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BIOLOGICAL ASSESSMENT REPORT

**Project Common Name:** Cielo de Lusardi; Rancho Cielo

**Project Numbers:** PDS2005-3100-5456 (TM)
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**Lead Agency:**

County of San Diego
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**SUMMARY**

The proposed Rancho Cielo Madura Major Subdivision TM 5456 RPL 2 {3100 4909 (TM) RPL2; 3910 90-080-27B (ER)} is comprised of three (3) parcels totaling approximately 270.29 acres. This property is located in the central portion of the Lake Hodges Segment of the San Diego County Subarea Plan, within the Rancho Cielo SPA, north-west of the Del Dios Highway, east of Rancho Santa Fe, and south of San Marcos. Primary access to the property is from within the Rancho Cielo Estates private entry off of Del Dios Highway. Once inside, access to the western side of the property is off of Via Dora, access to the northern portion of the property (in the center; multifamily development) is off of Cerro Del Sol and to the eastern portion of the property, access is off of Connemara Drive (Figures 1 and 2).

The take areas currently covered by the Lake Hodges Segment (LHS) apply only to areas in which property owners have completed negotiations with the Wildlife Agencies and the County. The LHS covers roughly 8,874 acres. The majority of the land is currently vacant, with approximately 512 acres of agricultural uses and a few scattered homes. Four major projects are located in this Subarea: Rancho Cielo, 4S Ranch, Santa Fe Valley and the Madura Subdivision.

The LHS preserve is a combination of: (1) projects that have been approved; (2) properties on which negotiations for open space have been completed; and (3) publicly owned lands. Figures 1- 3 of the County Subarea plan (MSCP Figures) depict the preserve and development area for the Lake Hodges Segment. The preserve consists of the open space areas set aside in connection with the following projects: (1) Rancho Cielo, (2) 4S Ranch, (3) Santa Fe Valley and (4) Madura projects.

The take authorizations cover all activities that were previously identified in the project descriptions including, but not limited to; all construction and land disturbance/alteration necessary, either on or off-site, within or outside of the preserve, to complete and operate the project. The Plan identifies mitigation consisting of participation in the subarea planning process and the dedication or transfer ownership of an appropriate amount of natural habitat to the LHS preserve (Section 2.3.2). However, the Plan states that in Rancho Cielo, the fuel modification zone may occur outside of the individual homeowner lots; however, it is not counted as part of the preserve. See Section 7.4 for the rationale for the mitigation design.

The previous MSCP approvals would preserve 192.2 acres in the hardline preserve. The proposed project would preserve 192.6 acres; an increase in preserved lands of 0.4 acres and in a better preserve design footprint. This is accomplished with focusing the footprint of the proposed TM 5456 project within its pre-approved MSCP development bubble, providing multiple access points from development areas, and consolidating the 200 foot FMZ within the proposed development bubbles.

Therefore, the redesign focused the development within areas that allows for a greater overall contribution to the Cielo MSCP preserve onsite and the MSCP as a whole. A MSCP Boundary Adjustment based upon the "Like or Equivalent" Exchange Concept would satisfy conformance with the MSCP.

## 1.0 INTRODUCTION

This report describes the existing biology, biological impacts, and mitigation measures required for the proposed Rancho Cielo Madura Major Subdivision Project. The 270.29 acre property is located in the central portion of the MSCP Lake Hodges Segment of the San Diego County Subarea Plan, within the Rancho Cielo SPA, north-west of the Del Dios Highway, east of Rancho Santa Fe, and south of San Marcos (Figures 1, 2, and 3). The proposed developed portion of the site is to be single and multi-family (condominium) residential housing.

This report provides biological data and background information required for environmental analysis by San Diego County, U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACOE), and the California Department of Fish and Game (CDFG).

### 1.1 Purpose of the Report

The purpose of this report is to provide the factual basis for the assessment of potential significant impacts (both direct and indirect) and recommend measures to avoid, minimize, and/or mitigate any potential significant impacts consistent with federal, state, and local rules and regulations including the Federal Endangered Species Act (FESA), the California Environmental Quality Act (CEQA), and the County of San Diego's MSCP and Resource Protection Ordinance (RPO).

### 1.2 Project Location and Description

The property making up TM 5456, totaling approximately 270.29 acres, is located in the central portion of the Lake Hodges Segment of the San Diego County Subarea Plan, within the Rancho Cielo SPA, north- west of the Del Dios Highway, east of Rancho Santa Fe, and south of San Marcos. Primary access to the property is from within the Rancho Cielo Estates private entry off of Del Dios Highway. Once inside, access to the western side of the property is off of Via Dora, access to the northern portion of the property (in the center; multifamily development) is off of Cerro Del Sol and to the eastern portion of the property, access is off of Connemara Drive (Figures 1 and 2). Thomas Brothers Coordinates: Page 1149, Grid C/6

The Rancho Cielo Specific Planning Area is partially graded out and partially vacant, although a large majority of the area has recorded Final Maps or approved Tentative Maps. Improvements such as home pads, roads and utilities are being constructed throughout the Rancho Cielo Specific Plan Area. Generally, Del Dios Highway and the San Dieguito River are located to the south of the site and Lake Hodges is located to the east. Preserved MSCP land is directly south and east of the project, developed land is to the west and north of the site.

## 1.3 Survey Methodologies

Literature that was reviewed prior to initiation of the site surveys included: U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS) mapping for the project area; a database query of potential on-site sensitive species based on a determination of the site's physical characteristics (*e.g.*, location, elevation, soils/substrate, and topography); documentation of California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDB) records for the project vicinity; and previous biology reports and correspondence prepared for the project(s), including reports prepared by the author.

BLUE Consulting Groups' County of San Diego approved biological consultant, Michael Jefferson, conducted onsite general vegetation surveys, an ACOE protocol wetlands/waters jurisdictional delineation and a directed rare plant and species presence/potential assessment. Independent biologist Erik LaCoste (TE 027736-3), who is permitted by the U.S. Fish and Wildlife Service (USFWS) to conduct surveys for the coastal California gnatcatcher, completed the protocol coastal California gnatcatcher surveys. All mapping was completed on a February 2009 aerial photograph of the area.

Animal species observed directly or detected from calls, tracks, scat, nests, or other sign were noted. All plant species observed on-site were also noted, and plants that could not be identified in the field were identified later using taxonomic keys. The site visit included a directed survey for sensitive plants that would be apparent at the time of the survey.

Limitations to the compilation of a comprehensive floral checklist were imposed by the fact that the area has burned both in the relatively recent 2007 witch fire and the 1990 paint fire. The entirety of the property was burned both times and the species and habitats are in a recovery stage with potentially limited species variability and/or cover. Furthermore, because surveys were not completed in the spring, most spring annual species that potentially exist onsite were not clear enough to absolutely forensically identify. Therefore, for annual plant species and geophytes, potential significant impacts and mitigation in terms of the species' "likely limits of occurrence" (LLO) could not be identified. Since surveys were performed during the day, nocturnal animals were detected by sign.

Assessments of the sensitivity of species and habitats are based primarily on County of San Diego MSCP (1997; 2004), Skinner and Pavlik (1994), State of California (2011). Nomenclature for animal species in this report follows American Ornithological Union (AOU 2000) for birds, Stebbins (2003) for reptiles and amphibians, Jones (1992) for mammals, and Powell (1979) for insects. Nomenclature for plants follows Hickman (1996), as updated by Simpson & Rebman (2001). Habitats were classified according to Holland (1986) and Oberbauer (1996).

The specific dates, personnel, and weather conditions are presented below in Table 1.

**TABLE 1**
**Biological Survey Data for TM 5456**
**Rancho Cielo Madura Property**

| Date | Survey Type | Time | Conditions Temp (ºF), Wind (mph) begin and end, Sky | Biologists |
|---|---|---|---|---|
| 7-28-08 | General/Rare | 0730-1530 | 53-67, 0-5, 100% fog - clear | MJ |
| 8-21-08 | General/Rare | 0915-1430 | 66-65, 0-5, 50% Cloud cover | MJ |
| 8-25-08 | General/Rare | 1500-1830 | 81-78, 5-10, clear | MJ |
| 8-17-11 | General/Rare | 0730-1630 | 62-77, 0-15, clear | MJ |
| 8-18-11 | General/Rare | 0915-1730 | 65-75, 0-15, 30% Cloud cover | MJ |
| 8-19-11 | General/Rare | 0800-1530 | 64-78, 0-15, clear | MJ |
| 8-20-11 | Wetland Delineation | 0830-1430 | 69-72, 0-5, clear | MJ |
| 6-30-11 | CAGN | 0700-1100 | 68-78,1-8, clear | EL |
| 7-1-11 | CAGN | 0715-1010 | 67-77,1-4, clear | EL |
| 7-21-11 | CAGN | 0700-1115 | 63-78,1-8, 100% fog - clear | EL |
| 7-22-11 | CAGN | 0700-1030 | 61-72,1-4, 100% fog - clear | EL |
| 8-8-11 | CAGN | 0700-1115 | 56-71,1-6, 100% fog - clear | EL |
| 8-9-11 | CAGN | 0730-1100 | 56-72,1-8, 100% fog - clear | EL |

Several directed field surveys and habitat evaluations were conducted per federal, state and/or local requirements in conjunction with the biological study of the site. These included a protocol wetland delineation, protocol California gnatcatcher surveys, focused surveys for Hermes copper (*Lycaena hermes*) habitat, San Diego thornmint (*Acanthomintha ilicifolia)*, and Encinitas baccharis (*Baccharis vannessae)* and species/habitat evaluations for the various other sensitive species known from the vicinity (CNDDB) and/or listed by the County in the scoping letter (dated November 1, 2010).

Surveys and an assessment of the Hermes copper habitat were conducted as stated in San Diego Counties Attachment B of the Report Format and Content Requirements Biological Resources (forth revision, 9-15-10). As stated previously, surveys occurred outside the species flight period.

Investigators include the lead biologist and author Michael Jefferson (MJ) and Erik LaCoste (EL; completed protocol CAGN surveys). During the field surveys, the entire property was walked except for a limited amount of extremely steep areas located in the southern portion of the property. All plants, animals and habitats encountered were noted in the field and identified on the map.

### 1.3.1 Protocol Wetland Survey

An Army Corps of Engineers (ACOE) protocol jurisdictional wetland delineation (per the 1987 manual;

Updated Arid West Region) was completed onsite by Michael Jefferson on August 20, 2011. All mapping was completed on a February 2009 aerial photograph of the area.

This directed survey consists of mapping the boundaries of the wetland habitat based on specific County RPO, state, and federal wetland definitions, utilizing the referenced "ground-truthed" aerial photograph and topographic CAD overlay of the site.

**Regulatory Jurisdiction Overview**

Local, state and federal regulatory requirements pertain to jurisdiction over wetlands and other sensitive habitats, as well as listed species. The area within the proposed development footprint of the pads and access road contains potential jurisdictional wetlands or waters. Drainages, as possible wetlands or waters, are potentially subject to regulation by several agencies. The County of San Diego exercises control over wetlands through the Resource Protection Ordinance (RPO); the CDFG regulates certain drainages and/or wetlands through the Fish and Game Code; and the ACOE regulates wetlands and waters protected by the Clean Water Act.

Federal Wetland Definitions

The federal regulations that implement Section 404 of the Clean Water Act (CWA), which was enacted in 1972, define "wetlands" as follows:

"Those areas that are inundated or saturated by surface or ground water (hydrology) at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation (hydrophytes) typically adapted for life in saturated soil conditions (hydric soils). Wetlands generally include swamps, marshes, bogs, and similar areas." (40 CFR 232.2(r)).

Federal jurisdictional wetlands that are regulated by the ACOE under Section 404 of the CWA must exhibit all three of the above characteristics: hydrology, hydrophytes, and hydric soils (ACOE, 1987). Areas that may function as wetlands ecologically, but exhibit one or two of the three characteristics, do not currently qualify as federal jurisdictional wetlands, thus activities in these wetlands are not regulated under Section 404.

The ACOE also regulates the discharge of dredge and/or fill material into non-wetland "waters of the United States". The term "waters of the United States" is defined by Corps regulations at 33 CFR Part 328.3 9(a) as:

1) All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2) All interstate waters including interstate wetlands;
3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce

including any such waters:

i. which are or could be used by interstate or foreign travelers for recreational or other purposes; or
ii. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
iii. which are used or could be used for industrial purpose by industries in interstate commerce;

4) All impoundments of waters otherwise defined as waters of the United States under the definition;
5) Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6) The territorial seas;
7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)(6) of this section.

The ACOE also takes jurisdiction in non-tidal waters when wetlands are not present according to the ordinary high water mark (OHWM). This is defined as:

"…that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

State Wetland Definitions

According to the definition used by the CDFG, wetlands are "lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water," and they exist where any one of the following conditions are present:

1) Predominantly undrained hydric soils; i.e. soils with low concentrations of oxygen in the upper layers during the growing season;
2) Predominance, at least periodically, of hydrophytic plants (plants that have adapted to the low availability of oxygen and others stresses in saturated soils);
3) Nonsoil substrate (such as a rocky shore) that is saturated with water or covered by shallow water each year at some point during the growing season.

Three Wetland Criteria

a. Hydrophytic Vegetation

Hydrophytic vegetation is defined as "the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content" (USACE 1987). The potential wetland areas were surveyed by walking the proposed project site and making

observations of those areas exhibiting characteristics of jurisdictional waters or wetlands. Vegetation units with the potential to be wetlands were examined. The dominant plant species for each vegetation stratum (i.e., tree, shrub, herb, and vine) within the unit was determined, and the relative canopy cover was visually estimated. The dominant species from each stratum were then recorded on a summary data sheet along with the associated wetland indicator status of those species. The wetland indicator status of each dominant species was determined by using the list of wetland plants for California provided by the U.S. Fish and Wildlife Service (1997).

The hydrophytic vegetation criterion is considered fulfilled at a location if greater than 50 percent of all the dominant species present within the vegetation unit have a wetland indicator status of obligate (OBL), facultative-wet (FACW), or facultative (FAC) (USACE 1987). An OBL indicator status refers to plants that have a 99 percent probability of occurring in wetlands under natural conditions. A FACW indicator status refers to plants that occur in wetlands (67-99 percent probability) but are occasionally found in non-wetlands. A FAC indicator status refers to plants that are equally likely to occur in wetlands or non-wetlands (estimated probability 34-66 percent).

b. Hydrology

Hydrologic information for the site was obtained by locating "blue-line" streams on U.S. Geological Survey (USGS) topographic maps, reviewing groundwater table elevation information from soil surveys, and direct observations of hydrology indicators in the field (e.g., inundation, drift lines, sediment deposits, and drainage patterns). Evidence of flows, flooding, and ponding were recorded and the frequency and duration of these events were inferred.

The wetland hydrology criterion is considered fulfilled at a location based upon the conclusions inferred from the field observations, which indicate that an area has a high probability of being inundated or saturated (flooded or ponded) long enough during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE 1987).

c. Hydric Soils

The hydric soil criterion is considered fulfilled at a location if soils in the area could be inferred to have a high groundwater table, evidence of prolonged soil saturation, or any indicators suggesting a long-term reducing environment in the upper 12 inches of the soil profile.

The California version of CWA is the Porter-Cologne Act, which established the State Water Resources Control Board (SWRCB) and the California Regional Water Quality Control Boards (RWQCB) to oversee use and protection of the "waters of the state". In California, all surface waters and groundwater are "waters of the state".

<u>County Wetland Definitions (RPO, 2007)</u>

(1) Lands having one or more of the following attributes are "wetlands":

(aa) At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);

(bb) The substratum is predominantly undrained hydric soil; or

(cc) An ephemeral or perennial stream is present, whose substratum is predominately non- soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

(2) Notwithstanding paragraph (1) above, the following shall not be considered "Wetlands":

(aa) Lands which have attribute(s) specified in paragraph (1) solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:

(i) Have negligible biological function or value as wetlands;

(ii) Are small and geographically isolated from other wetland systems;

(iii) Are not Vernal Pools; and,

(iv) Do not have substantial or locally important populations of wetland dependent sensitive species.

(bb) Lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of Planning and Land Use:

(i) Have negligible biological function or value as wetlands even if restored to the extent feasible; and,

(ii) Do not have substantial or locally important populations of wetland dependent sensitive species.

"Waters" are not specifically discussed in the County's RPO and, unless any of the three RPO wetland attributes are present, the County of San Diego does not recognize "waters" as a County-regulated resource.

### 1.4 Environmental Setting

The site predominately consists of south facing hillsides, the elevation ranges from 200 feet above mean sea level (AMSL) in the southwest corner of the site (immediately north of Del Dios Highway) to 1180 feet AMSL on the north eastern hilltop. There are intermittent non-vegetated non wetland waters in the main north-south canyons. Numerous smaller tributary drainages lead into these primary jurisdictional channels, but are generally upland vegetated swales.

