains policies which also strongly protect wetland habitats.

Biological Resources Policy 1.5.2-3 states:

Discretionary development that is proposed to be located within 300 feet of a marsh, small wash, intermittent lake, intermittent stream, spring, or perennial stream (as identified on the latest USGS 7½ minute quad map), shall be evaluated by a County approved biologist for potential impacts on wetland habitats. Discretionary development that would have a significant impact on significant wetland habitats shall be prohibited, unless mitigation measures are adopted that would reduce the impact to a less than significant level; or for lands designated "Urban" or "Existing Community", a statement of overriding considerations is adopted by the decision-making body.

Biological Resources Policy 1.5.2-4 states:

Discretionary development shall be sited a minimum of 100 feet from significant wetland habitats to mitigate the potential impacts on said habitats. Buffer areas may be increased or decreased upon evaluation and recommendation by a qualified biologist and approval by the decision-making body. Factors to be used in determining adjustment of the 100 foot buffer include soil type, slope stability, drainage patterns, presence or absence of endangered, threatened or rare plants or animals, and compatibility of the proposed development with the wildlife use of the wetland habitat area. The requirement of a buffer (setback) shall not preclude the use of replacement as a mitigation when there is no other feasible alternative to allowing a permitted use, and if the replacement results in no net loss of wetland habitat. Such replacement shall be "in kind" (i.e. same type and acreage), and provide wetland habitat of comparable biological value. On-site replacement shall be preferred wherever possible. The replacement plan shall be developed in consultation with California Department of Fish and Game.

Coastal Habitat Regulations

Ventura County's Coastal Area Plan and the Coastal Zoning Ordinance, which constitute the "Local Coastal Program" (LCP) for the unincorporated portions of Ventura County's coastal zone, ensure that the County's land use plans, zoning ordinances, zoning maps, and implemented actions meet the requirements of, and implement the provisions and polices of California's 1976 Coastal Act at the local level.

Environmentally Sensitive Habitats

The Coastal Act specifically calls for protection of “environmentally sensitive habitat areas” or ESHA, which it defines as: “Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments” (Section 30107.5).

Section 30240 of the Coastal Act states:



- (a) "Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas."
- (b) "Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas."

There are three important elements to the definition of ESHA. First, a geographic area can be designated ESHA either because of the presence of individual species of plants or animals or because of the presence of a particular habitat. Second, in order for an area to be designated as ESHA, the species or habitat must be either rare or it must be especially valuable. Finally, the area must be easily disturbed or degraded by human activities.

Protection of ESHA is of particular concern in the southeastern part of Ventura County, where the coastal zone extends inland (~5 miles) to include an extensive area of the Santa Monica Mountains. The Coastal Commission, the agency charged with administering the Coastal Act, developed a specific three-part test for determining whether habitat in the Malibu area of the Santa Monica Mountains should be considered coastal sage scrub/chaparral ESHA. Given that Malibu is immediately adjacent to the Ventura County part of the Santa Monica Mountains, this three-part test can be used for assessing whether coastal sage scrub and chaparral habitat in the Ventura County coastal zone meets the definition of ESHA. A memo from a Coastal Commission biologist outlines this test and can be found at:

www.ventura.org/rma/planning/pdf/bio_resources/ESHA_Santa_Monica_Mountains.pdf.

The County's Local Coastal Program outlines other specific protections to environmentally sensitive habitats in the Coastal Zone, such as to wetlands, riparian habitats and dunes. Protections in some cases are different for different segments of the coastal zone.

Copies of the Coastal Area Plan and the Coastal Zoning Ordinance can be found at:

www.ventura.org/rma/planning/programs_services/local_coast/local_coast.htm.

Wildlife Migration Regulations

The Ventura County General Plan specifically includes wildlife migration corridors as an element of the region's significant biological resources. In addition, protecting habitat connectivity is critical to the success of sensitive species and other biological resource protections. Potential project impacts to wildlife migration are analyzed by biologists on a case-by-case basis. The issue involves both a macro-scale analysis—where routes used by large carnivores connecting very large core habitat areas may be impacted—as well as a micro-scale analysis—where a road or stream crossing may impact localized movement by many different animals.

Locally Important Species/Communities Regulations

Locally important species/communities are considered to be significant biological resources in the Ventura County General Plan, thus one of the County's threshold criteria for the evaluation of impacts to biological resources is whether the project impacts locally important species/communities.

Locally Important Species

The following criteria were developed with the assistance of local biologists:

Locally Important Animal Species Criteria

1. Taxa for whom habitat in Ventura County is crucial for their existence either globally or in Ventura County. This includes taxa for whom:
 - Populations in Ventura County represents 10% or more of the known extant global distribution; or
 - In Ventura County, there are less than 6 element occurrences, or less than 1,000 individuals, or less than 2,000 acres.
2. Native taxa that are generally declining throughout their range and/or are in danger of extirpation in Ventura County.



Locally Important Plant Species Criteria

A locally important plant is a taxon that is declining throughout the extent of its range AND has a maximum of five (5) element occurrences in Ventura County.

Locally Important Animal and Plant Species Criteria

In some cases, to be determined on an individual basis, there are taxa whose population(s) do not qualify as locally important species; however, certain locations where a taxon occurs will be defined as locally important. This includes:

 If known, the published type locality for a holotype specimen.

 The edge of a taxon's range. This criterion does not apply to non-native taxa or those taxa whose range and population(s) size is expanding.

The County maintains a list of locally important species, which can be found on the Planning Division website at: www.ventura.org/rma/planning/programs_services/bio_resources/bio_resources.htm. *This list should not be considered comprehensive.* Any species that meets the criteria qualifies as locally important, whether or not it is included on this list.

Locally Important Communities

The Ventura County Initial Study Assessment Guidelines defines a locally important community as one that is considered by qualified biologists to be a quality example characteristic of or unique to the County or region, with this determination being made on a case-by-case basis. The County has not developed a list of locally important communities. Oak woodlands have however been deemed by the Ventura County Board of Supervisors to be a locally important community.

The state passed legislation in 2001, the Oak Woodland Conservation Act, to emphasize that oak woodlands are a vital and threatened statewide resource. In response, the County of Ventura prepared and adopted an Oak Woodland Management Plan that recommended, among other things, amending the County's Initial Study Assessment Guidelines to include an explicit reference to oak woodlands as part of its definition of locally important communities. The Board of Supervisors approved this management plan and its recommendations.