The entire site is mapped as San Miguel-Exchequer rocky silt loams, 9 to 70 percent slopes (U.S. Department of Agriculture 1973). San Miguel-Exchequer rocky silt loams, 9 to 70 percent, are a soil complex that consists of about 50 percent San Miguel soil, 40 percent Exchequer soil, and 10 percent rock outcrop. These soils are well drained, are slowly to moderately permeable, and have medium to rapid runoff. Neither soil is a hydric soil. The San Miguel soil has a light brown silt loam surface layer over a yellow brown to strong clay subsoil that extends to about 23 inches thick. The Exchequer soil has a yellowish red silt loam surface layer above the hard rock parent material.

These soils are characterized by areas with accumulation of clays and areas with shallow erosional soils over hard rock. As a result, there are numerous rocky outcrops totaling approximately 17.78 acres throughout the site.

Approximately 52 acres are within two preexisting open space easements located on the Madura 182 acre (western) property (Figure 4). These two easements were created for an earlier onsite project that was never implemented. While the easements were created and dedicated the project was never initiated and the mitigation within those easements was not relied upon. The two existing easements will be vacated as part of the development plan and rededicated in a better project preserve design. The vacation and rededication onsite will not require double mitigation.

### 1.4.1 Regional Context

This area is within the center of San Diego County and within the context of San Diego County's Multiple Species Conservation Program (MSCP). The combined properties making up the current TM 5456, totaling approximately 270.3 acres, are located in the central portion of the Lake Hodges Segment of the San Diego County Subarea Plan, within the Rancho Cielo SPA, immediately north of the Del Dios Highway, east of Rancho Santa Fe, and south of San Marcos. Primary access to the property is from within the Rancho Cielo Estates private entry off of Del Dios Highway.

### 1.4.2 Habitat Types/Vegetation Communities

During the biological surveys, a total of six vegetation communities were mapped on-site: Diegan coastal sage scrub, southern mixed chaparral, willow scrub, disturbed habitat, developed area, and disturbed habitat. In addition, Rock Outcrops were numerous throughout the property and have been noted. These land cover types are described below and Figure 5 depicts their location.

While the signs of the most recent 2007 witch fire have diminished over time, the burned understory has been replaced by significant populations of non-native grass species which have been introduced throughout the property by the historically graded dirt roads and the non-native grasses that dominate them (those areas identified as 'disturbed habitat'). Those areas originally identified as disturbed chaparral and coastal sage scrub maintain a disturbed status for this reason. Due to the fact that the existing chaparral vegetation as well as the dominant sensitive plant species on-site, wart-stem ceanothus (*Ceanothus verrucosus*), is a slow growing species, the areas originally mapped as disturbed chaparral, chaparral, eucalyptus and disturbed habitat retain the same area as originally mapped. Habitat-types present onsite are described below (Photographs 1 and 2):

<u>Diegan Coastal Sage Scrub; Disturbed (100.1 acres; Tier II, Holland Code 32500)</u>
Coastal sage scrub is a plant community comprised of low-growing, aromatic, drought-deciduous soft-woody shrubs that have an average height of approximately three to four feet. The plant community is typically dominated by facultatively drought deciduous species such as California sagebrush *(Artemisia californica),* California buckwheat *(Eriogonum fasciculatum),* laurel sumac *(Malosma laurina),* and white

sage *(Salvia apiana).* The community typically is found on low moisture-availability sites with steep, xeric slopes or clay rich soils that are slow to release stored water. These sites often include drier south- and west-facing slopes and occasionally north-facing slopes. Diegan coastal sage scrub is found in coastal areas from Los Angeles County south into Baja California (Holland 1986).

Onsite, this plant community is classified as disturbed as it contains elements of both non-native grassland and coastal sage scrub. Grasses and other non-native species are dominant, but shrubs typically found in coastal sage scrub provide cover. California buckwheat is the most common shrub in this community.

Southern mixed chaparral (137.9 acres, Tier III, Holland Code 37120)

Southern mixed chaparral is a subtype of southern mixed chaparral that occurs on mafic (rich in magnesium and iron) soils. Southern mixed chaparral is a vegetation community typically dominated by broad-leaved sclerophyllous shrubs or small trees and characteristically occupies protected north-facing and canyon slopes or ravines where more mesic conditions are present. The vegetation is usually dense, with little or no understory cover, but may include patches of bare soil. This community typically is found in sites that are moister than that supporting chamise chaparral. Many species in this community are adapted to repeated fires by their ability to stump sprout. Southern mixed chaparral is typically found in coastal foothills of San Diego County and northern Baja California, Mexico, usually at elevations below 3,000 feet (Holland 1986).

Prior to the fire in 2007, southern mixed chaparral dominated the property, where the dense vegetation on the north-facing and steep south facing slopes was eight to ten feet tall. Currently, in these areas that are recovering from the 2007 witch fire, dominant species include chamise *(Adenostoma fasciculata),* wart-stemmed lilac (*Ceanothus verrucosus*), mission manzanita *(Xylococcus bicolor), hairy* ceanothus *(Ceanothus oliganthus),* and bushrue *(Cneoridium dumosum).* The observed Southern mixed chaparral on the south-facing slopes was dominated by these species but included yellow bush penstemon *(Keckiella antirrhinoides)* and more elements of Diegan coastal sage scrub, particularly black sage and California buckwheat. Other shrubs present in small numbers and/or clustered together include Ramona lilac (*Ceanothus tomentosus),* mission manzanita (*Xylococcus bicolor*), and a small number of Nuttall's scrub oak (*Quercus dumosa*). In general, this community is recovering with greater vigor than the adjacent coastal sage scrub.

Non-native Grassland (15.9 acres, Tier III,Holland Code 42200)

This habitat type is found in the south east portion of the site. This habitat is dominated by annual non-native grasses such as wild oats (*Avena* sp.) Foxtail chess (*Bromus madritensis*), and Bermuda grass (*Cynodon dactykinn*). Additionally there are many broadleaved and other exotic plant species intermixed in the non-native grassland. These include mustards (*Brassica* sp.) and tocalote (*Centaurea melitensis*). Approximately 15.92 acres of this habitat occur onsite.

Eucalyptus Woodland (2.3 acres, Tier IV, Holland Code 11100)

This habitat is dominated by non-native eucalyptus trees. This habitat was planted by the owner. It is comprised of mature eucalyptus trees (*Eucalyptus* sp) sustained by the ephemeral water that flows through the areas. There is little to no understory associated with this habitat due to the thick layer of leaf litter that builds up within the woodland. Approximately 2.31 acres of this habitat, in two locations, occur onsite (Photograph 3).

Disturbed Habitat (10.9 acres, Tier IV, Holland Code 11300)

Disturbed habitat is found throughout the site in the form of bare dirt paths and graded dirt access roads. This disturbed habitat supports occasional weedy species such as Long-beaked Stork's-bill (*Erodium botrys*), Red-stem Stork's-bill (*Erodium cicutarium*), Dove Weed (*Eremocarpus setigerus*), and others. Disturbed Habitat is a non-sensitive habitat-type in San Diego County as defined by the County of San Diego Guidelines for Determining Significance. The Disturbed Habitat onsite has little to no biological resource value.

Developed (1.0 acre, Tier IV, Holland Code 12000)

This habitat onsite is composed of the graded pads and associated paved areas. This habitat comprises approximately 0.96 acres onsite.

Willow Scrub (0.9 acre, Tier I, Holland Code 63310)

This habitat is typically a depauperate, tall, herbaceous riparian scrub strongly dominated by *Baccharis salicifolia*. This early seral community is maintained by frequent flooding or intermittent stream channels with fairly coarse substrate and moderate depth to the water table. Species typically observed include *Baccharis salicifolia, Carex barbarae, Salix exigua*, *S. hindsiana, S. lasiolepis,* and *Urtica holosericea.* This designation is appropriate for the two pockets of hydrophytic vegetation totaling approximately 0.9 acres which supporting; mulefat, willows, poison oak, and oak *sp*. These areas were observed during the protocol wetland delineation and have been determined to be County RPO, ACOE and CDFG jurisdictional habitat.

Non-Wetland Jurisdictional Waters of the U.S. (20,824 linear feet, 1.2 acre; Tier I)

Two blue line tributaries run through the western (Madura) portion of the property. The location of areas considered jurisdictional waters that do not meet the criteria to also be classified as wetlands is based on the observance of strong indicators of seasonal flows or ponding and the presence of an ordinary high water mark. These jurisdictional waters were delineated by the lateral and upstream/downstream extent of the ordinary high water mark of the particular drainage or depression. The estimated total length of ephemeral tributaries on-site is approximately 20,824 feet. The average width of theses drainage courses is approximately 2.5 feet wide with a total area of 1.2 acres. These areas were observed during the protocol wetland delineation and have been determined to be within ACOE and CDFG jurisdiction. These were determined to not meet the criteria for RPO because the drainage did not contribute substantially to the biological functions or values of associated wetlands.

A number of areas located on the eastern portion of the property supporting potential County RPO waters were observed and studied in detail. It was determined that theses potential County RPO waters are in fact erosion cuts which do not meet the criteria to also be classified as wetlands which is based on the observance of strong indicators of seasonal flows or ponding, in this case lack the presence of an ordinary high water mark. Therefore, these erosion cuts which support no hydrophytic vegetation, but an understory of non-native upland species of grasses are not considered to be within the jurisdiction of County RPO, USACOE or the CDFG.

Rock Outcrop (17. 8 acres)

Rock outcrop is more of a geologic feature than vegetation, but outcrops often have a unique suite of plant and animal species. Vegetation within the rock outcrops is restricted to small pockets, narrow bands, cut canyons, or a thin layer of soil between and on top of the rock. The rock outcrops identified are of all the types listed above and due to the area and diversity of rock onsite, all are generally ideal habitat for all species. Furthermore, it appears that the steep rock walled canyons (such as the one running adjacent and parallel to Via Dora) were not as severely burned, or were jumped over altogether during the last fire (2007). The vegetation within the steep walled canyons and wall faces consequently support significantly more mature stands of quality vegetation.

The several large rock outcrops, within the surrounding plant communities, cover approximately 17.8 acres. Plant species present include Bigelow's mossfern (*Selaginella bigelovii*), ashy spike-moss (*Selaginella cinerascens*), dot-seed plantain (P*lantago erecta*), and chalk lettuce (*Dudleya pulverlenta*). Numerous den and burrow holes were observed in these areas. The 17.78 acres identified as supporting rock outcrops is not part of the habitat acreage calculation as the area is accounted for as what habitat type the outcrop overlays/underlay's the area.

**TABLE 2**

**ONSITE PLANT COMMUNITIES**

| Plant Community* | Tier | Acres |
|---|---|---|
| Diegan coastal sage scrub; disturbed | II | 100.14 |
| Southern mixed chaparral; disturbed | III | 137.93 |
| Willow Scrub | I | 0.91 |
| Jurisdictional/ County RPO Non Wetland Waters | I | 1.20 |
| Non-Native Grasslands | III | 15.92 |
| Eucalyptus Woodland | IV | 2.31 |
| Disturbed habitat | IV | 10.86 |
| Rock Outcrop** | | 17.78 |
| Developed Area | IV | 0.96 |
| TOTAL | | 270.29 |

*All habitats are in post witch fire (2007) recovery

** Acreage not counted towards total, only underlying habitat type acreage

### 1.4.3 Flora

A total of 83 plant species were identified within the survey area (Attachment 4). Of this total, 63 (76 percent) are species native to San Diego County.

### 1.4.4 Fauna

Typically, mature coastal sage scrub and chaparral is occupied by numerous insects, reptiles, birds, and rodents and other mammals, although none of these are restricted to these vegetation communities. The numbers of all are reduced, for varying durations, by fire. While still recovering from the 2007 fire, the current quality of the habitat is generally very high, but with low density and cover.

Twenty two species of animals were detected on and adjacent to the property during the surveys. A complete list of the wildlife species detected is provided in (Attachment 5). Sensitive species potentially occurring on-site are discussed in the Sensitive Biological Resources section of this report.

<u>Amphibians</u>

Most amphibians require moisture for at least a portion of their lifecycle, with many requiring a permanent water source for habitat and reproduction. Terrestrial amphibians have adapted to more arid conditions and are not completely dependent on a perennial or standing source of water. These species avoid desiccation by burrowing beneath the soil or leaf litter during the day and during the dry season.

Within the willow scrub within channels #1 and #4, California tree frog (*Pseudacris cadaverina*) was heard. No sensitive amphibians were detected on-site during the surveys. The USGS blue line drainages on-site are seasonal flows, and may provide breeding habitat for some amphibians during the spring. Due to the type and quality of the extant amphibian habitat, no rare or sensitive amphibians were observed, and are not expected to occur.

<u>Reptiles</u>

The diversity and abundance of reptile species varies with habitat type. Many reptiles are restricted to certain plant communities and soil types although some of these species will also forage in adjacent communities. Other species are more ubiquitous, using a variety of vegetation types for foraging and shelter. A southern pacific rattlesnake *(Crotalus viridis helleri)* was observed on and along a dirt road leading up to the top peak of the central property. Common reptiles such as western fence lizard *(Sceloporus occidentalis)* and side-blotched lizard *(Uta stansburiana)* were observed onsite on the site.

<u>Birds</u>

The diversity of bird species varies with respect to the character, quality, and diversity of plant communities present on a site. The diversity of bird species varies with respect to the character, quality, and diversity of plant communities present on a site. Chaparral and coastal sage scrub typically supports a fairly high diversity of bird species. Some of the birds observed include: coastal California gnatcatcher,

Southern California rufous-crowned sparrow, California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), bushtit (*Psaltriparus minimus*), Bewick's wren (*Thryomanes bewickii*), wrentit (*Chamaea fasciata*), and California towhee (*Pipilo crissalis*). Black phoebe (*Sayornis nigricans*) and mourning dove (*Zenaida macroura*) were observed in the disturbed and non-native grass areas. Red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo linetatus elegans*) were among the raptors observed foraging over the site. For a complete listing, see Attachment 2.

Mammals

Naturally vegetated areas provide cover and foraging opportunities for a variety of mammal species. Disturbed areas provide limited opportunities for mammals. Most mammal species are nocturnal and are difficult to detect during daytime surveys. A total of seven mammal species were observed and/or detected during the surveys. These species include: striped skunk (*Mephitis mephitis*), bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor),* California ground squirrel *(Spermophilus beecheyi),* cottontail rabbit *(Sylvilagus audubonii),* and coyote *(Canis latrans).* For a complete listing, see Attachment 2.

### 1.4.5 Sensitive Plant Species

State and federal agencies regulate sensitive species and require an assessment of their presence or potential presence to be conducted on-site prior to the approval of any proposed development on a property. For purposes of this report, species will be considered sensitive if they are: (1) listed or proposed for listing by local, state or federal agencies as threatened or endangered; (2) on List 1B (considered endangered throughout its range) or List 2 (considered endangered in California but more common elsewhere) of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Skinner and Pavlik 1994); or (3) considered fully protected, sensitive, rare, endangered, or threatened by the State of California (2011) and California Natural Diversity Data Base (CNDDB; State of California 2011), or other local conservation organizations or specialists. California fully protected is a designation adopted by the State of California prior to the creation of the State Endangered Species Act and is intended as protection from harm or harassment.

Noteworthy plant species are considered to be those which are on List 3 (more information about the plant's distribution and rarity needed) and List 4 (plants of limited distribution) of the CNPS Inventory. Sensitive habitat types are those identified by the CNDDB (State of California, 2011), Holland (1986) and/or those considered sensitive by other resource agencies.

Determination of the potential occurrence for listed, sensitive or noteworthy species are based upon known ranges and habitat preferences for the species (Zeiner et al. 1988a, 1988b, 1990; Skinner and Pavlik 1994; Reiser 1994); species occurrence records from the NDDB (State of California, 2011); and species occurrence records from other sites in the vicinity of the project site.

Plant species have variable blooming seasons and may only be identifiable at a certain time of year. Plants documented from the area have been assessed for their relative potential to occur within the habitats on the site.

The CNDDB search revealed 1 federally- or state-listed species or Species of Concern on-site or adjacent to the site (off-site). All directed rare plant surveys were completed as required by the County; including *Acanthomintha ilicifolia* and *Baccharis vannessae*. None of these species were observed during the directed surveys. Three sensitive plant species were observed on the site and the locations of these plants are depicted in Figure 6. Table 2 lists those species that were observed or are potentially expected to occur onsite.

A. Observed

Wart-stemmed ceanothus (*Ceanothus verrucosus).* Wart-stemmed ceanothus is a MSCP covered species County List B plant and a California Rare Plant Rank 2B species. This large evergreen shrub occurs in San Diego county and northern Baja California, Mexico (Reiser 1994). Wart-stemmed ceanothus is typically found on North facing slopes as a component of southern mixed chaparral or southern maritime chaparral plant communities (Holland 1986). Wart-stemmed ceanothus is in the buckthorn, or Rhamnaceae family. This plant produces clusters of small, white, lilac-like flowers from January to April. The small thick leaves and corky "warts" on the stem are characteristic of the species (Munz, 1994). This plant is threatened by loss of habitat to development (Skinner & Pavlik 1994).

While the fire of 2007 significantly damaged the population of Wart-stemmed ceanothus onsite, it is clearly coming back from the burn remnants and recruits. While it is difficult to tell currently it is one of the dominant shrubs in the southern mixed chaparral habitat on site, particularly on the steeper southern and north facing slopes of the property. In those areas where the area is not as steep, Ramona lilac (Wooly-leaf Mountain Lilac) was the dominant shrub. The densest stands of the population were virtually impenetrable prior to the fires due to the steepness of the terrain they inhabit. Due to the fire and the large number of individuals onsite (greater than approximately 10,000 over 137.93 acres) an estimation of impacts to individuals was required. The density of individuals is not uniformly dispersed, and a significant percentage of the population is located on the steep slopes of the property. Approximately 15% of the population is within the project footprint.

Nuttall's scrub oak (*Quercus dumosa*). Nuttall's scrub oak is a County List A plant and a California Rare Plant Rank 1B species. This plant is a large, evergreen shrub that grows in coastal areas of Santa Barbara, Orange, and San Diego Counties and northern Baja California, Mexico (Roberts 1995). Nuttall's scrub oak is in the oak family, Fagaceae. This plant is typically found on north-facing slopes in chaparral and coastal scrub habitats. It produces clusters of tiny yellow- white flowers in late winter and early spring (Munz 1974). This scrub oak is threatened by development of the coastal areas of southern California (Skinner and Pavlik 1994). Nuttall's scrub oak is represented by a few individuals in the southern mixed chaparral on the site. None of the individuals are within the project footprint.

California adolphia (*Adolphia californica*). This xeric shrub is a County List B plant and a California Rare Plant Rank 2 species that occurs in Diegan coastal sage scrub, often associated with California buckwheat and California sagebrush. While looked for in the historic locations, the historically observed California adolphia was not observed onsite. The California adolphia was first observed by RECON in their biological reporting and while the area burned, it can be assumed that adolphia continues to be present in the vicinity of the two locations on-site, within the Diegan coastal sage scrub, but it has not been relocated within the project footprint.

B. Not Observed

Several other sensitive plant species are known to occur in the vicinity of the project site, but were not observed during sensitive plant surveys. Table 2 summarizes the status, habitats, and likelihood of occurrence for these species. The majority of these species, such as shrubs or large cactus, would have been easily observed on the site during sensitive plant surveys. Because they were not observed, they are considered to have a low potential for occurrence or are not expected to occur. Other species are considered to have a low potential for occurrence because the site lacks the appropriate substrate. If the appropriate clay soils were onsite, spring surveys would be required to determine if the variegated dudleya (*Dudleya variegata*), a narrow endemic annual species, is present on the site.

As required, directed biological surveys for the County identified "Sensitive Species" (County scoping letter; 11-1-10) were completed for two the narrow endemic plant species, San Diego thornmint (*Acanthomintha ilicifolia*) which is an annual that grows on friable clay soils that are not present on the site; and Encinitas baccharis (*Baccharis vannessae*). Encinitas baccharis was searched for in the chaparral on-site, but not found. Due to the numerous negative result surveys completed onsite over the years, and the lack of adjacent populations or individuals in the near vicinity it is not expected that these species occur onsite.

### 1.4.6 Sensitive Wildlife Species

Directed biological surveys for the County identified "Sensitive Species" (County scoping letter; 11-1-10) were completed onsite. For those species requiring a protocol survey, the appropriate protocol(s) were observed and complied with at all times as discussed in the methodology section. Tables 3a and 3b lists these species, their conservation status, and potential for occurrence on the property. Table 4 lists the Sensitivity Codes. A total of three County of San Diego Sensitive Animals from Group 1 and three County Group 2 animal species were observed onsite.

A. Observed

Raptors are large predatory or scavenger birds that typically require tall trees for perching and nesting. These tall trees are often associated with adjacent open grasslands used as foraging areas for raptors. Due to declining habitat and the associated declining numbers of these species on the whole, raptor

species, as a group, have been designated as California Species of Special Concern by the CDFG. These species are protected, especially during their critical nesting and wintering stages.

Turkey Vulture (*Cathartes aura*). County of San Diego Sensitive Animal List, Group 1 species. Turkey vultures are rarely seen on or near the ground unless they are feeding. Turkey vultures *only* feed on carcasses. A turkey vulture was observed soaring above the property and is not expected to be identified with the onsite habitats.

Southern California rufous-crowned sparrow *(Aimophila ruficeps canescens).* County of San Diego Sensitive Animal List, Group 1 species. The southern California rufous-crowned sparrow is a state species of special concern. This subspecies of rufous-crowned sparrow is a resident and ranges throughout southern California from Los Angeles County to Baja California, Mexico, along the Transverse and Peninsular Ranges (Collins 1997). Southern California rufous-crowned sparrows are found in chaparral and coastal sage scrub habitats and occasionally in grasslands adjacent to these habitats. Southern California rufous-crowned sparrows were observed throughout the property during the surveys. It appears to be a healthy population with between 30 and 50 individuals identified onsite within the recovering habitat.

California gnatcatcher *(Polioptila californica californica).* County of San Diego Sensitive Animal List, Group 1 species. The coastal California gnatcatcher (CAGN) is a Multiple Species Conservation Program (MSCP) covered species, a federally listed threatened species, and a CDFG species of special concern. The coastal California gnatcatcher is a resident species restricted to the coastal slopes of southern California, from Ventura County southward through Los Angeles County, Orange, Riverside, and San Diego Counties into Baja California, Mexico (Atwood 1980; Jones and Ramirez 1995). The coastal California gnatcatcher typically occurs in coastal sage scrub, although this bird also uses chaparral, grassland, and riparian woodland habitats where they occur adjacent to coastal sage scrub. Populations of this species have declined as a result of both urban and agricultural development (Unitt 1984; Atwood 1990). Onsite, there were sightings of CAGN on four separate days (of the six protocol surveys completed) and the survey indicated the presence of two pairs and one single individual which was believed to be a dispersing juvenile.

Barn Owl (*Tyto alba*). County of San Diego Sensitive Animal List, Group 2 species. The common barn owl is an uncommon but widely distributed species requiring thick vegetation or buildings for daytime nesting. This owl was observed within the eucalyptus woodland.

Mule deer (*Odocoileus hemionus*). County of San Diego Sensitive Animal List, Group 2 species. Mule deer are indigenous to western North America and are a dark gray-brown in color. It has a white tail with a black tip that it carries in the drooped position. Mule deer prefer to eat high amounts of fresh grass and populations tend to move up or down with those of their preferred foods. Mule deer rarely travel far from water or forage, and tend to bed down within easy walking distance of both. Onsite, the mule deer population appears to be a thriving with the number of direct observations and sign through the

property. In addition, a mule deer buck carcass (Figure 6) was observed in the south-west portion of the property. From the look of the kill, it is assumed to be a resident mountain lion.

Mountain Lion (*Puma concolor).* County of San Diego Sensitive Animal List, Group 2 species. The Mountain Lion is a large, slender cat with a smallish head and noticeably long tail. Its fur is a light, tawny brown color which can appear gray or almost black, depending on light conditions. Mountain Lions generally are found in remote mountains, canyonlands, or hilly areas with good cover. Mountain Lions are relatively uncommon, secretive animals. They are carnivores that prey on a variety of animals; some favorites include deer and wild hogs. Other prey animals included in the Mountain Lion's diet are rabbits, jackrabbits, and rodents. Some lions occasionally kill livestock or dogs. No mountain lion was directly observed, but a large mule deer kill and prints in the area indicate that a lion is present onsite and within the area in general.

B. Not Observed

Belding's orange-throated whiptail *(Cnemidophorus hyperythrus beldingi).* The Belding's orange-throated whiptail is a CDFG species of special concern. This species ranges from southwestern San Bernardino County to the tip of Baja California, Mexico, in areas of low, scattered brush and grass with loose sandy loam soils. It can be found in open coastal sage scrub, chaparral, washes, stream sides, and other sandy areas with rocks, patches of brush, and rocky hillsides (Stebbins 1985). The orange-throated whiptail feeds primarily on subterranean termites and harvester ants. It is active during the spring and summer months and hibernates during the fall and winter. Adult orange-throated whiptails generally hibernate from late July or early August until late April. The immature whiptail has a shorter inactivity period, usually hibernating from December through March. Hibernation sites are on soft, well-drained slopes with southern exposure and little or no vegetation cover, and road cuts tend to be suitable. The property contains vegetation and soils that would provide suitable habitat for Belding's orange-throated whiptail. There is a moderate potential for the species to occur on-site.

San Diego black-tailed jack rabbit (*Lepus californicus bennettii* ). The San Diego black-tailed jack rabbit (*Lepus californicus bennettii*), occurs only on the coastal side of the southern California mountains where suitable jackrabbit habitat is less common (Stephenson and Calcarone 1999). This subspecies has been recorded from northern Baja California through San Diego, Orange, Los Angeles, and Ventura Counties, as well as on Mt. Pinos. The black-tailed jackrabbit is a habitat generalist occurring in open areas or semi-open country, typically in grasslands, agricultural fields or sparse coastal scrub (Bond 1977). Vaughan (1954) found San Diego black-tailed jackrabbit in "thin stands" of coastal sage scrub and on the margins of citrus groves in the lower foothills of the San Gabriel Mountains; however, it is generally not found in chaparral or woodland habitats.

Golden eagle (*Aquila chrysaetos*). Golden eagle is ranging resident in the area, however it was not observed during any of the surveys. The reported nest locations are all more than 10,000 feet from the property boundaries. Golden eagles and others raptors have not been observed nesting onsite and would not be expected to nest on-site. This is because appropriate nesting habitat is not present (cliff faces or mature open trees). Several eucalyptus trees are present onsite, but they are not appropriately

large and open canopied. In addition, the quality of raptor foraging habitat would be considered low to moderate due to the site's steepness and closed canopy.

Hermes copper butterfly (*Hermelycaena [Lycaena] hermes*)

The Hermes copper butterfly (*Hermelycaena [Lycaena] hermes*) is an imperiled species endemic to San Diego County and northern Baja California, west of the Peninsular mountain ranges. Hermes copper has been recognized as unique and imperiled for decades, and is dependent on patches of its spiny redberry (*Rhamnus crocea*) host plant for survival.

In 1984, the butterfly was dubbed a Category 2 candidate under the Endangered Species Act, a designation once given to species for which listing "might be warranted," but for which there was supposedly insufficient data to justify a listing proposal. In 1996, the Category 2 list was abolished. In 2003, 19 of the remaining Hermes copper populations were destroyed by fires that burned about 39 percent of the butterfly's habitat. This habitat is comprised of the larval host plant Spiny redberry (*Rhamnus crocea)*. This evergreen shrub is typically three to six feet in height. Spiny redberry typically occurs in chaparral, with common flora associates being Toyon and Hollyleaf cherry. It may also be associated with coastal sage scrub, chaparral, mixed evergreen forest, southern oak woodland, northern oak woodland, foothill woodland, yellow pine forest.

Surveys for appropriate habitat were conducted per County guidelines and the site was determined to be unoccupied. An area of approximate 0.66 acres of appropriate habitat containing both spiny redberry and California buckwheat, or within 15 feet, was observed in the mapped location (Figure 6). Due to the site's steep terrain, not all areas could be walked. However, additional Hermes habitat onsite is not expected due to the post fire condition of the vegetation. Due to the fact that the habitat on and offsite in the area was burned by the fires in 1990 and 2007, **the observed patch of appropriate habitat is isolated and there would be no source population to colonize it. No equivalency analysis is needed for this species because the habitat is too isolated for colonization by Hermes copper in the future considering its behavior and natural history.**

### 1.4.7 Wetlands/Jurisdictional Waters

Numerous ephemeral drainages were evaluated for potential RPO and jurisdictional status on the Rancho Cielo Madura property. Drainages were evaluated for U.S. Army Corps of Engineers (ACOE), California Department of Fish and Game (CDFG), and County of San Diego Resource Protection Ordinance (RPO) jurisdictional status. All but two of the channels had no material to dig "pits" as is typical for protocol wetland delineations; data sheets for the pits dug are attached (Attachment 6).

Within the property a total of 2.1 acres of jurisdictional area was observed. As depicted in Figure 7, the wetland delineation determined that twelve unvegetated non-wetland ephemeral waters and their

tributaries are jurisdictional. Two of the jurisdictional (#1 and #6) are identified as USGS blue line channels. Within the stretches of unvegetated non-wetland ephemeral waters in both channels #1 and #6 (blue-line channels) are individual pockets of willow scrub habitat. These willow scrub areas likely persist as they are within more prominent drainage channels (USGS blue line) which convey greater flows of storm event water and are located on natural benches underpinned by the solid bedrock in the area. Within these two blue line channels, #1 and # 6, upstream of the wetland vegetated (willow scrub) bench, erosion forces appear to over time deposited and accumulated soil on the bench(s) and within that substrate to collect and hold moisture in which the observed hydrophytic vegetation has persisted.

Flows from Lake Hodges, a reservoir whose concrete-arch dam began to impound the waters of the San Dieguito River in 1918, cascade into the Del Dios Gorge and flow through the San Dieguito River Valley, southwest of Escondido, to the Pacific Ocean in Del Mar. The wetland functions and values of the areas delineated as USACOE/CDFS ephemeral jurisdictional un-vegetated non-wetland waters as well as the two small isolated patches of jurisdictional wetland habitat (willow scrub) are limited for a number of reasons. In terms of wetland functions, which refers to biophysical benefits such as: groundwater recharge and discharge, flood control, flow alteration, sediment stabilization, erosion control, toxicant retention, nutrient removal and cycling, and wildlife habitat for diversity and abundance; the current system of tributaries supports a marginal wetland function. While the proximity of the onsite ephemeral flows' outlets are conveyed into a major river, the San Dieguito River immediately offsite to the south (across Del Dios Highway), the lack of water (even ephemeral flows) preclude the growth of hydrophytic vegetation which precludes appropriate habitat for wetland dependant species. Even in those two areas that do support riparian species and habitat, the areas are limited in size, species variability and are generally isolated from the larger areas of riparian habitat to the south.

Furthermore, due to the rock substrate within these areas, most ephemeral flows travel through narrow canyons, or topographic clefts which support no soil substrate as the flows is over bedrock. As a result, the potential biophysical benefits are greatly reduced for these ephemeral drainages. In terms of value, due to the lack of existing or future potential commercial enterprise, recreation and waste assimilation, and non-market values such as aesthetics, uniqueness and heritage it can be determined that the value of the onsite non-wetland waters is severely limited. In specific occasions, it can sometimes be argued that impacts to the unvegetated non-wetland waters create aesthetic impacts; for this project, this is not the case as the channels are typically overshadowed and blocked from view by the stands of chaparral and coastal sage adjacent to the cut and rocky substrate. As these channels are representative of the typical non-wetland ephemeral drainages throughout the area, these 8 channels, including the two are USGS blue lines do not represent or support unique or heritage features.

**Wetland Delineation Results**

The wetland habitat onsite can be described in terms of disturbance, species diversity, and connectivity to off-site habitat.

**TABLE 5**

**RPO/JURISDICTIONAL AREAS ONSITE**

| RPO/Jurisdictional Area | ACOE | CDFG | County RPO |
|---|---|---|---|
| Un-Vegetated Non Wetland Waters (areas 1-12) | 1.20 | 1.20 | 0.0 |
| Willow Scrub (areas 13-14) | 0.91 | 0.91 | 0.91 |
| TOTAL | 2.11 | 2.11 | 0.91 |

Non-Wetland Jurisdictional Waters of the U.S. (20,824 linear feet, 1.2acre)

A total of 12 jurisdictional unvegetated, non wetland waters (identified as channels #1-#12) and their minor tributaries were delineated onsite. Two of these channels are USGS blue line tributaries (channels #1 and #6; see Figure 2, USGS map) which run through the western portion of the property (Madura 182). The location of areas considered to be jurisdictional waters that do not meet the criteria to also be classified as wetlands is based on the observance of strong indicators of seasonal flows or ponding and the presence of an ordinary high water mark. These jurisdictional waters were delineated by the lateral and upstream/downstream extent of the ordinary high water mark of the particular drainage or depression. The estimated total length of ephemeral tributaries on-site is approximately 20,824 feet (Figure 7). The average width of theses drainage courses is approximately 2.5 feet wide with a total area of 1.20 acres. These areas were observed during the protocol wetland delineation and have been determined to be within ACOE and CDFG jurisdiction.