APPENDIX B – PLANT SPECIES OBSERVED ONSITE

Plants Observed at the Point Broadcasting LLC Radio Tower Survey Area

Scientific Name ³²	Common Name	Habit ³³	WIS ³⁴	Family	Voucher ³⁵
Lichens					
<i>Acarospora</i> sp.	Cracked Lichen	CL	.	Acarosporaceae	
<i>Buellia</i> sp.	Ascolichen	CL	.	Buelliaceae	
<i>Caloplaca</i> sp.	Firedot Lichen	CL	.	Caloplacaceae	
<i>Candelaria</i> cf. <i>pacifica</i>	Candleflame Lichen	FoL	.	Candelariaceae	
<i>Candelariella</i> sp.	Eggyolk Lichen	FoL	.	Candelariaceae	
<i>Lecanora</i> sp.	Rim-lichen	CL	.	Lecanoraceae	
<i>Umbilicaria phaea</i>	Rock Trip	FoL	.	Umbilicariaceae	
<i>Xanthoparmelia</i> sp.	Rock-shield	FoL	.	Parmeliaceae	
<i>Xanthoria</i> cf. <i>polycarpa</i>	Pin-cushion Sunburst Lichen	FoL	.	Teloschistaceae	
Vascular Plants					
<i>Achillea millefolium</i> var. <i>californica</i>	California White Yarrow	PH	FACU	Asteraceae	
<i>Acourtia microcephala</i>	Sacapellote	PH	.	Asteraceae	63-07
<i>Ambrosia psilostachya</i> var. <i>californica</i>	Western Ragweed	BH	FAC	Asteraceae	
<i>Amsinckia menziesii</i> var. <i>intermedia</i>	Rancher's Fire	AH	.	Boraginaceae	
<i>Anagallis arvensis</i> *	Scarlet Pimpernel	AH	FAC	Primulaceae	
<i>Anthemis cotula</i> *	Mayweed	AH	FACU	Asteraceae	49-08
<i>Artemisia californica</i>	California Sagebrush	S	.	Asteraceae	
<i>Artemisia douglasiana</i>	Mugwort	PH	FACW	Asteraceae	
<i>Asclepias</i> cf. <i>eriocarpa</i>	Indian Milkweed	AH	.	Apocynaceae	
<i>Asclepias fascicularis</i>	Narrowleaf Milkweed	PH	FAC	Apocynaceae	
<i>Avena barbata</i> *	Slender Wild Oat	AG	.	Poaceae	
<i>Baccharis pilularis</i>	Coyote Brush	S	(FAC-)	Asteraceae	
<i>Baccharis plummerae</i> var. <i>plummerae</i>	Plummer Baccharis	S	.	Asteraceae	65-07
<i>Baccharis salicifolia</i>	Mulefat	S	FACW	Asteraceae	

³² * = Introduced/naturalized plant species. **Bold** = Special-status species.

Scientific and common names follow Hickman (1993) and Flora of North America (Flora of North America Editorial Committee 1993+). Lichen scientific and common names follow Brodo et al. (2001).

³³ Habit definitions: AG = annual grass or graminoid; PG = perennial grass or graminoid; AH = annual herb; PH = perennial herb; PV = perennial vine; PF = perennial fern or fern ally; S= shrub; T = tree; CL = crustose lichen; FoL = foliose lichen; FrL = fruticose lichen.

³⁴ WIS = Wetland Indicator Status. The following code definitions are according to Reed (1988):

OBL = obligate wetland species, occurs almost always in wetlands (>99% probability).

FACW = facultative wetland species, usually found in wetlands (67-99% probability).

FAC = facultative species, equally likely to occur in wetlands or nonwetlands (34-66% probability).

FACU = facultative upland species, usually found in nonwetlands (67-99% probability).

+ or - symbols are modifiers that indicate greater or lesser affinity for wetland habitats.

NI = no indicator has been assigned due to a lack of information to determine indicator status.

* = a tentative assignment to that indicator status by Reed (1988).

Parentheses indicate a wetland status as suggested by David L. Magney based on extensive field observations.

³⁵ Vouchers are those of David Magney. All specimens will be deposited at the herbarium at UCSB.



Scientific Name ³²	Common Name	Habit ³³	WIS ³⁴	Family	Voucher ³⁵
<i>Bloomeria crocea</i> ssp. <i>crocea</i>	Goldenstars	PH	.	Themidaceae	
<i>Brachypodium distachyon</i> *	Short-pediceled Brome	AH	.	Poaceae	
<i>Brassica nigra</i> *	Black Mustard	AH	.	Brassicaceae	
<i>Brickellia californica</i>	California Brickellbush	S	FACU	Asteraceae	
<i>Bromus carinatus</i> var. <i>carinatus</i>	California Brome	PG	.	Poaceae	
<i>Bromus diandrus</i> *	Ripgut Grass	AG	(FACU)	Poaceae	
<i>Bromus hordeaceus</i> *	Soft Chess	AG	FACU-	Poaceae	
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	Red Brome	AG	NI	Poaceae	
<i>Calandrinia ciliata</i>	Redmaids	AH	FACU*	Portulacaceae	
<i>Calochortus catalinae</i>	Catalina Mariposa Lily	PH	.	Liliaceae	58-08
<i>Calochortus cf. clavatus</i> ssp. <i>clavatus</i>	Club-haired Mariposa Lily	PH	.	Liliaceae	57-06
<i>Calochortus weedii</i> var. <i>vestus</i>	Late-Flowered Mariposa Lily	PH	.	Liliaceae	50-06
<i>Calystegia macrostegia</i> ssp. <i>cyclostegia</i>	Morning-glory	PV	.	Convolvulaceae	59-06
<i>Camissonia californica</i>	California Primrose	AH	.	Onagraceae	
<i>Camissonia micrantha</i>	Tiny Primrose	AH	.	Onagraceae	
<i>Carduus pycnocephalus</i> *	Italian Thistle	AH	(FACU-)	Asteraceae	
<i>Castilleja affinis</i> ssp. <i>affinis</i>	Lay-&-Collie Indian Paintbrush	PH	.	Orobanchaceae	63-06, 59-07, 57-08
<i>Castilleja exserta</i> ssp. <i>exserta</i>	Purple Owl's Clover	AH	.	Orobanchaceae	68-07
<i>Castilleja foliolosa</i>	Woolly Indian Paintbrush	PH	.	Orobanchaceae	58-07
<i>Ceanothus crassifolius</i> var. _____	Hoaryleaf Ceanothus	S	.	Rhamnaceae	
<i>Ceanothus cuneatus</i> var. <i>cuneatus</i>	Buck Brush	S	.	Rhamnaceae	
<i>Centaurea melitensis</i> *	Tocalote	AH	.	Asteraceae	
<i>Chamomilla suaveolens</i>	Pineapple Weed	AH	FACU	Asteraceae	
<i>Chaenactis glabriuscula</i>	Yellow Pincushion	AH	.	Asteraceae	65-08
<i>Chenopodium album</i> *	Lamb's Quarters	AH	FAC	Chenopodiaceae	
<i>Chenopodium californicum</i>	California Goosefoot	PH	.	Chenopodiaceae	57-07
<i>Chenopodium chenopodioides</i> *	Red Goosefoot	AH	FACW	Chenopodiaceae	37-07
<i>Chenopodium desiccatum</i>	Aridland Goosefoot	AH	.	Chenopodiaceae	230-08
<i>Chlorogalum pomeridianum</i> ssp. <i>pomeridianum</i>	Soap Lily	PH	.	Agavaceae	
<i>Chorizanthe staticoides</i> var. <i>staticoides</i>	Turkish Rugging	AH	.	Polygonaceae	54-06
<i>Cirsium vulgare</i> *	Bull Thistle	BH	FACU	Asteraceae	
<i>Clematis lasiantha</i>	Pipestem Clematis	PV	.	Ranunculaceae	
<i>Conyza canadensis</i>	Horseweed	AH	FAC	Asteraceae	
<i>Cryptantha clevelandii</i>	Cleveland Forget-Me-Not	AH	.	Boraginaceae	55-08
<i>Cryptantha decipiens</i>	Gravel Forget-Me-Not	AH	.	Boraginaceae	48-08
<i>Datura wrightii</i>	Jimson Weed	AH	.	Solanaceae	
<i>Deinandra fasciculata</i>	Fascicled Tarplant	AH	.	Asteraceae	55-06
<i>Dichelostemma capitatum</i> ssp. <i>capitatum</i>	Blue Dicks	PG	.	Themidaceae	