Non-Wetland Ephemeral Channels (1,135 linear feet, 0.06 acre)

A total of 12 non-wetland ephemeral unvegetated channels (identified as channels #1-#12) were delineated onsite. Two of these channels are USGS blue line tributaries (channels #1 and #6; see Figure 2, USGS map) which run through the western portion of the property (Madura 182). The location of areas considered to be jurisdictional waters that do not meet the criteria to also be classified as wetlands is based on the observance of strong indicators of seasonal flows or ponding and the presence of an ordinary high water mark. Each of these jurisdictional waters were delineated by the lateral and upstream/downstream extent of the ordinary high water mark of the particular drainage or depression. As stated, all of the identified channels are similar in that none of these ephemeral drainage cuts maintained wetland and/or hydrophytic species, hydric soils or a significant contribution of positive wetland values and functions to the downstream primary drainage offsite. The estimated total length of ephemeral tributaries on-site is approximately 20,824 feet (Figure 7). The average width of theses drainage courses is approximately 2.5 feet wide with a total area of 1.20 acres.

A number of unvegetated erosion channels were observed onsite that do not meet the criteria to be classified as ACOE/CDFG jurisdictional waters or County RPO wetlands. These areas are located in the north eastern portion of the property which was the most severely burned portion of the property during the 2007 fires (Figure 7). From aerials taken after the 2007 fire compared to the aerials prior to the fires it is clear how the created graded fire breaks and dirt roads which were created to save the existing structures in the area also created un-natural topsoil removal and erosion damage down slope

along the sides of the roads/breaks as well as down slope in the natural clefts which were likely (as in adjacent and similar areas) vegetated by upland species. In addition, while there was the observance of strong indicators of flow, the lack of the presence of an ordinary high water mark, the fact that the flows do not connect to the jurisdictional tributaries to the south and that they support no hydrophytic species or the functions and values of a wetland supports the non-jurisdictional status.

Finally, it is clear how the development to the north, during the grading phase of the project, collected and channelized the water accumulated on their property and drained it off in a single focused location as opposed to the low flow sheet flow prior to the development. Down slope of this location are the observed locations of non jurisdictional erosion damage.

Willow Scrub (0.9 acres, Holland Code 63310)

This habitat is typically a herbaceous riparian scrub strongly dominated by willow shrub and small tree species. This early seral community is maintained by frequent flooding or intermittent stream channels with fairly coarse substrate and moderate depth to the water table. Species typically observed include *Salix exigua*, *S. hindsiana, S. lasiolepis, Baccharis salicifolia, Carex barbarae,* and *Urtica holosericea.*

This designation is appropriate for the two pockets of hydrophytic vegetation (identified as wetland areas 13 and 14 on Figure 7) totaling approximately 0.9 acres which supporting; mulefat, willows, poison oak, and oak *sp*. The 0.9 acres are comprised of a 0.07 acre patch located within Channel #13 and the 0.84 acres patch located within channel #14 (Figure 5). These areas were observed during the general surveys and protocol wetland delineation and have been determined to be ACOE and CDFG jurisdictional habitat.

### 1.4.8 Habitat Connectivity and Wildlife Corridors

Wildlife corridors or linkages between significant wildlife areas are important because of their role in preserving species diversity and viability. Without some connection or corridor to other areas, wildlife areas become virtual islands surrounded by development. Carlquist's principals of island biogeography predict that species diversity of an island is a function of the size of the island, the distance from the mainland, and the length of time it has been isolated. These principles have been shown to apply to wildlife areas within the urban fabric (Soule et al. 1988). As shown by Soule, small fragmented areas of habitat ultimately support lower numbers of species than similarly situated larger blocks of habitat.

Large numbers of a thriving population of mule deer was observed onsite as well as the carcass of a mule deer that appears to have been a mountain lion kill in the south west corner of the property (Figure 6). Because the property is large and located within an extensive tract of mountainous undeveloped open space that includes Lake Hodges and the Del Dios Gorge corridor and linkage to large tracts of undeveloped habitat to the east and west, it currently supports and is traversed by large mammals including bobcats, mule deer and mountain lion(s). The proposed project will not interfere with the existing corridor as all proposed development has been clustered together with existing development

leaving the bulk of the property, approximately 71% or 192.6 acres of the properties 270.29 acres, preserved as open space and contiguous to the large areas of habitat in the area.

## 1.5 Applicable Regulations

Development of the Rancho Cielo Madura property is subject to discretionary environmental review in compliance with CEQA, the County of San Diego (RPO and MSCP), FESA, and other applicable environmental regulations. The purpose of this discretionary review is to ensure that the project will not result in significant, adverse impacts to the environment. In this case, it applies specifically to endangered species, protected habitats, wetlands, and other sensitive biological resources.

The Applicable Laws, Ordinances, Regulations, and Standards (LORS) applicable for this project include:

| **FEDERAL** | |
|---|---|
| Clean Water Act (CWA) of 1977 | Title 33, United States Code, Sections 1251-1376, and Code of Federal Regulations, Part 30, Section 330.5(a)(26), prohibit the discharge of dredge or fill material into the waters of the United States without a permit. The administering agency is the U.S. Army Corps of Engineers (USACE). |
| Endangered Species Act (ESA) of 1973 | Title 16, United States Code, Section 1531 et seq., and Title 50, Code of Federal Regulations, Part 17.1 et seq., designate and provide for the protection of threatened and endangered plant and animal species and thei critical habitat. The administering agency is the U.S. Fish and Wildlife Service (USFWS). |
| Migratory Bird Treaty Act | Title 16, United States Code, Sections 703 through 712, prohibit the taking of migratory birds, including nests with viable eggs. The administering agency is the USFWS. |
| Fish and Game Coordination Act | Title 16, United States Code, section 661 et seq. requires federal agencies to coordinate federal actions with the U.S. Fish and Wildlife Service (USFWS) to conserve fish and wildlife resources. |
| **STATE** | |
| California Endangered Species Act (CESA) of 1984 | Fish and Game Code Sections 2050 through 2098 protect California's rare, threatened, and endangered species. |
| California Code of Regulations | California Code of Regulations Title 14, Division 1, Subdivision 3, Chapter 3, Sections 670.2 and 670.5, list plants and animals of California that are designated as rare, threatened, or endangered. |
| Fully Protected Species | Fish and Game Code Sections 3511, 4700, 5050, and 5515 prohibit the taking of animals that are classified as fully protected in California. |
| Nest or Eggs — Take, | Fish and Game Code Section 3503 protects California's birds by |

| | |
|---|---|
| Possess, or Destroy | making it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. |
| Birds of Prey — Take, Possess, or Destroy | Fish and Game Code Section 3503.5 specifically protects California's birds of prey in the orders Falconiformes and Strigiformes by making i unlawful to take, possess, or destroy any such birds of prey or to take, possess, o destroy the nest or eggs of any such bird. |
| Migratory Birds — Take or Possession | Fish and Game Code Section 3513 protects California's migratory non-game birds by making it unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act, or any part of such migratory non-game bird. |
| Natural Community Conservation Plan (NCCP) Act of 1991 | This act includes provisions for protection and management of state-listed threatened or endangered plants and animals and their designated habitats. |
| Native Plant Protection Act of 1977 | Fish and Game Code Sections 1900 et seq. designate rare, threatened, and endangered plants in the State of California. |
| Streambed Alteration Agreement | Fish and Game Code section 1600 et seq. requires the CDFG to review project impacts to waterways, including impacts to vegetation and wildlife from sediment, diversions, and other disturbances. |
| Clean Water Act | By federal law, every applicant for a federal permit or license for an activity which may result in a discharge into a California water body, including wetlands, must request a 401 certification from the Regional Water Quality Contro Board so that the proposed activity will not violate state and federal water quality standards. |
| **LOCAL** | |
| San Diego County General Plan — Conservation and Open Space Element; Community and Subregional Plans | Provides guiding principles for the conservation of biological resources, such as water, vegetation, and wildlife habitat. |
| Multiple Species Conservation Plan (MSCP) | These ordinances protect the County's biological resources by guiding development outside of biological resource core areas, and by establishing mitigation standards for discretionary projects. |
| San Diego County Code Title 8 Div 6 Ch Biological Ordinance Sec 86 501 | Adoption and implementation of these ordinances enable the County of San Diego to achieve the conservation goals set forth in the Subarea Plan for the Multiple Species Conservation Plan ("MSCP"), adopted by the Board of Supervisors on October 22, 1997. |

## 2.0 PROJECT EFFECTS

Impacts to biological resources can be categorized as direct, indirect, or cumulative. Direct impacts are a result of project implementation, and generally include loss of vegetation, sensitive habitats, and plant and animal populations; introduction of non-native species which may outcompete and displace native vegetation; activity-related wildlife mortality; loss of foraging, nesting, breeding, or burrowing habitat; and fragmentation of wildlife corridors. Indirect impacts occur as a result of the increase in human encroachment in the natural environment and include off-road vehicle use, which impacts sensitive plant and animal species; harassment and/or collection of wildlife species; wildlife predation by domestic animals that intrude into open space areas; and increased wildlife mortality along roads. Cumulative impacts occur as a result of ongoing direct and indirect impacts for unrelated projects within a geographic area. Cumulative impacts are assessed on a regional basis and determine the overall effect of numerous activities on a sensitive resource over a larger area.

This analysis has determined that of the properties approximately 270.29 acres, the area proposed to be impacted by the projects onsite grading, improvements and fuel management zone totals approximately 83.8 acres; a total of 77.68 acres are proposed to be impacted offsite. Of the 6.12 acres of offsite impacts, 4.67 acres of impacts are located on the properties eastern edge and is within an existing MSCP take area; 1.45 acres are within the previously discussed MSCP hard-line preserve area. The proposed project redesign provides additional equivalent habitat and qualifies for a MSCP boundary adjustment.

Of the 83.8 acre impact total, approximately 51.98 acres of impacts are within the grading footprint and 31.82 acres of impacts are a result of the fuel management zone.

These direct impacts result from the removal of habitat, plants, and animals from the site through grading and brushing, clearing, or thinning for fire protection purposes, agriculture, etc. These direct impacts are considered permanent because they result in a conversion of habitats to landscaped areas, structures, roads, etc. Indirect impacts also affect plants, animals, and habitats that occur on or near a project site. These are not the direct result of grading or development, but are the result of changes in land use as a by-product of adjacency. Examples of indirect impacts include the introduction of exotic species, human or pet intrusions into natural areas, lighting, traffic, and noise. Indirect impacts are often called "edge effects".

The determination of whether a project has a significant effect on biological resources is based on the best scientific and factual data that staff could review for the project. The significance of the activity is in large part dependent on the setting and the existing LORS for the particular site. For example, disturbance during construction on a “brownfield” (i.e., developed) site may not be significant, but this same activity on a “greenfield” (i.e., undeveloped) site may be significant because of the greater likelihood of sensitive biological resources in the area. Generally, staff relies on the rules and regulations of USFWS, USACE, and CDFG in assessing significance. Staff also considered the County of San Diego’s ordinances protecting

biological resources and guidance contained within the Multiple Species Conservation Program in developing the impact analysis and mitigation measures discussed below.

Significant biological resource impacts would occur if special-status species, such as state- or federal-listed species, state fully protected species, candidates for state or federal listing and/or Species of Special Concern, are likely to be impacted from the construction or operation of the proposed project. Interruption of species migration, reduction of native fish, wildlife and plant habitat, causing a fish or wildlife population to drop below self-sustaining levels, and disturbance of wetlands, marshes, riparian areas or other wildlife habitat would also be considered significant impacts. Harassment of a protected species, even if it does not result in the loss of habitat or reduction in population numbers, would still be considered a significant impact. Substantial degradation of the quality of the environment or environmental effects that are individually limited, but cumulatively considerable, would also be considered significant. Compliance with LORS is typically sufficient to avoid or mitigate these impacts.
The biological impacts resulting from the proposed project were assessed according to guidelines set forth in the CEQA and as stated above. The guidelines provide standard mitigation for impacts to sensitive habitats, sensitive species, and wetlands. Mitigation is required for impacts that are considered significant under CEQA guidelines.

Direct and Indirect impacts

The CEQA Guidelines define direct impacts as those impacts that result from the project and occur at the same time and place. Indirect impacts are caused by the project, but can occur later in time or farther removed in distance while still reasonably foreseeable and related to the project. The potential impacts discussed in this analysis are those most likely to be associated with construction of the project.

Projects in developed sites typically have less of an impact on sensitive biological resources because they lack suitable habitat on site. However, such projects are evaluated for the impacts they could have on surrounding areas that remain in more natural conditions and support sensitive biological resources.

## 2.1 Habitat Impacts

Of the 270.29 acres, a total of approximately 83.8 acres are proposed to be impacted (Table xx). A total of 192.6 acres are proposed to be preserved onsite by the consolidated project (Figures 9). Of the 83.8 acres of impacted habitat, a total of 73. 4 acres support sensitive plant communities.

Significant impacts to four sensitive plant communities include: 51.8 acres of southern mixed chaparral, 21.2 acres of coastal sage scrub, 0.3 acres of annual non-native grasslands, and 697 linear feet of jurisdictional ephemeral unvegetated non-wetland waters within USGS blue line channel #1 (and its tributary) onsite.

**TABLE 9**
**PLANT COMMUNITIES MSCP IMPACTS**

| Plant Community* | Tier | Onsite Acres | Proposed Project Onsite Impacts (offsite) | Proposed Project Total Impact | Prior Approval Total Impact |
|---|---|---|---|---|---|
| **Diegan coastal sage scrub** | **II** | **100.14** | **20.85 (0.46)** | **21.31** | **27.68** |
| **Southern mixed chaparral** | **III** | **137.93** | **46.56 (4.99)** | **51.55** | **47.40** |
| **Willow Scrub** | | **0.91** | **0** | **0** | **0** |
| **Jurisdictional Non Wetland Waters** | | **1.20** | **0.04 (O)** | **0.04** | **0.06** |
| **Non-Native Grasslands** | **III** | **15.92** | **0.15 (0.16)** | **0.31** | **0.08** |
| Eucalyptus Woodland | IV | 2.31 | 2.31(0) | 2.31 | 1.64 |
| Disturbed habitat | IV | 10.86 | 7.12 (0.51) | 7.63 | 7.43 |
| Developed Area | IV | 0.96 | 0.65 (0) | 0.65 | 0.68 |
| TOTAL (natural habitats• in BOLD) | | 256.10 | 67.60 (5.61) | 73.21 | 75.22 |
| TOTAL | | 270.23 | 77.68 {6.12**) | 83.80 | 81.66 (3.31) |
| | | | 83.80 | | 84.97 |

* All habitats are in post fire (2007) recovery

** All but 1.45 acres are within take authorized areas. The 1.45 acres are within an existing road easement on the Lichty Major Amendment property.

Table 10 shows the proposed impacts to jurisdictional wetlands and/or non-wetland areas. All hydrophytic wetlands (0.9 acres of willow scrub) have been preserved onsite with a minimum 200 foot buffer.

Table 10
IMPACTS TO JURISDICTIONAL AREAS

| Jurisdictional Area | CORPS | CDFG | COUNTY RPO |
|---|---|---|---|
| | Existing/Impact | Existing/Impact | Existing/Impact |
| Willow Scrub | 0.91/0.0 | 0.91/0.0 | 0.91/0.0 |
| Ephemeral, Un-Vegetated, Non Wetland Waters | 1.20/0.04 | 1.20/0.04 | 0.0/0.0 |
| TOTAL IMPACTS | 0.04 Non Wetland | 0.04 Non Wetland | None |

The project also impacts 0.05 acre of rock outcrop (included with underlying habitat).

The remaining 8.1 acres of impacts (to acquire the total footprint of approximately 83.8 acres) consists of previously developed/disturbed area(s) associated with historic activities and subsequent public access. Table 9 lists the acres of each plant community that is proposed to be impacted on-site.

Impacts to southern mixed chaparral, coastal sage scrub, annual non-native grasslands, and jurisdictional ephemeral unvegetated-non-wetland waters are considered significant and require mitigation. The impacts to eucalyptus woodland, disturbed and/or previously developed habitat are considered less than significant (Figure 9).

Potential significant impacts to nesting birds could occur due to the fact that the property supports numerous large and/or mature trees, particularly within the eucalyptus woodland. Preventative mitigation measures shall be incorporated to prevent the potential significant impact to nesting birds.

Areas in which identified jurisdictional unvegetated non wetland waters of the U.S. are within the impact footprint of the fuel management zone, no impact is assessed as no hydophytic vegetation would be removed and the channel would not be filled in through the required brush management activities. Only those jurisdictional unvegetated non wetland waters of the U.S. within the footprint of the grading operation are considered to be significant impacts.

## 2.2 Plant Impacts

The project would impact a single California adolphia location (a County of San Diego Sensitive plant List 'B' species) within a fuel management zone (however this location could not be relocated after its reporting by RECON in 2001).

The Ashy spike moss will also be affected but is not subject to avoidance requirements because it is a County of San Diego Sensitive plant List 'D' species. Ashy spike moss was predominantly observed around the rocky outcrops and was occasionally apparent throughout the property within the understory or the openings in the habitat.

Less than 20% of the wart-stemmed ceanothus (a County of San Diego Sensitive plant List 'B' species) population onsite will be affected through grading and brush management activities. These impacts are considered significant and require mitigation in the form of onsite habitat preservation. The large population of wart-stemmed ceanothus is widespread throughout the area as well as being a dominant shrub species within the 137.9 acres of mixed chaparral onsite. It is found in particularly high densities on the steeper slopes located in the central and south east portion of the property. The fact that the flatter areas of the property have been historically utilized/graded is why the wart stemmed ceanothus is not generally observed there and why the proposed development avoids the significant portion of the population.

Due to frequent fire effects and the large number of individuals onsite (greater than 10,000 over 137.9 acres) an estimation of impacts to individuals was required. The density of individuals was not uniformly dispersed, but a significant percentage of the population, greater than approximately 70%, are located on the steep slopes of the property. Therefore, it is estimated that 1,500 individuals or 15% of the population will be impacted.

### 2.3 Wildlife Impacts

Impacts to habitat supporting two observed sensitive species include the California gnatcatcher and the rufous crowned sparrow. Onsite, two pairs and one single individual of CAGN and a healthy population of 30 to 50 individuals of Southern California rufous-crowned sparrows were identified onsite. Impacts to habitat totaling 73.05 acres is a significant impact and requires mitigation to be reduced to a level below significance. Impacts from proposed grading activities may also be significant and preventative measures have been included to preclude direct and/or indirect impacts.

The sensitive wildlife species potentially on-site with low mobility (Belding's orange throated whiptail) may potentially be directly impacted (inadvertently killed) or indirectly impacted through the loss of habitat by the proposed development. Species with high mobility such as the mountain lion, the San Diego black-tailed jack rabbit and/or mule deer may be indirectly impacted through the loss of habitat. Due to the reduced impact total and increased MSCP preserve habitat compared to the MSCP approved project footprints, relatively low acreage of habitat to be impacted relative to the area preserved, the status and regionally large populations, the impacts to these species are considered less than significant and will not require specific mitigation requirements.

Due to the fact that raptors have been observed in the area and potentially appropriate raptor nesting sites occur onsite (immature eucalyptus trees with and adjacent to the proposed grading activities) preventative measures have been included to preclude direct and/or indirect impacts. Potential nesting sites are defined as large trees, and/or man made towers/poles etc. Construction season avoidance will be implemented.

## 3.0 SPECIAL STATUS SPECIES

### 3.1 Guidelines for the Determination of Significance

Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? County Guidelines for the Determination of Significance (2006) state that the following conditions would be considered significant impacts:

A. The project would impact one or more individuals of a species listed as federally or state endangered or threatened.

B. The project would impact the local long-term survival of a County Group A or B plant species, or a

County Group I animal species, or a species listed as a state Species of Special Concern.

C. The project would impact the regional long-term survival of a County Group C or D plant species or a County Group II animal species.

D. The project may impact arroyo toad aestivation or breeding habitat. E. The project would impact golden eagle habitat.

F. The project would result in a loss of functional foraging habitat for raptors.

G. The project would increase noise and/or nighttime lighting to a level above ambient proven to adversely affect sensitive species.

H. The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, through smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or an area that supports multiple wildlife species.

I. The project would increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species.

J. The project would impact nesting success of sensitive animas (as listed in the Guidelines for Determining Significance) through grading, clearing, fire fuel modification, and/or noise generating activities such as construction.

## 3.2 Analysis of Project Effects

Sensitive Plant Impacts

The project will potentially directly impact three sensitive plant species: wart-stemmed ceanothus (a County of San Diego Sensitive plant List 'B' species), through grading and brush management activities, and Ashy spike moss (*Selaginella cinerascens)* (a County of San Diego Sensitive plant List 'D' species) through grading and brush management activities and California adolphia historically observed within the proposed FMZ. This potentially extant single California adolphia (a County of San Diego Sensitive plant List 'B' species) was last observed in 2001 within the original TM 4909 fuel management zone. If it were to re-appear, it could be impacted as it is within the proposed FMZ. It was not observed during the completed 2004 or 2011 species specific surveys. Due to the length of time between observations, the fires, and location within the FMZ (not grading footprint) it is listed as impact neutral. Furthermore, the second of the historically observed location is within the proposed preserve and would be protected in perpetuity.

The proposed project will not result in significant impacts to sensitive plants under the following guidelines for the following reasons:

3.1.A. No state or federally listed plant species are onsite or proposed to be impacted.

3.1.B The project does not impact the local long-term survival of a County Group A or B plant species or a species listed as a state Species of Special Concern as the proposed onsite occupied habitat preservation is greater than the mitigation ratios typically require. The onsite habitat preservation reduces the level of impacts below significance in

accordance with MSCP preservation standards and through the project's proposed (increased) contribution to the MSCP preserve.

3.1.C The project does not impact the regional long-term survival of a County Group C or D plant species as the proposed onsite occupied habitat preservation and preserve design is consistent with the MSCP principles. The onsite habitat preservation reduces the potential for regional impacts to low level sensitive species to below significance by contributing to the MSCP preserve system.

Sensitive Wildlife Impacts

The proposed current proposed project will potentially result in significant direct impacts sensitive wildlife pursuant to the above significance guidelines for the following reasons:

3.1.A. Coastal sage scrub habitat is proposed to be impacted and a single dispersing juvenile California gnatcatcher was observed within the project footprint in July of 2011. This is a potentially significant impact if not mitigated below a level of significance. However participation in the MSCP by incorporation of the preserve and avoidance measures will reduce potential impacts as delineated in Section 3.4.

Southern California rufous-crowned sparrows were observed within the proposed project footprint. Loss of this occupied habitat is considered significant impact if not mitigated below a level of significance. However participation in the MSCP by incorporation of the preserve and avoidance measures will reduce potential impacts as delineated in Section 3.4.

3.1.F The project would result in a loss of functional foraging habitat for raptors. The project would potentially impact raptor foraging habitat, by removing open habitat including non-native grasslands. This is a significant impact if not mitigated for to reduce the impacts to a level below significance. Mitigation will reduce potential impacts as delineated in Section 3.4.

3.1.I The project could increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species. Increased human use of the site could result in access, predation and/or competition impacts to special status species. This is a significant impact if not mitigated for to reduce the impacts to a level below significance. Mitigation will reduce potential impacts with signage and barriers preventing access into the preserved habitat as delineated in Section 3.4.

3.1.J The project could impact nesting success of sensitive animals through grading, clearing, modification, and/or noise generating activities during construction. This is a significant impact if not mitigated for to reduce the impacts to a level below significance. Mitigation will reduce potential impacts as delineated in Section 3.4.

The proposed project will result in less than significant impacts to sensitive wildlife under the following guidelines for the following reasons:

3.1.B The project would not impact the local long-term survival of other County Group I animal species or a species listed as a state Species of Special Concern as the proposed project is a reduced footprint relative to the existing MSCP impact footprint and preserves a total of 192.6 acres of habitat while impacting 83.8. The onsite habitat preservation avoids potential impacts through the project's proposed contribution to the MSCP preserve. MSCP coverage for County Group I animal species and state Species of Special Concern is

appropriate because these populations will be adequately protected by the project design.

3.1.C The project would not impact the regional long-term survival of County Group II animal species as the proposed project is a reduced footprint relative to the existing MSCP impact footprint and avoids long-term impacts through the project's proposed preserve design and contribution to the overall MSCP preserve.

3.1.D. No arroyo toads were detected, or expected to occur onsite.

3.1.E. No golden eagles were observed, or expected to occur onsite.

3.1.G. Noise and/or nighttime lighting is not expected to increase to a level above ambient.
The proposed project is a low density project and will adhere to County lighting standards. Night construction is not proposed.

3.1.H. The project site does not constitute a wildlife core area and will not impact a wildlife core area. The proposed project widens an existing corridor by approximately 330 linear feet relative to the MSCP approved footprint and resulting corridor between Del Dios and the southernmost area of impacts.

Potential sensitive wildlife species on-site with low mobility (such as Belding's orange throated whiptail) may potentially be directly impacted (inadvertently killed) or indirectly impacted through the loss of habitat by the proposed development. Species with high mobility such as the Southern California rufous- crowned sparrow, the California gnatcatcher and/or mule deer may be indirectly impacted through the loss of habitat. Due to the relatively low acreage of habitat to be impacted, the status and regionally large populations, the impacts to these species are considered avoided by the preserve design measures and will not require specific mitigation requirements.

Due to the fact that raptors have been observed in the area, raptor foraging onsite may occur. However, the site is historically dense (pre-2007 fire) with vegetation and historically utilized by human activity (as seen by the numerous dirt roads traversing the property) and considered to be low quality foraging habitat. Because raptor roosting sites are present onsite (eucalyptus trees and power poles adjacent to the proposed grading activities) preventative measures to preclude direct and/or indirect impacts during construction will be required (Mitigation Section 3.4).

### 3.3 Cumulative Impact Analysis

Cumulative impacts refer to a proposed project's incremental effect viewed over time, together with other closely related past, present, and reasonably foreseeable future projects (Public Resources Code § 21083; California Code of Regulations, Title 14, § 15064[h], 15065[c], 15130, and 15355). Cumulative impacts can occur when a group of projects have environmental effects are individually minor but collectively significant over time.

Direct, indirect, and cumulative impacts to sensitive species and the loss of habitat are critical issues in the San Diego County region, an area supporting an extraordinarily high number of sensitive species. Consequently, state, federal, and local agencies have developed regional and subregional strategies to help minimize sensitive species impacts. Compliance with the Multiple Species Conservation Program (MSCP) is the primary means of

conserving San Diego County's sensitive biological resources and special status species and minimizing potential cumulative impacts to less than significant.

### 3.4 Mitigation Measures and Design Considerations

Under the California Environmental Quality Act (CEQA) mitigation is required for all significant biological impacts. Mitigation guidelines include, in order of preference: 1) avoidance of impacts, 2) minimization of impacts to the maximum extent practicable, and 3) mitigation if avoidance is not feasible and the impacts have been minimized. Whenever possible, the significant impact should be avoided using design alternatives such as increasing development density in disturbed habitats while reducing or eliminating density in areas that support sensitive biological resources. If it is not feasible to avoid the impact due to either jurisdictional policy or to economic or topographic constraints, then minimizing of impacts should be considered. Impacts to significant resources should be minimized to the greatest extent feasible. Minimizing includes decreasing lot size, narrowing roadways, increasing buffer zones, etc. If unavoidable impacts to significant resources would still occur, mitigation would be required.

**Wart-stemmed ceanothus:** The project will impact 1,500 individuals or 15% of the robust onsite population of approximately 10,000 wart-stemmed ceanothus shrubs. MSCP requires avoidance of 80 percent of the population and the project design meets this requirement. This avoidance and mitigation reduces the potential impacts to a level below significance.

**Ashy spike moss:** Impacts to Ashy spike moss, a County list 'D' species will be mitigated by habitat preservation on the project site and particularly within the 17.8 acres of habitat with rock outcrops to be preserved onsite. This avoidance and mitigation reduces the potential impacts to a level below significance.

**California gnatcatcher:** The significant impacts to 21.22 acres of coastal California gnatcatcher occupied coastal sage habitat will be mitigated by the project design and the onsite preservation of 79.45 acres of occupied habitat. The project proposes enhancing the existing MSCP Preserve boundaries, which reduces the potential for significant impacts to less than significant and allows for incidental take under MSCP.

**Southern California rufous-crowned sparrow:** The significant impacts to Southern California rufous- crowned sparrows occupied coastal sage scrub and mixed chaparral habitat will be mitigated by the project design and the onsite preservation of 173.29 acres of Southern California rufous-crowned sparrows' occupied coastal sage scrub and mixed chaparral habitat. This is greater than a 2:1 mitigation ratio and is an increase in the preserved onsite occupied coastal sage scrub and mixed chaparral habitat relative to the MSCP approved footprint of 165.94 acres. This onsite preservation of occupied habitat reduces the potential significant impact to less than significant.

As discussed, it is not possible to accurately determine whether sensitive animal species with low mobility may be impacted by the proposed project. However, after surveys of the area, it has been determined that the likelihood of significant impacts to sensitive animal species is low. Furthermore, while raptors were seen flying overhead, significant impacts to raptors both directly through the loss of an active nest, or indirectly through the loss of annual grasslands for hunting shall not result from the proposed project with the following mitigation measures in place.

**Raptor foraging habitat/Non-native grasslands:** To mitigate for the potential significant indirect loss of 0.3 acres of non native grasslands, raptor foraging habitat, the project will preserve 15.77 acres of non native

grasslands onsite within the open space proposed. This is greater than the 1:1 mitigation ratio required. This onsite preservation of foraging habitat reduces the potential significant impact to less than significant.

**Nesting birds:** Birds nesting within and near the footprint of the proposed impacts could be directly impacted by construction activities if the required clearing and grubbing occurs during the "breeding season". Direct impacts from the proposed construction activities/vegetation removal could impact nesting activity. To avoid potential impacts to nesting raptors, coastal California gnatcatchers, rufous crowned sparrows and other species which may potentially utilize the observed habitat, mature trees, power poles and coastal sage scrub habitat (for nesting), construction limitations and/or biological monitoring would reduce the potential significant impact to less than significant.

**Prior to approval of the Final Map, or approval of the grading and/or improvement plans, the following measures will be required to reduce the above biological impacts to less than significant:**

**1. BIOLOGICAL EASEMENT: Intent:** In order to protect sensitive biological resources, pursuant to the MSCP as implemented by the BMO, enhanced biological open space easement shall be granted. **Description of Requirement:** Grant to the County of San Diego and the California Department of Fish and Game by separate document, an open space easement, or grant to the California Department of Fish and Game a conservation easement, as shown on the Approved Open Space Exhibit dated _____. This easement is for the protection of biological resources and requires the landowner(s) to provide resource management activities according to an approved Resource Management Plan, stewardship activities including fencing, removal of trash and report of illegal trespass to the County of San Diego Sheriff's Department.

This easement prohibits all of the following on any portion of the land subject to said easement: grading; excavation; placement of soil, sand, rock, gravel, or other material; clearing of vegetation; construction, erection, or placement of any building or structure; vehicular activities; trash dumping; or use for any purpose other than as open space. Granting of this open space authorizes the County and its agents to periodically access the land to perform management and monitoring activities for the purposes of species and habitat conservation.

The only exceptions to this prohibition are:

a. Selective clearing of vegetation by hand to the extent required by written order of the fire authorities for the express purpose of reducing an identified fire hazard. While clearing for fire management is not anticipated with the creation of this easement, such clearing may be deemed necessary in the future for the safety of lives and property. All fire clearing shall be pursuant to the applicable fire code of the Fire Authority Having Jurisdiction and the Memorandum of Understanding dated February 26, 1997, between the wildlife agencies and the fire districts and any subsequent amendments thereto.

b. Activities conducted pursuant to a revegetation or resource management plan approved by the Director of Planning and Land Use, Parks and Recreation or the Director of Public Works.

**Documentation:** The applicant shall prepare the draft plats and legal descriptions of the easements, then submit them for preparation and recordation with the *[DGS, RP]*, and pay all applicable fees associated with preparation of the documents. If the easement is a conservation easement to the Department of Fish and Game, evidence that Department of Fish and Game has reviewed and approved the easement must be submitted. Upon Recordation of the easements, the applicant shall provide copies of the recorded easement documents to *[DPLU, PCC]* for approval. **Timing:** Prior to the approval of the map and prior to the approval of any plan and issuance of any permit, the easements shall be executed and recorded. **Monitoring:** The *[DGS, RP]* shall prepare and approve the easement documents and send them to *[DPLU, PCC] and [DPR TC, GPM]* for preapproval. The *[DPLU, PCC]* shall pre-approve the language and estimated location of

the easements before they are released to the applicant for signature and subsequent recordation. Upon Recordation of the easements *[DGS, RP]* shall forward a copy of the recorded documents to *[DPLU, PCC]* for satisfaction of the condition.

**2. LBZ EASEMENT: Intent:** In order to protect sensitive biological resources protected in a biological open space easement from vegetation management requirements, introduction of exotic pest plants, and increased light and noise, pursuant to CEQA, an enhanced Limited Building Zone Easement shall be granted. **Description of Requirement:** Grant to the County of San Diego an enhanced Limited Building Zone Easement as shown on the Approved Tentative Map. This easement requires the landowner(s) to maintain permanent open space fencing and open space signage in a manner that restricts access to the open space easement, and as shown on the above referenced exhibit. This easement prohibits all of the following on any portion of the land subject to said easement: construction, erection, or placement of any building or structure; landscaping with exotic pest plants, defined as those on the California Invasive Plant Council Inventory, at http://www.cal-ipc.org/ip/inventory/index.php; artificial lighting, except for low-pressure sodium fixtures, shielded and directed away from the open space easement; and equipment that regularly generates noise in excess of 60 dBA at the open space boundary. Granting of this open space authorizes the County and its agents to periodically access the land to perform monitoring activities for the purposes of compliance with this condition. **Documentation:** The applicant shall prepare the draft plats and legal descriptions of the easements, then submit them for preparation and recordation with the *[DGS, RP]*, and pay all applicable fees associated with preparation of the documents. Upon Recordation of the easements, the applicant shall provide copies of the recorded easement documents to *[DPLU, PCC]* for approval .**Timing:** Prior to the approval of the map and prior to the approval of any plan and issuance of any permit, the easements shall be recorded. **Monitoring:** The *[DGS, RP]* shall prepare and approve the easement documents and send them to *[DPLU, PCC]* for pre approval. The *[DPLU, PCC]* shall preapprove the language and estimated location of the easements before they are released to the applicant for signature and subsequent recordation. Upon Recordation of the easements *[DGS, RP]* shall forward a copy of the recorded documents to *[DPLU, PCC]* for satisfaction of the condition.