Scientific Name ³²	Common Name	Habit ³³	WIS ³⁴	Family	Voucher ³⁵
<i>Emmenanthe penduliflora</i>	Whispering Bells	AH	.	Boraginaceae	
<i>Encelia californica</i>	California Bush Sunflower	S	.	Asteraceae	
<i>Epilobium canum</i> ssp. <i>canum</i>	California Fuchsia	PH	(FACU)	Onagraceae	
<i>Eremocarpus setigerus</i>	Dove Weed	AH	.	Euphorbiaceae	
<i>Erigeron foliosus</i> var. <i>foliosus</i>	Leafy Fleabane	PH	.	Asteraceae	61-06
<i>Eriodictyon crassifolium</i> var. <i>nigrescens</i>	Thickleaf Yerba Santa	S	.	Boraginaceae	51-07
<i>Eriogonum elongatum</i> var. <i>elongatum</i>	Long-stemmed Buckwheat	PH	.	Polygonaceae	58-06
<i>Eriogonum fasciculatum</i> var. <i>foliolosum</i>	Leafy California Buckwheat	S	.	Polygonaceae	
<i>Eriogonum latifolium</i>	Coast Buckwheat	PH	.	Polygonaceae	
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	Golden Yarrow	PH	.	Asteraceae	
<i>Erodium botrys</i> *	Broadleaf Filaree	AH	.	Geraniaceae	
<i>Erodium cicutarium</i> *	Redstem Filaree	AH	(FACU)	Geraniaceae	
<i>Erodium moschatum</i> *	Whitestem Filaree	AH	.	Geraniaceae	
<i>Eschscholzia californica</i>	California Poppy	AH	.	Papaveraceae	
<i>Eucalyptus globulus</i> var. <i>compacta</i> *	Dwarf Tasmanian Blue Gum	T	.	Myrtaceae	
<i>Eucalyptus globulus</i> var. <i>globulus</i> *	Tasmanian Blue Gum	T	.	Myrtaceae	
<i>Eucrypta chrysanthemifolia</i> ssp. <i>chrysanthemifolia</i>	Common Eucrypta	AH	.	Boraginaceae	
<i>Filago californica</i>	California Filago	AH	.	Asteraceae	50-08
<i>Filago gallica</i> *	Woolly Filago	AH	.	Asteraceae	53-06
<i>Galium angustifolium</i> var. <i>angustifolium</i>	Chaparral Bedstraw	S	.	Rubiaceae	
<i>Galium aparine</i>	Goose Grass	AH	FACU	Rubiaceae	
<i>Galium nuttallii</i>	Climbing Bedstraw	S	.	Rubiaceae	
<i>Galium porrigens</i> var. <i>porrigens</i>	Climbing Bedstraw	PV	.	Rubiaceae	56-07
<i>Gastridium ventricosum</i> *	Nit Grass	AG	FACU	Poaceae	56-06
<i>Gilia capitata</i> ssp. <i>abrontanifolia</i>	Blue Field Gilia	AH	.	Polemoniaceae	
<i>Gilia clivorum</i>	Island Gilia	AH	.	Polemoniaceae	
<i>Grindelia camporum</i> var. <i>bracteosum</i>	Bracted Gumplant	S	FACU	Asteraceae	60-06
<i>Hazardia squarrosa</i> var. <i>grindelioides</i>	Gum Plant Goldenbush	S	.	Asteraceae	
<i>Hazardia squarrosa</i> var. <i>squarrosa</i>	Sawtooth Goldenbush	S	.	Asteraceae	51-06
<i>Hesperoyucca whipplei</i> ssp. <i>whipplei</i>	Our Lord's Candle	S	.	Agavaceae	
<i>Heteromeles arbutifolia</i> [<i>H. arbutifolia</i>]	Toyon	S	.	Rosaceae	
<i>Hirschfeldia incana</i> *	Summer Mustard	PH	.	Brassicaceae	
<i>Hordeum murinum</i> ssp. <i>glaucum</i> *	Summer Barley	AG	.	Poaceae	52-08
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	Hare Barley	AG	NI	Poaceae	41-07
<i>Hypochaeris glabra</i> *	Smooth Cat's-ear	AH	.	Asteraceae	
<i>Juglans californica</i> var. <i>californica</i>	Southern Calif. Black Walnut	T	FAC	Juglandaceae	
<i>Juncus balticus</i> ssp. <i>mexicanus</i>	Mexican Rush	PG	FACW	Juncaceae	39-07
<i>Juncus patens</i>	Spreading Rush	PH	FAC	Juncaceae	53-08

Scientific Name ³²	Common Name	Habit ³³	WIS ³⁴	Family	Voucher ³⁵
<i>Lactuca serriola</i> *	Prickly Wild Lettuce	AH	FAC	Asteraceae	
<i>Lagophylla ramosissima</i> ssp. <i>ramosissima</i>	Branched Lagophylla	AH	.	Asteraceae	62-06, 228-08
<i>Lamarckia aurea</i> *	Goldentop	AG	.	Poaceae	
<i>Lasthenia gracilis</i> [<i>L. californica</i>]	California Goldfields	AH	FACU*	Asteraceae	43-07
<i>Lathyrus vesitus</i> ssp. _____	Pacific Pea	PH	.	Fabaceae	
<i>Lepidium nitidum</i> var. <i>nitidum</i>	Common Peppergrass	AH	.	Brassicaceae	44-07
<i>Leptosiphon</i> [<i>Linanthus</i>] <i>parviflorus</i>	Yellow Linanthus	AH	.	Polemoniaceae	60-07
<i>Leymus condensatus</i>	Giant Wildrye	PG	FACU	Poaceae	
<i>Lolium multiflorum</i> *	Italian Ryegrass	AG	FAC*	Poaceae	
<i>Lotus purshianus</i> var. <i>purshianus</i>	Spanish Clover	AH	.	Fabaceae	
<i>Lotus scoparius</i> var. <i>scoparius</i>	Deerweed	PH	.	Fabaceae	
<i>Lotus strigosus</i> var. <i>strigosus</i>	Strigose Lotus	AH	.	Fabaceae	
<i>Lotus wrangelianus</i>	Chile Lotus	AH	.	Fabaceae	69-07
<i>Lupinus longifolius</i>	Long-leaved Bush Lupine	S	.	Fabaceae	
<i>Lupinus bicolor</i>	Small Lupine	AH	.	Fabaceae	
<i>Lupinus succulentus</i>	Fleshy Lupine	AH	.	Fabaceae	
<i>Lythrum hyssopifolium</i> *	Hyssop Loosestrife	AH	FACW	Lythraceae	38-07
<i>Madia</i> sp. (not flowering)	Tarplant	AH	.	Asteraceae	
<i>Malosma laurina</i>	Laurelleaf Sumac	S	.	Anacardiaceae	
<i>Malva parviflora</i> *	Cheeseweed	AH	.	Malvaceae	
<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	Large-fruited Man-root	PV	.	Cucurbitaceae	36-07
<i>Marrubium vulgare</i> *	White Horehound	S	FAC	Lamiaceae	
<i>Medicago polymorpha</i> *	Common Burclover	AH	(FACU-)	Fabaceae	
<i>Melica imperfecta</i>	Coast Melic Grass	PG	.	Poaceae	
<i>Melilotus indica</i> *	Yellow Sweetclover	AH	FAC	Fabaceae	
<i>Micropus californicus</i> var. <i>californicus</i>	Slender Cottonweed	AH	.	Asteraceae	66-07, 51-08
<i>Microseris douglasii</i> ssp. <i>douglasii</i>	Douglas Microseris	AH	.	Asteraceae	64-07
<i>Microseris douglasii</i> ssp. <i>tenella</i>	Slender Douglas Microseris	AH	.	Asteraceae	62-07
<i>Mimulus aurantiacus</i> ssp. <i>australis</i>	Bush Monkeyflower	S	.	Phrymaceae	
<i>Mimulus longiflorus</i> var. <i>longiflorus</i>	Sticky Bush Monkeyflower	S	.	Phrymaceae	
<i>Mirabilis laevis</i> var. <i>crassifolia</i>	California Wishbone Bush	PH	.	Nyctaginaceae	
<i>Nassella pulchra</i>	Purple Needlegrass	PG	.	Poaceae	49-07
<i>Navarretia atractyloides</i>	Hollyleaf Skunkweed	PG	.	Poaceae	265-10, 229-08
<i>Nicotiana glauca</i> *	Tree Tobacco	S	FAC	Solanaceae	
<i>Opuntia littoralis</i>	Coastal Prickly Pear	S	.	Cactaceae	
<i>Oxalis albicans</i> ssp. <i>pilosa</i>	Hairy White Wood Sorrel	PH	.	Oxalidaceae	46-07, 66-08
<i>Paeonia californica</i>	California Peony	PH	.	Paeoniaceae	
<i>Pennisetum setaceum</i> *	African Fountain Grass	PG	.	Poaceae	



Scientific Name ³²	Common Name	Habit ³³	WIS ³⁴	Family	Voucher ³⁵
<i>Pentagramma triangularis</i> ssp. <i>triangularis</i>	Goldenback Fern	PF	.	Pteridaceae	
<i>Phacelia cicutaria</i> var. <i>hispida</i>	Hispid Caterpillar Phacelia	AH	.	Boraginaceae	
<i>Phacelia egena</i>	Rock Phacelia	PH	.	Boraginaceae	55-07
<i>Phacelia viscida</i> var. <i>albiflora</i>	White-flowered Viscid Phacelia	AH	.	Boraginaceae	64-08
<i>Phalaris aquatica</i> *	Harding Canarygrass	PG	FACW	Poaceae	
<i>Plagiobothrys acanthocarpus</i>	Adobe Popcornflower	AH	FAC	Boraginaceae	52-07,71-07
<i>Plagiobothrys canescens</i>	Bracted Popcornflower	AH	.	Boraginaceae	70-07
<i>Plagiobothrys nothofulvus</i>	Rusty Popcornflower	AH	FAC	Boraginaceae	42-07,56-08
<i>Plantago erecta</i>	California Plantain	AH	.	Plantaginaceae	67-07
<i>Platanus racemosa</i> var. <i>racemosa</i>	California Sycamore	T	FACW	Platanaceae	
<i>Poa secunda</i> ssp. <i>juncifolia</i>	Rush Bluegrass	PG	.	Poaceae	60-08
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish Milkwort	S	(FAC)	Polygalaceae	
<i>Polypodium californicum</i>	California Polypody	PF	.	Polypodiaceae	
<i>Polypogon monspeliensis</i> *	Rabbitsfoot Grass	AG	FACW+	Poaceae	40-07
<i>Pseudognaphalium californicum</i>	Green Everlasting	A/B H	.	Asteraceae	
<i>Pseudognaphalium luteoalbum</i> *	Cudweed Everlasting	AH	FACW-	Asteraceae	
<i>Pterostegia drymarioides</i>	Fairy Mist	AH	.	Polygonaceae	
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	Coast Live Oak	T	(FACU)	Fagaceae	
<i>Rafinesquia californica</i>	California Chicory	AH	.	Asteraceae	
<i>Ranunculus californicus</i> var. <i>californicus</i>	California Buttercup	PH	FAC	Ranunculaceae	50-07
<i>Rhamnus crocea</i>	Spiny Redberry	S	.	Rhamnaceae	
<i>Rhamnus ilicifolia</i>	Hollyleaf Redberry	S	.	Rhamnaceae	
<i>Rhus integrifolia</i>	Lemonade Berry	S	.	Anacardiaceae	
<i>Ribes malvaceum</i> var. <i>malvaceum</i>	Chaparral Currant	S	.	Grossulariaceae	61-08
<i>Ribes malvaceum</i> var. <i>viridifolium</i>	Chaparral Currant	S	.	Grossulariaceae	
<i>Rumex crispus</i> *	Curly Dock	PH	FACW-	Polygonaceae	
<i>Salix exigua</i>	Narrow-leaved Willow	S	OBL	Salicaceae	
<i>Salix lasiolepis</i> var. <i>lasiolepis</i>	Arroyo Willow	T	FACW	Salicaceae	
<i>Salvia apiana</i>	White Sage	S	.	Lamiaceae	
<i>Salvia columbariae</i>	Chia	AH	.	Lamiaceae	
<i>Salvia leucophylla</i>	Purple Sage	S	.	Lamiaceae	
<i>Sambucus mexicana</i>	Blue Elderberry	S	FAC	Caprifoliaceae	
<i>Sanicula arguta</i>	Southern California Sanicle	PH	.	Apiaceae	47-07
<i>Sanicula crassicaulis</i>	Pacific Sanicle	PH	.	Apiaceae	53-07
<i>Senecio flaccidus</i> var. <i>douglasii</i>	Shrubby Butterweed	S	.	Asteraceae	
<i>Senecio vulgaris</i> *	Common Groundsel	AH	NI*	Asteraceae	
<i>Silene gallica</i> *	Windmill Pink	AH	.	Caryophyllaceae	