**3. OPEN SPACE SIGNAGE: Intent:** In order to protect the proposed open space easement from entry, informational signs shall be installed. **Description of Requirement:** Open space signs shall be placed at the biological open space easement boundary (on fencing where required). The signs must be corrosion resistant, a minimum of 6" x 9" in size, on posts not less than three (3) feet in height from the ground surface. Two signs, centrally located, on each residential property and in series approximately 100 feet apart along right-of-ways the boundary between the development and the biological open space easement. The sign must state the following:

**Sensitive Environmental Resources**
**Area Restricted by Easement**
Entry without express written permission from the
County of San Diego is prohibited
To report a violation or for information about restrictions and exceptions
Contact the County of San Diego Department of Planning and Development Services Reference: 3100 5456 (TM)

**Documentation:** The applicant shall install the signs as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor that the open space signs have been installed at the boundary of the open space easement. **Timing:** Prior to the approval of the map and prior to the approval of any plan and issuance of any permit, the open space signs shall be installed. **Monitoring:** The *[DPLU, PCC]* shall review the photos and statement for compliance with this condition.

**4. OPEN SPACE FENCING: Intent:** In order to protect the proposed open space easement from entry, and disturbance, permanent fencing may be installed. **Description of Requirement:** Open space fencing shall be placed outside the biological open space boundary at the development edge with no gates. Each lot shall have an independent fence. The fencing shall be five feet high and consist of sturdy metal posts and chain link, or other material suitable to restrict domestic pets. **Documentation:** The applicant shall install the fencing as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor that the open space fencing has been installed. **Timing** Prior to the approval of the map and prior to the approval of any plan and issuance of any permit, the fencing or walls shall be placed. **Monitoring:** The *[DPLU, PCC]* shall review the photos and statement for compliance with this condition.

**5. RESOURCE MANAGEMENT PLAN: Intent:** In order to provide for the long-term management of the proposed open space preserve, a Resource Management Plan (RMP) shall be prepared and implemented for the entire conserved portion of the property. **Description of Requirement:** Submit to and receive approval from the Director of the Department of Planning and Land Use, a Resource Management Plan (RMP). The RMP shall be for the perpetual management of the onsite biological open space. The final RMP cannot be approved until the following has been completed to the satisfaction of the Director of DPLU and in cases where DPR has agreed to be the owner and/or manager, to the satisfaction of the Director of DPR.

a. The plan shall be prepared and approved pursuant to the most current version of the <u>County of San Diego Biological Report Format and Content Requirements, and shall include the following tasks:</u>
   i. Exotic plant species as defined as those on the California Invasive Plant Council Inventory shall be removed from high value woodlands and wetlands on an as-needed basis, and at a minimum, shall be assessed every five years.
   ii. General biological surveys shall be conducted every five years and the data inventories updated.
   iii. Sensitive plant population boundaries shall be surveyed and mapped every five years and the data inventories updated.
   iv. Sensitive animal populations shall be surveyed and mapped every five years and the data inventories updated.
   v. Trash shall be removed a minimum of twice annually.
   vi. Fencing and signs shall be monitored biannually and replaced as needed.
   vii. Sensitive habitats and sensitive plant and animal locations shall be monitored biannually for disturbance.
   viii. Annual reports shall be submitted to the County demonstrating that appropriate habitat monitoring and management has occurred.
b. The habitat land shall be managed by one entity.
c. The easements shall be dedicated to ensure that the land is protected in perpetuity.
d. A qualified Resource Manager shall be selected and approved by DPLU and evidence provided by applicant as to the acceptance of this responsibility by the proposed Resource Manager
e. The RMP funding mechanism shall be identified and approved by the County. The funds shall be secured to fund annual costs of the plan, with the County as the third party beneficiary in the case the Resource Manager fails to perform.
f. A contract between the Resource Manager and County shall be executed for the implementation of the RMP.

**Documentation:** The applicant shall prepare the RMP and submit it to the *[DPLU, ZONING with applicable review fees]* and the Wildlife Agencies. **Timing:** Prior to the approval of the map and prior to the approval of

any plan and issuance of any permit, the RMP shall be completed and approved. **Monitoring:** The *[DPLU, PPD]* shall review the RMP for compliance with the content guidelines, this condition and for consistency with comments from the Wildlife Agencies.

**6. BIOLOGICAL MONITORING: Intent:** In order to prevent inadvertent disturbance to sensitive habitats, jurisdictional waters, and special- status species, clearing and grading located within 100 feet of the biological open space easements shall be monitored by a biologist. **Description of Requirement:** A County approved biologist "Project Biologist" shall be contracted to perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities. The following shall be completed:

a. The Biologist shall perform the monitoring duties before, during and after construction pursuant to the most current version of the County of San Diego Biological Report Format and Requirement Guidelines and this permit. The contract provided to the county shall include an agreement that this will be completed, and a Memorandum of Understanding (MOU) between the biological consulting company and the County of San Diego shall be executed. The contract shall include a cost estimate for the monitoring work and reporting.
b. The cost of the monitoring shall be added to the grading bonds that will be posted with the Department of Public Works, or bond separately with the Department of Planning and Land Use.

**Documentation:** The applicant shall provide a copy of the biological monitoring contract, cost estimate, and MOU to the *[DPLU, PCC*]. Additionally, the cost amount of the monitoring work shall be added to the grading bond cost estimate. **Timing:** Prior to the approval of any plan, issuance of any permit, and prior to approval of the map, the requirement shall be completed. **Monitoring:** The [DPLU, PCC] shall review the contract, MOU and cost estimate or separate bonds for compliance with this condition. The cost estimate should be forwarded to [DPW, Project Manager], for inclusion in the grading bond cost estimate, and grading bonds. The [DPW, PC] shall add the cost of the monitoring to the grading bond costs.

**7. PLAN CONDITIONS NOTES: Intent:** In order to implement the required mitigation measures, for which was the basis for approval of this project pursuant to the County Subdivision Ordinance Section 81.303, County Subdivision Ordinance Section 81.605, the condition notes shall be implemented on the grading and Improvement plans and made conditions of the permit issuance. **Description of Requirement:** The Grading and Improvement plans shall include the following condition notes and made conditions of the issuance of said permit:

**DURING CONTRUCTION**

**The following actions shall occur throughout the duration of the grading construction.**

**8. BIOLOGICAL MONITORING: Intent:** In order to prevent inadvertent disturbance to sensitive habitats, clearing and grading located within or adjacent to sensitive habitats shall be monitored by a biologist. **Description of Requirement:** The biologist shall supervise and monitor grading activities to ensure against damage to biological resources that are intended to be protected and preserved. The biologist and/or employed biological professionals shall be on site during clearing activities that are in or within 100 feet of native biological habitat or within 100 feet of biological open space easements during clearing and grading activities. If there are disturbances, the biologist must report them immediately to the [*DPLU PCC*]. Additionally, the biologist shall perform the duties specified in the most current version of the County of San Diego Biological Report Format and Requirement Guidelines. **Documentation:** The biologist shall prepare and submit to the satisfaction the

[*DPLU, PCC*] monitoring reports, which indicate that the monitoring has occurred as indicated above. **Timing**: The following actions shall occur throughout the duration of the grading construction. **Monitoring:** The [*DPW, PDCI*] shall assure that the biologist is on-site performing the monitoring duties of this condition during all applicable grading activities as determined by the biologist. The [*DPW, PDCI*] shall contact the [*DPLU, PCC*] if the biologist or applicant fails to comply with this condition. The [*DPLU, PCC*] shall review and approve the monitoring reports for compliance with this condition.

***FINAL GRADING RELEASE:*** *(Prior to any occupancy, final grading release, or use of the premises in reliance of this permit).*

**9. OPEN SPACE SIGNAGE: Intent:** In order to protect the proposed open space easement from entry, informational signs shall be installed. **Description of Requirement:** Independent open space signs shall be placed at the biological open space easement boundary with wildlife friendly markers between signs to delineate the edge for fire fuel maintenance. The signs must be corrosion resistant, a minimum of 6" x 9" in size, on posts not less than three (3) feet in height from the ground surface. Two signs, centrally located, on each residential property and in series approximately 100 feet apart along right-of-ways the boundary between the development and the biological open space easement. The sign must state the following:

**Sensitive Environmental Resources**
**Area Restricted by Easement**
Entry without express written permission from the
County of San Diego is prohibited
To report a violation or for information about restrictions and exceptions
Contact the County of San Diego
Department of Planning and Development Services
Reference: 3100 5456 (TM)

**Documentation:** The applicant shall install the signs as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor that the open space signs have been installed at the boundary of the open space easement. **Timing:** Prior to the approval of the map and prior to the approval of any plan and issuance of any permit, the open space signs shall be installed. **Monitoring:** The *[DPLU, PCC]* shall review the photos and statement for compliance with this condition.

**10. OPEN SPACE FENCING: Intent:** In order to protect the proposed open space easement from entry, and disturbance, permanent fencing shall be installed. **Description of Requirement:** Open space fencing or equivalent shall be placed at the development edge (pad boundary) with no gates to allow maximum wildlife usage. Each lot shall have an independent fence. The fencing shall be five feet high and consist of sturdy metal posts and chain link, or other material suitable to restrict domestic pets. **Documentation:** The applicant shall install the fencing as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor that the open space fencing has been installed. **Timing** Prior to the approval of the map and prior to the approval of any plan and issuance of any permit, the fencing or walls shall be placed. **Monitoring:** The *[DPLU, PCC]* shall review the photos and statement for compliance with this condition.

**11. BIOLOGICAL MONITORING: Intent:** In order to ensure that the biological monitoring occurred during the grading phase of the project, a final Biological Monitoring Report shall be prepared. **Description of Requirement:** The biologist shall prepare final biological monitoring report. The report shall substantiate the supervision of the grading activities, and state that grading or construction activities did not impact any additional areas of sensitive habitats, jurisdictional waters, special-status plant and wildlife species, or any other sensitive biological resources. The report shall conform to the County of San Diego Report Format Guidelines for Biological Resources, and include the following items:

1. Photos of the temporary fencing that was installed during the trenching, grading, or clearing activities.
2. Monitoring logs showing the date, time, and persons, (biologist and/or employed qualified biologists) present on site.
3. Photos of the site after the grading and clearing activities.
4. Daily verification of the following compliance measures:
   a. Best Management Practices for erosion control;
   b. Construction activities shall take place only inside the designated construction area;
   c. Grading materials shall be stored either inside the fenced construction area or in an area approved by the project biologist;
   d. A storm drain system and detention basins shall be constructed to restrict excess water flow from proposed roads and structures. Filter devices shall be installed at the appropriate points to ensure that run-off is cleansed before reaching the basins. All water-catchment features shall be located above graded and natural slopes;
   e. Nighttime lighting shall be shielded and directed away from riparian and upland habitat adjacent to the development.

**Documentation:** The biologist(s) shall prepare the final report and submit it to the [DPLU, PCC] for review and approval. **Timing:** Prior to any occupancy, final grading release, or use of the premises in reliance of this permit, the final report shall be approved. **Monitoring:** The *[DPLU, PCC]* shall review the final report for compliance this condition and the report format guidelines. Upon approval of the report, *[DPLU, PCC]* shall inform *[DPW, LDR]* and *[DPW, PDCI]*, that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then *[DPLU, PCC]* shall inform *[DPLU, FISCAL]* to release the bond back to the applicant.

**12. RESOURCE AVOIDANCE (COASTAL SAGE SCRUB). Intent:** In order to avoid impacts to nesting coastal California gnatcatchers under the MSCP and CEQA, brushing and clearing of coastal sage scrub (CSS) or within 300 feet of CSS shall not occur during the breeding season (March 1 to August 15). **Description of Requirement**: There shall be no brushing, clearing and/or grading during the breeding season of the coastal California gnatcatcher. **Documentation:** The applicant shall provide a letter of agreement with this condition. **Timing:** Prior to preconstruction conference and prior to any clearing, grubbing, trenching, grading, or any land disturbances and throughout the duration of the grading and construction, compliance with this condition is mandatory. **Monitoring:** The [DPW, PDCI] shall not allow any grading of the site during the specified dates, unless a concurrence from the [DPLU, PCC] is received. The [DPLU, PCC] shall review the concurrence letter.

**13. RESOURCE AVOIDANCE (RAPTOR NESTING HABITAT): [DPLU, PCC] [DPW, PDCI] DPLU, FEE X2].**
**Intent:** In order to avoid impacts to nesting raptors, which are a sensitive biological resource pursuant to

BMO and CEQA, brushing and clearing within 500 feet of oak woodlands shall not occur unless a pre-construction survey verifies there are no active nests during the breeding season. **Description of Requirement**: There shall be no brushing, clearing and/or grading allowed within 500 feet of documented raptor nests during the breeding season. The breeding season is defined as occurring between January 15 and September 1. The Director of Planning and Land Use [DPLU, PCC] may waive this condition, through written concurrence from the US Fish and Wildlife Service and the California Department of Fish and Game, provided that no Raptors are present in the vicinity of the brushing, clearing or grading based on a survey done within 5 days of the habitat clearing. **Documentation:** The applicant shall provide a letter report of the preconstruction survey with the locations of raptor nests and a letter of agreement with this condition. **Timing:** Prior to preconstruction conference and prior to any clearing, grubbing, trenching, grading, or any land disturbances and throughout the duration of the grading and construction, compliance with this condition is mandatory unless the requirement is waived by the County upon receipt of concurrence from the Wildlife Agencies. **Monitoring:** The [DPW, PDCI] shall not allow any grading in or within 500 feet of the oak woodland areas during the specified dates, unless a concurrence from the [DPLU, PCC] is received. The [DPLU, PCC] shall review the concurrence letter.

**14. TEMPORARY FENCING. Intent:** In order to prevent inadvertent disturbance to all on-site biological open space, temporary construction fencing shall be installed. **Description of Requirement:** Prior to the commencement of any grading and or clearing in association with the grading plan, temporary orange construction fencing shall be placed to protect from inadvertent disturbance of all open space easements that do not allow grading, brushing or clearing:

a. Temporary fencing is also required in all locations of the project where proposed grading or clearing is within 100 feet of an open space easement boundary.
b. The placement of such fencing shall be approved by the DPLU, Permit Compliance Section. Upon approval, the fencing shall remain in place until the conclusion of grading activities after which the fencing shall be removed.

**Documentation:** The applicant shall provide evidence that the fencing has been installed and have a California licensed surveyor certify that the fencing is located on the boundary of the open space easement(s). The applicant shall submit photos of the fencing along with the certification letter to the [*DPLU, PCC*] for approval. **Timing:** Prior to Preconstruction Conference, and prior to any clearing, grubbing, trenching, grading, or any land disturbances the fencing shall be installed, and shall remain for the duration of the grading and clearing. **Monitoring:** The [*DPLU, PCC*] shall either attend the preconstruction conference and approve the installation of the temporary fencing, or review the certification and pictures provided by the applicant.

**15. Jurisdictional** mitigation for significant impacts to unvegetated non wetland waters of the U.S.: This will be completed offsite as no area onsite supports the suitable hydrological conditions required to support additional jurisdictional waters/wetlands. Due to the size and scope of the impacts, the specifics of the required mitigation shall be determined through project permitting with ACOE and the CDFG. Approximately 0.04 acres of jurisdictional waters/wetlands will be created at a location specified by the agencies in the required permitting for the project.

### 3.5 Conclusions

Implementation of the proposed mitigation (192.6 acres of onsite habitat preservation with habitat management) for potential significant project impacts to sensitive habitats, plants, and wildlife will reduce the potential significance level of these proposed significant impacts to a level less than significant.

Indirect impacts to sensitive animals will be mitigated by fencing and signage at the edge of open space. Lighting and noise considerations will be avoided by a 200-foot wide limited building zone easement. Construction impacts will be avoided through limitations on timing of implementation. Potential indirect impacts to animals will be mitigated through the RMP.

Implementation of these mitigation measures will reduce potential project impacts to below a level of significance and ensure that the project is compliant with the California Environmental Quality Act.

## 4.0 RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITY

### 4.1 Guidelines for the Determination of Significance

Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
Any positive response relative to the following conditions would be considered significant:

4.1.A Project-related construction, grading, clearing, construction or other activities would temporarily or permanently remove sensitive native or naturalized habitat on or off the project site.

4.1.B Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by ACOE, CDFG and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.

4.1.C The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historically low groundwater levels.

4.1.D The project would increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats.

4.1.E The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.

### 4.2 Analysis of Project Effects

Significant direct impacts to Riparian Habitats or Other Sensitive Natural Communities pursuant to the following significance guidelines are proposed to occur for the following reasons:

4.1.A Project-related construction, grading, clearing, construction or other activities would temporarily or

permanently remove sensitive native or naturalized habitat on or off the project site.

Significant impacts to four sensitive plant communities include: 51.83 acres of southern mixed chaparral, 21.22 acres of coastal sage scrub, 0.3 acres of annual non-native grasslands, 0.04 acres (697 linear feet) of jurisdictional ephemeral unvegetated non-wetland waters within USGS blue line channel #1 (and its tributary) onsite (Tables 9a/b).

The following Section 5, *Jurisdictional Wetlands and Waterways*, lists the existing MSCP approved and proposed impacts to Jurisdictional non-wetland waters. All wetland/riparian habitat (0.91 acres of willow scrub) have been preserved onsite.

The remaining 8.1 acres of impacts (to acquire the total footprint of approximately 83.8 acres) consists of previously developed/disturbed area(s) associated with historic activities and subsequent public access. Also proposed to be impacted is approximately 0.05 acres of rock outcrop, which is not included as part of the acreage calculation, the species growing within the rock outcrops identifies the habitat type. Table's 9a/b lists the acres of each plant community that is proposed to be impacted.

Impacts to southern mixed chaparral, coastal sage scrub, annual non-native grasslands, and jurisdictional ephemeral, unvegetated-non-wetland waters are considered significant and require mitigation. The impacts to eucalyptus woodland, disturbed and/or previously developed habitat are considered less than significant (Figure 9).

A total of 0.04 acres of grading impacts within jurisdictional unvegetated non-wetland waters located within Channel #1 and its' tributaries is proposed to be impacted as a result of a road crossing that cannot not occur with less direct impacts. This is a potentially significant impact if not mitigated below a level of significance. This significant impact and the required mitigation is described in full detail in the following Section 5, Jurisdictional Wetlands and Waterways.

Significant direct impacts to Riparian Habitats pursuant to the following significance guidelines are not proposed to occur for the following reasons:

4.1.B None of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by ACOE, CDFG and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.

4.1.C The project would not draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.

4.1.D The project would not increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats. In fact, as the development will enforce a static development envelope and cat proof fences etc. precluding access to the open space, the

project would reduce human impacts

4.1.E The proposed project does include a wetland buffer to protect the functions and values of the avoided 0.91 acre willow scrub wetland habitat. The project shall be mitigating the impacted wetlands and the avoided wetland and jurisdictional non-wetland areas shall retain their existing functions and values within the larger buffer of the 192.6 acres of proposed onsite Open Space preserve.

### 4.3 Cumulative Impact Analysis

The Rancho Cielo Madura project will contribute to the cumulative loss of Sensitive Natural Communities; however, the project proposes fewer impacts than the existing MSCP approved footprint. The currently proposed project contributes 4.73 acres of additional onsite habitat to the MSCP preserve than the existing MSCP approved footprint, increasing the width of the wildlife corridor while also reducing impacts to jurisdictional unvegetated, ephemeral, non-wetland waters.

Significant impacts to four sensitive plant communities include: 51.83 acres of southern mixed chaparral, 21.22 acres of coastal sage scrub, 0.3 acres of annual non-native grasslands, 0.04 acres (697 linear feet) of jurisdictional and County ephemeral unvegetated non-wetland waters within USGS blue line channel #1 (and its tributary) onsite (Table 9).

Also proposed to be impacted is approximately 0.05 acres of rock outcrop, which is not included as part of the acreage calculation, the species growing within the rock outcrops identifies the habitat type.

Therefore, due to the additional contribution of 4.73 acres of preserve habitat to the MSCP as well as the fact that all impacts to jurisdictional non-wetland water areas and sensitive natural communities will be mitigated for to a level that is below significance, approval of the proposed TM 5456RPL2 project will not have cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects affecting the same resource.

Within these 4.73 acres of additional MSCP habitat, the revised development will avoid and preserve an additional 701 linear feet of non-wetland jurisdictional waters of the U.S. on site relative to the approved TM 4909 MSCP footprint. The revised project proposes to impact 697 linear feet of jurisdictional of unvegetated, ephemeral, non-wetland waters. The original approved TM 4909 MSCP development footprint (which created all of the jurisdictional impacts between the three original TM's which combined make the proposed TM 5456 RPL2) impacted a total of 1,395 linear feet of jurisdictional non-wetland waters of the U.S. bringing the total of on-site non-wetland jurisdictional waters of the U.S. preservation to 20,127 linear feet, or approximately 1.16 acres. A list of the projects in the vicinity and their impacts in combination with the proposed projects' impacts are described in the Cumulative Impacts Project List.

### 4.4 Mitigation Measures and Design Considerations

Mitigation is required for impacts that are considered significant, including impacts to sensitive species, sensitive plant communities, and wetlands. Mitigation is intended to reduce significant impacts to a level of less than

significant. Refer to section 3.4 for the mitigation measures employed for reducing impacts to riparian or other sensitive habitats.

Because the site is within the central portion of the Lake Hodges Segment of the San Diego County Subarea Plan, within the Rancho Cielo SPA, the mitigation requirements of the County of San Diego's Guidelines for Determining Significance (2009) are not used as the reference habitat mitigation ratios, however, in all cases, the preserve area exceeds that required by the ratios specified in the Guidelines.

The proposed project will avoid and preserve a total of 192.6 acres of onsite habitat supporting numerous sensitive species and an integral part of the existing Lake Hodges and Del Dios Gorge corridor. As required by the Subarea Plan, all avoided habitat is proposed to be preserved in perpetuity with an Open Space Easement. Generally, mitigation for the cumulative impacts for all approved projects in the Lake Hodges Segment, a total of 2,600 acres of coastal sage and 1,422 acres of southern mixed chaparral has been preserved.

Jurisdictional mitigation for significant impacts to unvegetated non wetland waters of the U.S.: This will be completed offsite as no area onsite supports the suitable hydrological conditions required to support additional jurisdictional waters/wetlands. Due to the size and scope of the impacts, the specifics of the required mitigation shall be determined through project permitting with ACOE and the CDFG. Approximately 0.04 acres of jurisdictional waters/wetlands will be created at a location specified by the agencies in the required permitting for the project.

A Limited Building Zone (LBZ) is required of the proposed project. The LBZ is the remainder of the graded pad which cannot be utilized for flammable structures and is 200 feet from the inner edge of the proposed Open Space. No structures, grading or brush management impacts shall be permitted outside the preexisting development bubble or within the LBZ, FMZ, and mitigation habitat/open space.

Due to the nature of the existing wildlife corridor, the extremely steep grade of the site, as well as the mature stands of dense habitat (historically, and to be), fencing around the open space easement area is not desirable because it would promote new trails into the open space. In lieu, the fences will be placed on the perimeter of the graded pads of the residential lots and signs would be placed at the open space

easement boundary and in areas where access is possible. Due to the steep grade of the property in general, access from within residential property boundaries would be difficult, even with regular fuel management. Therefore, additional fencing on the open space boundary would not further reduce access by humans or pets. At access points to preserve areas from roads, roadside access and trails will be blocked off with a split rail fences or equivalent barriers. Large boulders may be utilized to stop motor bike access and maintain the natural feel in the habitat. This preserved open space, and the habitat within it, will be protected in perpetuity with the incorporation of the conditions specified in Section 3.4.

### 4.5 Conclusions

Project implementation will contribute to the loss of coastal sage scrub, southern mixed chaparral, non- native grasslands and unvegetated non wetland waters in the region. This loss of sensitive habitat will be offset with the proposed onsite 192.6 acres of proposed Open Space and offsite jurisdictional mitigation as approved

(for the 0.04 acres of significant jurisdictional impacts) which supports numerous sensitive species and is an integral part of the existing Lake Hodges and Del Dios Gorge corridor and MSCP preserve.

In sum the total proposed onsite preserve (192.6 acres) supports; 79.45 acres of coastal sage scrub, 91.37 acres of southern mixed chaparral, 0.91 acres of willow scrub, 1.16 acres of jurisdictional non wetland waters, 15.77 acres of annual non-native grasslands, 1.46 acres of disturbed habitat (dirt trails), and 0.31 acres of pre-developed area. Finally, the project proposes the establishment of the onsite Open Space as required by the Subarea Plan.

Implementation of the proposed mitigation measures will reduce potential project impacts to below a level of significance and the project will conform to the MSCP Subarea Plan.

## 5.0 JURISDICTIONAL WETLANDS AND WATERWAYS

Approximately 2.11 acres of ACOE, RWQCB, CDFG and jurisdictional non-wetland waters (1.2 acres) and wetlands (0.9 acres) were observed onsite. Approximately 0.04 acres of Jurisdictional and jurisdictional unvegetated non wetland waters are proposed to be impacted. Implementation of the proposed mitigation measures will reduce the significance level of all significant impacts to the Sensitive Natural Communities to less than significant.

### 5.1 Guidelines for the Determination of Significance

Impacts to Jurisdictional Wetlands and Waterways associated with the Rancho Cielo Madura project are assessed as being either “significant” or “less than significant”, as defined by CEQA. The determination of impact significance is based on the following criteria: Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?

Any of the following conditions would be considered significant:

5.1.A Project-related construction, grading, clearing, construction or other activities would temporarily or permanently remove sensitive native or naturalized habitat on or off the project site.

5.1.B Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by ACOE, CDFG and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.

5.1.C The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.

5.1.D The project would increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats.

5.1.E The project does include a wetland buffer adequate to protect the functions and values of existing wetlands.

## 5.2 Analysis of Project Effects

The following significance guidelines do apply to the Rancho Cielo Madura project for the following reasons:

5.1.B As proposed, 0.04 acres (697 linear feet) of jurisdictional (ACOE, CDFG, RWQCB) unvegetated non-wetland waters shall be impacted as a result of the unavoidably impacts resulting from the road crossings.

Direct grading impacts to the 0.04 acres (697 linear feet) of jurisdictional (ACOE, CDFG, RWQCB) unvegetated non-wetland waters resulting from the road crossings adjacent to the western property line and USGS blue-line channel and its tributaries is considered significant and requires mitigation to reduce to a level below significance.

| Jurisdictional Area | CORPS Existing/Impact | CDFG Existing/Impact | COUNTY Existing/Impact |
|---|---|---|---|
| Willow Scrub | 0.9/0.0 | 0.9/0.0 | 0.9/0.0 |
| Ephemeral, Un-Vegetated, Non Wetland Waters | 1.2/0.04 | 1.2/0.04 | 0 |
| TOTAL | 0.04 | 0.04 | 0 |

The total significant impacts to jurisdictional ephemeral unvegetated non-wetland waters of the U.S. totals approximately 697 linear feet or approximately 0.04 acres is proposed to be impacted (Table 10). This impact is unavoidable as the properties western boundary is bordered its' entire length by the USGS blue line channel #1 and its' tributaries. Therefore, in order to enter the property from the planned connection point at the terminus of Via Dora (existing) on the west side of the property channel #1 and its' tributaries must be crossed. Numerous alternatives were considered in order to reduce the impacts from the previously planned/approved TM 4909 the road was moved further to the north where the canyon was not as deep which required less grading and overall reduced impacts (manufactured slope).

The revised project proposes to impact 697 linear feet. The original approved TM 4909 MSCP development footprint impacted a total of 1,395 linear feet of jurisdictional non-wetland waters of the U.S. The revised development will avoid and preserve an additional 701 linear feet of non-wetland jurisdictional waters of the U.S. on site relative to the approved footprint, bringing the total of on-site non-wetland jurisdictional waters of the U.S. preservation to 20,127 linear feet, or approximately 1.16 acres.

This proposed wetland buffer was designed as part of the project to protect the functions and values of existing wetlands supporting the 0.9 acres of willow scrub habitat. As the project is subject to the Resource Protection Ordinance, buffers of a minimum of 50 feet and a maximum of 200 feet to protect wetlands are required based on the best available science available to the County at the time of adoption of the ordinance. This RPO/jurisdictional willow scrub habitat observed onsite is within the proposed open space preserve. The buffer between the project impact footprint and the willow scrub habitat is approximately 290 feet in Channel #1 and 330 feet in channel #6. This is a significant improvement from the approved MSCP footprint. The approved MSCP TM 4909 footprint has a

significantly smaller buffer of approximately 127 feet in Channel #1 and approximately the same 330 foot buffer to the hydrophytic willow scrub habitat in channel #6.

Though the construction of the access road, which has been moved and redesigned to reduce impacts to the drainage as part of TM 5456 RPL2, there will be a significant impact to a USGS blue line onsite drainage (channel #1) and its' tributaries totaling approximately 697 linear feet (0.04 acres @ 2.5' wide) of ACOE and CDFG unvegetated non-wetland waters.

The following significance guidelines do not apply to the Rancho Cielo Madura project for the following reasons:

5.1.A Project related construction, grading, clearing, construction or other activities would not temporarily or permanently remove sensitive native or naturalized wetland habitat on or off the project site. All 0.91 acres of willow scrub habitat is avoided and preserved with a buffer greater than 200 feet wide.

5.1.C The project would not draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.

5.1.D The project would not increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats. Fencing, signage and education shall prevent access into the created Open Space.

5.1.E The proposed project would not impact wetland buffers or reduce the functions and values of the avoided willow scrub wetland habitat.

### 5.3 Cumulative Impact Analysis

The proposed project is the combination of three previously approved TM's/projects within the MSCP. The revised project, TM 5456 RPL2, has been designed to avoid impacts to the existing unvegetated non wetland waters of the U.S. and willow scrub habitat. For the unavoidable significant impacts to the 0.04 acres of unvegetated non wetland waters of the U.S. area, a Streambed Alteration (1602) permit from the CDFG, a nationwide 404 permit from ACOE, and a 401 certification from the RWQCB shall be required.

As the identified drainages are ephemeral unvegetated non wetland waters of the U.S. running over bedrock, the existing functions and values of the drainage(s) are low. However, the loss of 0.04 acres of unvegetated non wetland waters of the U.S. is considered significant and a minimum of 1:1 mitigation will be implemented (CDFG no net loss). This impact is not a large or viable enough to contribute significantly to the cumulative impacts of the development in the area.

### 5.4 Mitigation Measures and Design Considerations

Due to the size and scope of the impacts, the specifics of the required mitigation shall be determined through project permitting with ACOE and the CDFG. Approximately 0.04 acres of jurisdictional waters/wetlands will be created at a location specified by the agencies in the required permitting for the project.

### 5.5 Conclusions

The drainage impacts would be regulated by the ACOE, RWQCB, and CDFG. The project has been designed to minimize impacts to this drainage and avoid all others. All areas outside of the development bubble will be placed in an open space easement with a buffer and preserved and maintained in perpetuity. The required wetland mitigation shall be accomplished within a County and CDFG approved mitigation bank or at a location required through the permitting by the Agencies.

## 6.0 WILDLIFE MOVEMENT AND NURSERY SITES

### 6.1 Guidelines for the Determination of Significance

Impacts to Wildlife Movement and Nursery Sites associated with the Rancho Cielo Madura project are assessed as being either "significant" or "less than significant", as defined by CEQA. The determination of impact significance is based on the following criteria:

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Any of the following conditions would be considered significant:

6.1.A The project would prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.

6.1.B The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.

6.1.C The project would create artificial wildlife corridors that do not follow natural movement patterns.

6.1.D The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site specific analysis of wildlife movement.

6.1.E The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.

6.1.F The project does not maintain adequate visual continuity (i.e., long lines-of-site) within wildlife corridors or linkage.

### 6.2 Analysis of Project Effects

The area within the property(s) is within the large and diverse Lake Hodges and Del Dios Gorge corridor and habitat preserve. In deference to that, the project components were designed to be clustered amongst not just themselves, but up against the existing development at the edges of the property. This has kept the integrity of

the existing corridor intact. Therefore, the Rancho Cielo Madura project will not impact existing habitat connectivity, either on or offsite, or native wildlife nursery sites. The portions of the property which supports the highest quality habitat shall be conserved in biological open space.

No barriers or crossings are proposed within the open space. The proposed Open Space easement is adjacent to an existing Open Space easement to the west, east, north and south.

The following significance guidelines are found to be less than significant in their application to the Rancho Cielo Madura project for the following reasons:

6.1.A The project will not prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction because no permanent fencing, or equivalent wildlife movement inhibitor, is proposed. Fencing along roads is split rail so there is no barrier to the linkage. The linkage meets MSCP standards.

6.1.B The project will not substantially interfere with connectivity between blocks of habitat and will not potentially block or substantially interfere with a local or regional wildlife corridor or linkage because the preserve design meets MSCP standards for linkages.

6.1.C The project will not create artificial wildlife corridors that do not follow natural movement patterns because the wildlife currently utilizes the corridor and it provides for good linkage design and development consolidation.

6.1.D The project will not increase noise and/or nighttime lighting in a wildlife corridor, linkage, or nursery to levels proven to affect the behavior of the animals identified in a site specific analysis of wildlife movement because the proposed development is clustered and provides for adequate fuel modification and barriers to keep domestic animals from entering the preserve.