Scientific Name ³²	Common Name	Habit ³³	WIS ³⁴	Family	Voucher ³⁵
<i>Silybum marianum</i> *	Milk Thistle	AH	(FACU)	Asteraceae	
<i>Sisyrinchium bellum</i>	Blue-eyed Grass	PH	FAC	Iridaceae	
<i>Solanum douglasii</i>	Douglas Nightshade	PH	FAC	Solanaceae	
<i>Solanum xanti</i> var. <i>xanti</i>	Chaparral Nightshade	S	.	Solanaceae	
<i>Sonchus asper</i> *	Prickly Sow-thistle	AH	FAC	Asteraceae	
<i>Sonchus oleraceus</i> *	Common Sow-thistle	AH	NI*	Asteraceae	
<i>Stellaria media</i> *	Common Chickweed	AH	FACU	Caryophyllaceae	
<i>Stephanomeria virgata</i> ssp. <i>virgata</i>	Twiggy Wreath Plant	AH	.	Asteraceae	
<i>Tauschia hartwegii</i>	Hartweg Tauschia	PH	.	Apiaceae	45-07, 54-07
<i>Toxicodendron diversilobum</i>	Western Poison Oak	S/V	(FACU)	Anacardiaceae	
<i>Uropappus lindleyi</i>	Silver Puffs	AH	.	Asteraceae	61-07,59- 08
<i>Verbena lasiostachys</i> var. <i>lasiostachys</i>	Western Verbena	AH	FAC-	Verbenaceae	35-07
<i>Vicia ludoviciana</i> var. <i>ludovicinana</i>	Vetch	AH	NI	Fabaceae	48-07
<i>Vulpia myuros</i> var. <i>hirsuta</i> *	Foxtail Fescue	AG	FACU*	Poaceae	52-06
<i>Xanthium strumarium</i>	Cocklebur	AH	FAC+	Asteraceae	



APPENDIX C
WILDLIFE SPECIES OBSERVED OR DETECTED IN THE
TOWER SURVEY AREA



Wildlife Species Observed or Detected at the Point Broadcasting LLC Radio Tower Survey Area

Scientific Name ³⁶	Common Name
<i>Reptiles</i>	
<i>Sceloporus occidentalis</i>	Western Fence Lizard
<i>Uta stansburiana elegans</i>	California Side-blotched Lizard
<i>Bird³⁷s</i>	
<i>Accipiter cooperii</i> +	Coopers Hawk
<i>Aphelocoma californica</i> +	Western Scrub-jay
<i>Buteo jamaicensis</i> +	Red-tailed Hawk
<i>Callipepla californica</i>	California Quail
<i>Calypte anna</i> +	Anna's Hummingbird
<i>Carpodacus mexicanus</i> +	House Finch
<i>Cathartes aura</i> +	Turkey Vulture
<i>Chamaea fasciata</i>	Wrentit
<i>Corvus corax</i> +	Common Raven
<i>Empidonax difficilis</i> +	Pacific-slope Flycatcher
<i>Geococcyx californianus</i> +	Greater Roadrunner
<i>Icterus bullockii</i> +	Bullock's Oriole
<i>Mimus polyglottos</i> +	Northern Mockingbird
<i>Petrochelidon pyrrhonota</i> +	Cliff Swallow
<i>Phainopepla nitens</i> +	Phainopepla
<i>Pipilo crissalis</i> +	California Towhee
<i>Pipilo maculatus</i> +	Spotted Towhee
<i>Psaltriparus minimus</i> +	Common Bushtit
<i>Sturnella neglecta</i> +	Western Meadowlark
<i>Tachycineta thalassica</i> +	Violet-Green Swallow
<i>Zenaida macroura</i> +	Mourning Dove
<i>Zonotrichia leucophrys</i> +	White-crowned Sparrow
<i>Mammals</i>	
<i>Canis latrans</i>	Coyote (scat)
<i>Dipodomys</i> sp.	Kangaroo Rat
<i>Neotoma fuscipes macrotis</i>	Long-eared Woodrat (nest)
<i>Neotoma lepida intermedia</i>	San Diego Desert Woodrat (nest)
<i>Odocoileus hemionus</i>	Mule Deer (scat)
<i>Spermophilus beecheyi</i>	California Ground Squirrel

³⁶ **Bold** = Special-status species.

³⁷ + = Birds protected by the Migratory Bird Treaty Act



Scientific Name ³⁶	Common Name
<i>Sylvilagus auduboni</i>	Audubon Cottontail
<i>Taxidea taxus</i>	American Badger (burrow)
<i>Thomomys bottae</i>	Botta's Pocket Gopher (burrow)
<i>Urocyon cinereoargenteus</i>	Gray Fox (scat)
<i>Invertebrates</i>	
Order Araneae (Spiders)	
Family Dipluridae	Funnelweb Spider
Order Acarina (Ticks)	
<i>Dermacentor variabilis</i>	American Dog Tick
Order Hemiptera (True Bugs)	
Family Reduviidae	Assassin Bug
Order Homoptera (Cicadas et al.)	
Family Cicadidae	Cicada
Order Orthoptera (Grasshoppers et al.)	
Family Acrididae, Subfamily Oedipodinae	Band-winged Grasshopper
Order Coleoptera (Beetles)	
Family Mordellidae	Tumbling Flower Beetle
Family Coccinellidae, <i>Hippodamia convergens</i>	Convergent Ladybird Beetle
Order Lepidoptera (Butterflies, Moths)	
Family Hesperidae	Black Skipper
Family Lycaenidae	Blue
Family Nymphalida, <i>Adelpha bredowii</i>	California Sister
Family Nymphalidae; <i>Vanessa cardui</i>	Painted Lady Butterfly
Family Pieridae, <i>Anthocharis sara</i>	Sara's Orangetip
Family Pieridae	Cabbage White
Family Pieridae	Sulphur
Order Diptera (Flies)	
Family Rhagionidae; <i>Symphoromyia</i> sp.	Snipe Fly
Family Sarcophagidae	Flesh Fly
Family Simuliidae; <i>Simulium</i> sp.	Black Fly
Order Hymenoptera (Wasps, Bees)	
Family Apidae; <i>Apis mellifera</i> *	European Honey Bee
Family Anthophoridae; <i>Xylocopa</i> sp.	Carpenter Bee



APPENDIX D- CNDDDB REPORT



CNDDDB Report for Point Broadcasting LLC Radio Tower Project Survey Area and Surrounding Quadrangles

Scientific Name	Common Name	G-rank	S-rank	Fedlist	Callist	CDFG	CNPSlist
<i>Acanthoscyphus parishii</i> var. <i>abramsii</i>	Abrams' Oxytheca	G4?T2	S2.2	7	5		1B.2
<i>Actinemys marmorata</i>	Western Pond Turtle	G3G4	S3	7	5	SC	
<i>Anaxyrus californicus</i>	Arroyo Toad	G2G3	S2S3	1	5	SC	
<i>Antrozous pallidus</i>	Pallid Bat	G5	S3	7	5	SC	
<i>Aspidoscelis tigris stejnegeri</i>	Coastal Whiptail	G5T3T4	S2S3	7	5		
<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	Miles' Milk-vetch	G5T2	S2.2	7	5		1B.2
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Ventura Marsh Milk-vetch	G2T1	S1.1	1	1	PD	1
<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's Saltscale	G5T2?	S2?	7	5		1B.2
California Walnut Woodland	California Walnut Woodland	G2	S2.1	7	5		
<i>Calochortus palmeri</i> var. <i>palmeri</i>	Palmer's Mariposa-lily	G2T2	S2.1	7	5		1B.2
<i>Calochortus plummerae</i>	Plummer's Mariposa-lily	G3	S3.2	7	5		1B.2
<i>Calochortus weedii</i> var. <i>vestus</i>	Late-flowered Mariposa-lily	G3G4T2	S2.2	7	5		1B.2
<i>Catostomus santaanae</i>	Santa Ana Sucker	G1	S1	2	5	SC	
<i>Chaetodipus californicus femoralis</i>	Dulzura Pocket Mouse	G5T3	S2?	7	5	SC	
<i>Coccyzus americanus occidentalis</i>	Western Yellow-billed Cuckoo	G5T3Q	S1	5	1		
<i>Danaus plexippus</i>	Monarch Butterfly	G5	S3	7	5		
<i>Delphinium umbraculorum</i>	Umbrella Larkspur	G2G3	S2S3.3	7	5		1B.3
<i>Elanus leucurus</i>	White-tailed Kite	G5	S3	7	5		
<i>Empidonax traillii extimus</i>	Southwestern Willow Flycatcher	G5T1T2	S1	1	1		
<i>Fritillaria ojaiensis</i>	Ojai Fritillary	G1	S1.2	7	5		1B.2
<i>Gila orcuttii</i>	Arroyo Chub	G2	S2	7	5	SC	
<i>Gymnogyps californianus</i>	California Condor	G1	S1	1	1		
<i>Horkelia cuneata</i> ssp. <i>puberula</i>	Mesa Horkelia	G4T2	S2.1	7	5		1B.1
<i>Lasiurus cinereus</i>	Hoary Bat	G5	S4?	7	5		
<i>Lepechinia rossii</i>	Ross' Pitcher Sage	G1	S1.2	7	5		1B.2



Scientific Name	Common Name	G-rank	S-rank	Fedlist	Callist	CDFG	CNPSlist
<i>Navarretia ojaiensis</i>	Ojai Navarretia	G1	S1	7	5		1B.1
<i>Neotoma lepida intermedia</i>	San Diego Desert Woodrat	G5T3?	S3?	7	5	SC	
<i>Oncorhynchus mykiss irideus</i>	Southern Steelhead - Southern California ESU	G5T2Q	S2	1	5	SC	
<i>Orobanche valida ssp. valida</i>	Rock Creek Broomrape	G3T1	S1.2	7	5		1B.2
<i>Phrynosoma blainvillii</i>	Coast Horned Lizard	G4G5	S3S4	7	5	SC	
<i>Polioptila californica californica</i>	Coastal California Gnatcatcher	G3T2	S2	2	5	SC	
<i>Rana draytonii</i>	California Red-legged Frog	G4T2T3	S2S3	2	5	SC	
<i>Rana muscosa</i>	Sierra Madre Yellow-legged Frog	G1	S1	1	5	SC	
Southern California Steelhead Stream	Southern California Steelhead Stream	G?	SNR	7	5		
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	G4	S4	7	5		
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	G3	S3.2	7	5		
Southern Mixed Riparian Forest	Southern Mixed Riparian Forest	G2	S2.1	7	5		
Southern Riparian Scrub	Southern Riparian Scrub	G3	S3.2	7	5		
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	G4	S4	7	5		
Southern Willow Scrub	Southern Willow Scrub	G3	S2.1	7	5		
<i>Spea hammondi</i>	Western Spadefoot	G3	S3	7	5	SC	
<i>Taxidea taxus</i>	American Badger	G5	S4	7	5	SC	
<i>Thamnophis hammondi</i>	Two-striped Garter Snake	G3	S2	7	5	SC	
<i>Thamnophis sirtalis ssp.</i>	South coast Garter Snake	G5T1T2	S1S2	7	5	SC	
<i>Vireo bellii pusillus</i>	Least Bell's Vireo	G5T2	S2	1	1		



APPENDIX E- COMPLETED CNDDDB FORMS



Mail to:
 California Natural Diversity Database
 Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95811
 Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

For Office Use Only	
Source Code _____	Quad Code _____
Etm Code _____	Occ. No. _____
EO Index No. _____	Map Index No. _____

Date of Field Work (mm/dd/yyyy): 04/11/2007

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: <u>Baccharis plummerae var. plummerae</u>	
Common Name: <u>Plummer Baccharis</u>	
Species Found? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>If not, why?</small> Total No. Individuals _____ Subsequent Visit? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Is this an existing NDDDB occurrence? <input checked="" type="checkbox"/> no <input type="checkbox"/> unk. Collection? If yes: <u>65-07</u> <u>UCSB</u> <small>Number Museum / Herbarium</small>	Reporter: <u>David Magney</u> Address: <u>P.O. Box 1346</u> <u>Ojai, CA 93024-1346</u> E-mail Address: <u>david@magney.org</u> Phone: <u>(805) 646-6045</u>

Plant Information Phenology: _____% vegetative _____% flowering _____% fruiting	Animal Information <table> <tr> <td># adults</td> <td># juveniles</td> <td># larvae</td> <td># egg masses</td> <td># unknown</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>breeding</td> <td>wintering</td> <td>burrow site</td> <td>rookery</td> <td>nesting</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>other</td> </tr> </table>	# adults	# juveniles	# larvae	# egg masses	# unknown	<input type="checkbox"/>	breeding	wintering	burrow site	rookery	nesting					other				
# adults	# juveniles	# larvae	# egg masses	# unknown																	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
breeding	wintering	burrow site	rookery	nesting																	
				other																	

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Ventura Landowner / Mgr.: Lee Cole
 Quad Name: Santa Paula Peak Elevation: _____
 T _____ R _____ Sec _____, _____ % of _____ %
 Meridian: H S M S
 Source of Coordinates (GPS, topo. map & type): GPS
 T _____ R _____ Sec _____, _____ % of _____ %
 Meridian: H S M S
 GPS Make & Model: Garmin eTrex
DATUM: NAD27 NAD83 WGS84
 Horizontal Accuracy 30 feet _____ meters/feet
Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)
 Coordinates: N 34.384691, W 119.036342

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):
The habitat is primarily coastal scrub. This plant was found in association with some Quercus agrifolia.

Other rare taxa seen at THIS site on THIS date:
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor
 Immediate AND surrounding land use: Livestock grazing and Oil development
 Visible disturbances: Cattle grazing
 Threats: Overgrazing
 Comments: The habitat is mostly intact. Overgrazing by livestock could become a threat if cattle density significantly increased, but this is not currently the case.

Determination: (check one or more, and fill in blanks) <input checked="" type="checkbox"/> Keyed (cite reference): _____ <input type="checkbox"/> Compared with specimen housed at: _____ <input checked="" type="checkbox"/> Compared with photo / drawing in: _____ <input type="checkbox"/> By another person (name): _____ <input checked="" type="checkbox"/> Other: <u>I know this plant</u>	Photographs: (check one or more) Slide Print Digital Plant / animal <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Habitat <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Diagnostic feature <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> May we obtain duplicates at our expense? yes <input checked="" type="checkbox"/> no <input type="checkbox"/>
--	--



Mail to:
 California Natural Diversity Database
 Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95811
 Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

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Source Code _____	Quad Code _____
Etm Code _____	Occ. No. _____
EO Index No. _____	Map Index No. _____

Date of Field Work (mm/dd/yyyy): 04/18/2008

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: <u>Calochortus catalinae</u>	
Common Name: <u>Catalina Mariposa Lily</u>	
Species Found? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>If not, why?</small> Total No. Individuals <u>15</u> Subsequent Visit? <input type="checkbox"/> yes <input type="checkbox"/> no Is this an existing NDDDB occurrence? <input checked="" type="checkbox"/> no <input type="checkbox"/> unk. Collection? If yes: <u>58-08</u> <u>UCSB</u> <small>Number Museum / Herbarium</small>	Reporter: <u>David Magney</u> Address: <u>P.O. Box 1346</u> <u>Ojai, CA 93024-1346</u> E-mail Address: <u>david@magney.org</u> Phone: <u>(805) 646-6045</u>

Plant Information Phenology: _____% vegetative _____% flowering _____% fruiting	Animal Information <table border="0"> <tr> <td># adults</td> <td># juveniles</td> <td># larvae</td> <td># egg masses</td> <td># unknown</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>breeding</td> <td>wintering</td> <td>burrow site</td> <td>rookery</td> <td>nesting</td> </tr> <tr> <td>other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	# adults	# juveniles	# larvae	# egg masses	# unknown	<input type="checkbox"/>	breeding	wintering	burrow site	rookery	nesting	other								
# adults	# juveniles	# larvae	# egg masses	# unknown																	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
breeding	wintering	burrow site	rookery	nesting																	
other																					

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Ventura Landowner / Mgr.: Lee Cole
 Quad Name: Santa Paula Peak Elevation: _____
 T _____ R _____ Sec _____, _____ ¼ of _____ ¼, Meridian: H S C Source of Coordinates (GPS, topo. map & type): GPS
 T _____ R _____ Sec _____, _____ ¼ of _____ ¼, Meridian: H S C GPS Make & Model: Garmin eTrex
DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 30 feet meters/feet
Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)
 Coordinates: N 34.42123, W 119.03610

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):
The habitat is primarily coastal scrub. This plant was found in association with Salvia leucophylla, Artemisia californica, and Hazardia squarrosa.

Other rare taxa seen at THIS site on THIS date:
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor
 Immediate AND surrounding land use: Livestock grazing and Oil development
 Visible disturbances: Cattle grazing
 Threats: Overgrazing
 Comments: The habitat is mostly intact. Overgrazing by livestock could become a threat if cattle density significantly increased, but this is not currently the case.

Determination: (check one or more, and fill in blanks) <input checked="" type="checkbox"/> Keyed (cite reference): _____ <input type="checkbox"/> Compared with specimen housed at: _____ <input checked="" type="checkbox"/> Compared with photo / drawing in: _____ <input type="checkbox"/> By another person (name): _____ <input checked="" type="checkbox"/> Other: <u>I know this plant</u>	Photographs: (check one or more) Slide Print Digital Plant / animal <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Habitat <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Diagnostic feature <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> May we obtain duplicates at our expense? yes <input checked="" type="checkbox"/> no <input type="checkbox"/>
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Etm Code _____	Occ. No. _____
EO Index No. _____	Map Index No. _____

Date of Field Work (mm/dd/yyyy): 07/13/2006

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: <u>Calochortus clavatus var. clavatus</u>	
Common Name: <u>Club-haired Mariposa Lily</u>	
Species Found? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>If not, why?</small> Total No. Individuals <u>1</u> Subsequent Visit? <input type="checkbox"/> yes <input type="checkbox"/> no Is this an existing NDDDB occurrence? <input checked="" type="checkbox"/> no <input type="checkbox"/> unk. Collection? If yes: <u>57-06</u> <u>UCSB</u> <small>Number Museum / Herbarium</small>	Reporter: <u>David Magney</u> Address: <u>P.O. Box 1346</u> <u>Ojai, CA 93024-1346</u> E-mail Address: <u>david@magney.org</u> Phone: <u>(805) 646-6045</u>

Plant Information Phenology: _____% vegetative <u>100</u> % flowering _____% fruiting	Animal Information <table> <tr> <td># adults</td> <td># juveniles</td> <td># larvae</td> <td># egg masses</td> <td># unknown</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>breeding</td> <td>wintering</td> <td>burrow site</td> <td>rookery</td> <td>nesting</td> </tr> <tr> <td>other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	# adults	# juveniles	# larvae	# egg masses	# unknown	<input type="checkbox"/>	breeding	wintering	burrow site	rookery	nesting	other								
# adults	# juveniles	# larvae	# egg masses	# unknown																	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
breeding	wintering	burrow site	rookery	nesting																	
other																					

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Ventura Landowner / Mgr.: Lee Cole
 Quad Name: Santa Paula Peak Elevation: _____
 T _____ R _____ Sec _____, _____ % of _____ % Meridian: H S C Source of Coordinates (GPS, topo. map & type): GPS
 T _____ R _____ Sec _____, _____ % of _____ % Meridian: H S C GPS Make & Model: Garmin eTrex
DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 30 feet meters/feet
Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)
 Coordinates: 34.41983560, -119.03630720

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):
The habitat is primarily coastal scrub. This plant was found in association with Salvia leucophylla and Eriogonum fasciculatum.

Other rare taxa seen at THIS site on THIS date:
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor
 Immediate AND surrounding land use: Livestock grazing and Oil development
 Visible disturbances: Cattle grazing
 Threats: Overgrazing
 Comments: The habitat is mostly intact. Overgrazing by livestock could become a threat if cattle density significantly increased, but this is not currently the case.

Determination: (check one or more, and fill in blanks) <input checked="" type="checkbox"/> Keyed (cite reference): _____ <input type="checkbox"/> Compared with specimen housed at: _____ <input checked="" type="checkbox"/> Compared with photo / drawing in: _____ <input type="checkbox"/> By another person (name): _____ <input type="checkbox"/> Other: _____	Photographs: (check one or more) Slide Print Digital Plant / animal <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Habitat <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Diagnostic feature <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> May we obtain duplicates at our expense? yes <input checked="" type="checkbox"/> no <input type="checkbox"/>
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Date of Field Work (mm/dd/yyyy): 07/13/2006

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California Native Species Field Survey Form

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Scientific Name: Calochortus weedii var. vestus

Common Name: Weed's Mariposa Lily

Species Found? Yes No If not, why? _____

Total No. Individuals 2 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? no unk.

Collection? If yes: 50-06 UCSB
Number Museum / Herbarium

Reporter: David Magney

Address: P.O. Box 1346
Ojai, CA 93024-1346

E-mail Address: david@magney.org

Phone: (805) 646-6045

Plant Information	Animal Information																				
Phenology: _____% vegetative _____% flowering _____% fruiting	<table border="0"> <tr> <td># adults</td> <td># juveniles</td> <td># larvae</td> <td># egg masses</td> <td># unknown</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>breeding</td> <td>wintering</td> <td>burrow site</td> <td>rookery</td> <td>nesting</td> </tr> <tr> <td>other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	# adults	# juveniles	# larvae	# egg masses	# unknown	<input type="checkbox"/>	breeding	wintering	burrow site	rookery	nesting	other								
# adults	# juveniles	# larvae	# egg masses	# unknown																	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
breeding	wintering	burrow site	rookery	nesting																	
other																					

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Ventura Landowner / Mgr.: Lee Cole

Quad Name: Santa Paula Peak Elevation: _____

T _____ R _____ Sec _____, _____ % of _____ % Meridian: H S C Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ % of _____ % Meridian: H S C GPS Make & Model: Garmin eTrex

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 30 feet meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 34.41267888, -119.03201932

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):
The habitat is primarily coastal scrub. This plant was found in association with Deinandra fasciculata.

Other rare taxa seen at THIS site on THIS date:
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Livestock grazing and Oil development

Visible disturbances: Cattle grazing

Threats: Overgrazing

Comments: The habitat is mostly intact. Overgrazing by livestock could become a threat if cattle density significantly increased, but this is not currently the case.

<p>Determination: (check one or more, and fill in blanks)</p> <p><input checked="" type="checkbox"/> Keyed (cite reference): _____</p> <p><input type="checkbox"/> Compared with specimen housed at: _____</p> <p><input checked="" type="checkbox"/> Compared with photo / drawing in: _____</p> <p><input type="checkbox"/> By another person (name): _____</p> <p><input checked="" type="checkbox"/> Other: <u>I know this plant</u></p>	<p>Photographs: (check one or more)</p> <table border="0"> <tr> <td>Plant / animal</td> <td>Slide <input type="checkbox"/></td> <td>Print <input type="checkbox"/></td> <td>Digital <input type="checkbox"/></td> </tr> <tr> <td>Habitat</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Diagnostic feature</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table> <p>May we obtain duplicates at our expense? yes <input type="checkbox"/> no <input type="checkbox"/></p>	Plant / animal	Slide <input type="checkbox"/>	Print <input type="checkbox"/>	Digital <input type="checkbox"/>	Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant / animal	Slide <input type="checkbox"/>	Print <input type="checkbox"/>	Digital <input type="checkbox"/>										
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										



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Etm Code _____	Occ. No. _____
EO Index No. _____	Map Index No. _____

Date of Field Work (mm/dd/yyyy): 08/11/2008

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California Native Species Field Survey Form

Send Form

Scientific Name: <u>Juglans californica var. californica</u>	
Common Name: <u>Southern California Black Walnut</u>	
Species Found? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>If not, why?</small> Total No. Individuals <u>Approx. 24</u> Subsequent Visit? <input type="checkbox"/> yes <input type="checkbox"/> no Is this an existing NDDDB occurrence? <input checked="" type="checkbox"/> no <input type="checkbox"/> unk. <small>Yes, Occ. #</small> Collection? If yes: _____ <small>Number Museum / Herbarium</small>	Reporter: <u>David Magney</u> Address: <u>P.O. Box 1346</u> <u>Ojai, CA 93024-1346</u> E-mail Address: <u>david@magney.org</u> Phone: <u>(805) 646-6045</u>

Plant Information Phenology: <u>100</u> % vegetative _____ % flowering _____ % fruiting	Animal Information <table border="0"> <tr> <td># adults</td> <td># juveniles</td> <td># larvae</td> <td># egg masses</td> <td># unknown</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>breeding</td> <td>wintering</td> <td>burrow site</td> <td>rookery</td> <td>nesting</td> </tr> <tr> <td>other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	# adults	# juveniles	# larvae	# egg masses	# unknown	<input type="checkbox"/>	breeding	wintering	burrow site	rookery	nesting	other								
# adults	# juveniles	# larvae	# egg masses	# unknown																	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
breeding	wintering	burrow site	rookery	nesting																	
other																					

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Ventura Landowner / Mgr.: Lee Cole

Quad Name: Santa Paula Peak Elevation: 2758 ft

T _____ R _____ Sec _____, _____ % of _____ % Meridian: H S C Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ % of _____ % Meridian: H S C GPS Make & Model: Garmin eTrex Vista

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 30 feet meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 34.42073N, 119.03658W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

The habitat is primarily coastal scrub. This plant was found in association with *Salvia leucophylla*, *Artemisia californica*, and *Hazardia squarrosa*.

Other rare taxa seen at THIS site on THIS date:
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Livestock grazing and Oil development

Visible disturbances: Cattle grazing

Threats: Overgrazing

Comments: The habitat is mostly intact. Overgrazing by livestock could become a threat if cattle density significantly increased, but this is not currently the case.

Determination: (check one or more, and fill in blanks) <input type="checkbox"/> Keyed (cite reference): _____ <input type="checkbox"/> Compared with specimen housed at: _____ <input type="checkbox"/> Compared with photo / drawing in: _____ <input type="checkbox"/> By another person (name): _____ <input checked="" type="checkbox"/> Other: <u>I know this plant</u>	Photographs: (check one or more) Slide Print Digital Plant / animal <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Habitat <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Diagnostic feature <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> May we obtain duplicates at our expense? yes <input type="checkbox"/> no <input type="checkbox"/>
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Eim Code _____	Occ. No. _____
EO Index No. _____	Map Index No. _____

Date of Field Work (mm/dd/yyyy): 04/11/2007

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California Native Species Field Survey Form

Send Form

Scientific Name: *Polygala cornuta ssp. fishiae*

Common Name: Fish Milkwort

Species Found? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If not, why? _____ Total No. Individuals <u>1</u> Subsequent Visit? <input type="checkbox"/> yes <input type="checkbox"/> no Is this an existing NDDDB occurrence? <input checked="" type="checkbox"/> no <input type="checkbox"/> unk. Yes, Occ. # _____ Collection? If yes: _____ Number _____ Museum / Herbarium _____	Reporter: <u>David Magney</u> Address: <u>P.O. Box 1346</u> <u>Ojai, CA 93024-1346</u> E-mail Address: <u>david@magney.org</u> Phone: <u>(805) 646-6045</u>
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Plant Information	Animal Information
Phenology: _____% vegetative <u>100</u> % flowering _____% fruiting	# adults <input type="checkbox"/> # juveniles <input type="checkbox"/> # larvae <input type="checkbox"/> # egg masses <input type="checkbox"/> # unknown <input type="checkbox"/> breeding winterring burrow site rookery nesting other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Ventura Landowner / Mgr.: Lee Cole
 Quad Name: Santa Paula Peak Elevation: 1790 ft
 T _____ R _____ Sec _____, _____ ¼ of _____ ¼, Meridian: H M S W
 Source of Coordinates (GPS, topo. map & type): GPS
 T _____ R _____ Sec _____, _____ ¼ of _____ ¼, Meridian: H M S W
 GPS Make & Model Garmin eTrex Vista
DATUM: NAD27 NAD83 WGS84
 Horizontal Accuracy 30 feet meters/feet
Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)
Coordinates: 34.40591812N, 119.03755188W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):
The habitat is primarily coastal scrub. The plant was found on a S-facing slope.

Other rare taxa seen at THIS site on THIS date:
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor
 Immediate AND surrounding land use: Livestock grazing and Oil development
 Visible disturbances: Cattle grazing
 Threats: Overgrazing
 Comments: The habitat is mostly intact. Overgrazing by livestock could become a threat if cattle density significantly increased, but this is not currently the case.

Determination: (check one or more, and fill in blanks) <input type="checkbox"/> Keyed (site reference): _____ <input type="checkbox"/> Compared with specimen housed at: _____ <input type="checkbox"/> Compared with photo / drawing in: _____ <input type="checkbox"/> By another person (name): _____ <input checked="" type="checkbox"/> Other: <u>I know this plant</u>	Photographs: (check one or more) Slide Print Digital Plant / animal <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Habitat <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Diagnostic feature <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> May we obtain duplicates at our expense? yes <input type="checkbox"/> no <input type="checkbox"/>
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DFG00001747 Rev. 6/16/06