6.1.E The project will maintain an adequate width for an existing wildlife corridor or linkage and will not further constrain an already narrow corridor because the preserve design meets MSCP standards for linkages.

6.1. F The project maintains adequate visual continuity within wildlife corridors or linkages because there is adequate shrub and boulder cover and superior preserve design (193.6 acres).

### 6.3 Cumulative Impact Analysis

As stated above, the Rancho Cielo Madura project will not result in significant adverse impacts to wildlife movement and/or nursery sites. Because the Rancho Cielo Madura project is part of a regional plan for conservation, it will not have cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects affecting the same resource.

### 6.4 Mitigation Measures and Design Considerations

Due to the preserve design measures, no additional mitigation is recommended at this time.

### 6.5 Conclusions

As stated above, the project will not significantly impact Wildlife Movement or Nursery Sites.

## 7.0 LOCAL POLICIES, ORDINANCES, ADOPTED PLANS

### 7.1 Guidelines for the Determination of Significance

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

County Guidelines (2010) state that the following conditions would be considered significant:

7.1.A For lands outside of the MSCP, the project would impact coastal sage scrub (CSS) vegetation in excess of the County's 5% habitat loss threshold as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning Process (NCCP) Guidelines.

7.1.B The Project would preclude or prevent the preparation of the subregional Natural Communities Conservation Planning Process (NCCP). For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.

7.1.C The project will impact any amount of sensitive habitat lands as outlined in the Resource Protection Ordinance (RPO).

7.1.D The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the Natural Communities Conservation Planning Process (NCCP) Guidelines.

7.1.E The project does not conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.

7.1.F For lands within the Multiple Species Conservation Program (MSCP), the project would not minimize impacts to Biological Resource Core Areas (BRCAs), as defined in the Biological Mitigation Ordinance (BMO).

7.1.G The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning Process (NCCP) Guidelines.

7.1.H The project does not maintain existing movement corridors and/or habitat linkages as defined by the Biological Mitigation Ordinance (BMO).

7.1.I The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.

7.1.J The project would reduce the likelihood of survival and recovery of listed species in the wild.

7.1.K The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act).

7.1.L The project would result in the take of eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act).

### 7.2 Analysis of Project Effects

7.1.C The project will impact an amount of sensitive habitat lands (SHL) as outlined in the Resource Protection Ordinance (RPO). The SHL that supports California gnatcatcher is considered RPO 'sensitive'. However, impacts are covered under the MSCP and mitigation is proposed in conformance with the

hardline boundaries through onsite habitat preservations and stewardship to reduce the level of impact below significance.

7.1.F The project is located within a Multiple Species Conservation Program (MSCP) Subarea Planning Area. Therefore, the project is subject to the designation of Biological Resource Core Areas (BRCAs), as defined in the Biological Mitigation Ordinance (BMO). The project is located within the Lake Hodges segment of the MSCP; the re-designed project complies with the MSCP and reduces residential lots, edge effect, total impacts, and jurisdictional impact areas and thereby increases the size of the MSCP preserve by a total of 4.73 acres; 3.98 acres of additional preserve habitat onsite as well. Due to the reduction of impacts in the latest redesign, and an equivalent exchange of habitat preservation, the project qualifies for the County MSCP Boundary adjustment process. Findings have been made to demonstrate that the project has been designed to meet or exceed (through project reduction) the requirements of the BMO.

7.1.I The project is subject to the narrow endemic species provisions of the BMO only in the application of the Boundary Adjustment, however, the project site does not support any narrow endemic species nor will it impact any core populations (or individuals) of narrow endemic species.

7.1.J The project will have a less than significant affect on the likelihood of survival and recovery of listed species in the wild because the project is covered for incidental take by the MSCP for California gnatcatcher, which is the only listed species that occurs on site. Breeding season avoidance for construction activities will be implemented.

7.1.K The project could result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act). Conditions of approval are required on construction activities to prevent a potential significant impact during breeding season.

The following significance guidelines with respect to Local Policies, Ordinances, and Adopted Plans do not apply to the Rancho Cielo Madura project for the following reasons:

7.1.A The project impacts CSS but the project site is located within the MSCP so the guideline does not apply.

7.1.B The project does not propose development within any area that has been identified by the County or resource agencies as critical to future habitat preserves because the project is in the Lake Hodges Segment of the MSCP which has established hardline preserve boundaries.

7.1.D The project minimizes and mitigates all impacts to coastal sage scrub habitat loss in accordance with Section 4.3 of the Natural Communities Conservation Planning Process (NCCP) Guidelines because the project is in the Lake Hodges Segment of the MSCP which has established hardline preserve boundaries.

7.1.E The project is not located in an area subject to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort because the project is in the Lake Hodges Segment of the MSCP which has established hardline preserve boundaries.

7.1.G The project will not preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning Process (NCCP) Guidelines because the project is in the Lake Hodges Segment of the MSCP which has established hardline preserve boundaries.

7.1.H The project is NOT subject to the Biological Mitigation Ordinance (BMO) because it is in the Lake Hodges Segment of the MSCP which has established hardline preserve boundaries.

7.1.L The project site does not support eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act) because there are no nest sites, current or historic, within 10,000 feet of the project boundaries and the site is a low quality foraging site.

### 7.3 Cumulative Impact Analysis

Due to the fact that all impacts to Local Policies, Ordinances, or Adopted Plans will be mitigated for to a level that is below significance, approval of the Rancho Cielo Madura project will not have cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects affecting the same resource.

### 7.4 Mitigation Measures and Design Considerations

7.1.C RPO 'Sensitive Habitat Lands'; the proposed project impacts approximately 21.22 acres of coastal California gnatcatcher habitat (coastal sage scrub).

The applicant has requested a Boundary Adjustment to the MSCP Preserve that will place 79.45 acres of sensitive CSS occupied habitat, and a total of 192.6 acres into the Preserve. The proposed project will to place the designated MSCP Preserve into an open space easement protected by a limited building zone easement, fencing, and signage, and with management through an RMP.

**MSCP PRESERVE HABITAT COMMUNITIES INCREASE EXISTING VS. PROPOSED**

| Plant Community | Onsite Acres | Existing On-Site MSCP OS Acres | Proposed On-Site MSCP OS Acres | Difference |
|---|---|---|---|---|
| **Diegan coastal sage scrub*** | **100.14** | **72.91** | **79.45** | **+6.54** |
| **Southern mixed chaparral*** | **137.93** | **92.69** | **91.37** | **-1.32** |
| **Willow Scrub** | **0.91** | **0.91** | **0.91** | **0.0** |
| **Jurisdictional /RPO unvegetated Non Wetland Waters*** | **1.20** | **1.14** | **1.16** | **+0.02** |
| **Non-Native Grasslands*** | **15.92** | **15.87** | **15.77** | **-0.01** |
| Eucalyptus Woodland | 2.31 | 0.67 | 0.0 | -0.67 |
| Disturbed habitat | 10.86 | 4.06 | 3.74 | -0.32 |
| Developed Area | 0.96 | 0.28 | 0.31 | +0.03 |
| TOTAL | 256.10 | 188.63** | 192.6 | +3.98 |

Totals may not compute exactly due to rounding to the nearest 100th place

*potentially significant impacts unless mitigated

**Federal Register states that the total onsite OS for the combined projects totals 192.2 acres. Corrections have been made for the incorrect inclusion of approximately 4.57 acres of impacted habitat as avoided habitat and part of the OS calculation. These impacts included within the MSCP OS include: Manufactured slope and sewer line within Lot "A" (0.91 acres), sewer line joining upper and lower Madura (0.56 acres), FMZ for the Cielo project completed on the Madura property (0.56 acres) and approximately 2.54 acres of isolated ungraded habitat to be cleared for FMZ and as part of the mass grading operations. When these impacted areas are removed from the MSCP project OS calculation the actual existing MSCP project OS totals approximately 188.63 acres

7.1.K Impacts to migratory birds or destruction of active migratory bird nests and/or eggs will be prevented by the implementation of seasonal restrictions on the removal of potential nesting areas (trees and shrubs) in conjunction with site build-out as delineated below. This will ensure consistency with the MBTA and the CFGC, and keep impacts to Local Policies, Ordinances, or Adopted Plans to a level which is less than significant.

The project approval includes a warning that the MBTA must be followed. There are specific conditions for avoiding construction impacts to raptors and California gnatcatcher. To avoid potential impacts to nesting raptors and coastal California gnatcatchers, construction activities within or near mature trees or power poles for raptors and coastal sage scrub habitat for gnatcatchers shall be avoided during their nesting seasons. For raptors, if construction activities cannot be avoided from January 15 to September 1, pre-construction nest surveys shall be conducted and avoidance measures implemented, as required upon consultation with the County and appropriate Wildlife Agencies. The MSCP does not allow clearing or construction activity in occupied gnatcatcher habitat during the breeding season of March 1 to July 15.

### 7.5 Conclusions

As discussed in the previous sections, future development of the project site, as presently proposed, could result in significant impacts to Local Policies, Ordinances, or Adopted Plans. However, all significant impacts to Local Policies, Ordinances, or Adopted Plans shall be mitigated for, reducing them to a level that is less than significant.

## 8.0 SUMMARY OF PROJECT IMPACTS AND MITIGATION

Section 3.4 lists all 15 mitigation measures. The project will impact 83.8 acres and preserve 192.6 acres of onsite habitat with management within the MSCP. This is an increase of approximately 3.98 acres preserved onsite acres relative to the existing onsite MSCP preserve (based on approved impacts) and increases the total MSCP Preserve by a total of 4.68 acres (on and offsite).

Mitigation for the impacts to the jurisdictional ephemeral non wetland waters be completed offsite within an approved mitigation bank or program. All upland mitigation measures are proposed to be completed onsite. The location of the onsite open space easement is shown in Figure 10 and shown in Photograph 4. To avoid potential impacts to nesting California gnatcatchers, construction activities within 300 feet of coastal sage scrub habitat shall be avoided from March 1 through August 15. To avoid potential impacts to nesting raptors, which may nest in the onsite eucalyptus trees, construction activities within this area shall be avoided from January 15 through August 15. If construction activities cannot be avoided during this period, pre-construction surveys nest surveys shall be conducted and avoidance measures implemented, as required upon consultation with the County and appropriate Wildlife Agencies.

No structures, grading or brush management impacts shall be permitted within the preserved open space. The open space shall be further buffered from the development with the created limited building zone easements in which no structures may be constructed. No trails are located within the proposed mitigation open space easement area. All access with be precluded and signs will be posted within each residential lot and along potential access paths.

Due to the topography, as well as the mature stands of dense habitat (historically, and to be), fencing around

the open space easement area is not recommended because it would promote new trails into the open space. Fences are to be placed on the perimeter of the graded pads of the residential lots and signs would be placed at the open space easement boundary in areas where access is possible.
Potential indirect impacts will be mitigated by the RMP, the biological monitor during construction, conspicuously marking the construction area, and adhering to the Stormwater Management Plan.

Implementation of these mitigation measures will reduce potential project impacts to below a level of significance and ensure that the project is compliant with the California Environmental Quality Act.

**TABLE 12**
**Special-Status Species**
**Summary of Impacts and Mitigation**

| ***Species*** | **Status** | **Impact and Mitigation** |
|---|---|---|
| Wart Stemmed Ceanothus *Ceanothus Verrucosus* | CNPS 2.2, MSCP-List B | Direct: Impact due to grading, vegetation removal for BMZ. Mitigation: Preserve approximately 85% of the population onsite within the 91.37 acres of preserved mixed chaparral onsite and the preservation of the species within the SPA |
| San Diego Adolphia *Adolphia californica* | CNPS 2.1, MSCP-List B | Direct: Potential mortality due to vegetation removal required for the BMZ. Mitigation: Of the two last observed in 2001, one is within the proposed FMZ and the other is within the 192.6 acres Open Space preserve; likely to have not persisted after the 2007 fire. |
| Coastal California gnatcatcher *Polioptila californica californica* | FT, CSC, MSCP- Group 1 | Impact: Potential loss of nest, eggs, or young; loss of coastal sage scrub breeding and foraging habitat; disturbance of nesting activities. Mitigation: Limited construction period; Preserve 79.45 acres of occupied habitat onsite within Open Space as compensatory mitigation lands |
| Southern California rufous-crowned sparrow *Aimophila ruficeps canescens* | FgD MSCP- Group 1 | Impact: Potential loss of nest, eggs, or young; loss of coastal sage scrub breeding and foraging habitat; disturbance of nesting activities Mitigation: Limited construction period |

**Potential Permitting Requirements**
For impacts to the unvegetated ephemeral non wetland waters of the U.S. a USACOE Nationwide 404 permit, a RWQCB 401 certification and a CDFG 1600 series permit shall be required prior to the initiation of County approved impacts (the project).

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## 10.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

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BLUE Consulting Group, LLC.

The following individual(s) completed the field survey(s): Michael Jefferson
Erik LaCoste (protocol CAGN surveys)

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

Signed:

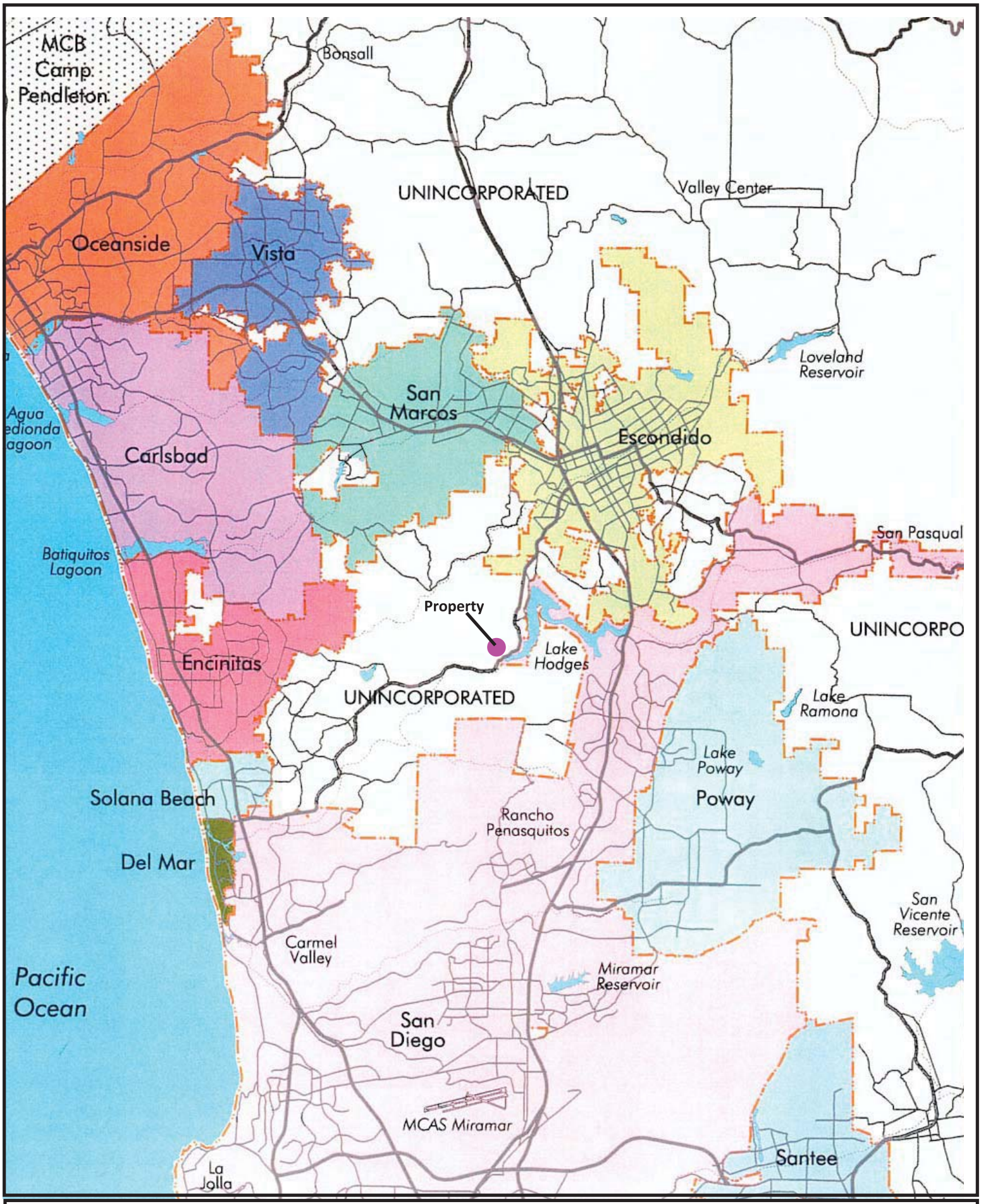
Michael K. Jefferson
BLUE Consulting Group, LLC Signed:

Erik LaCoste

Organizations Contacted: County of San Diego
U.S. Fish and Wildlife Service

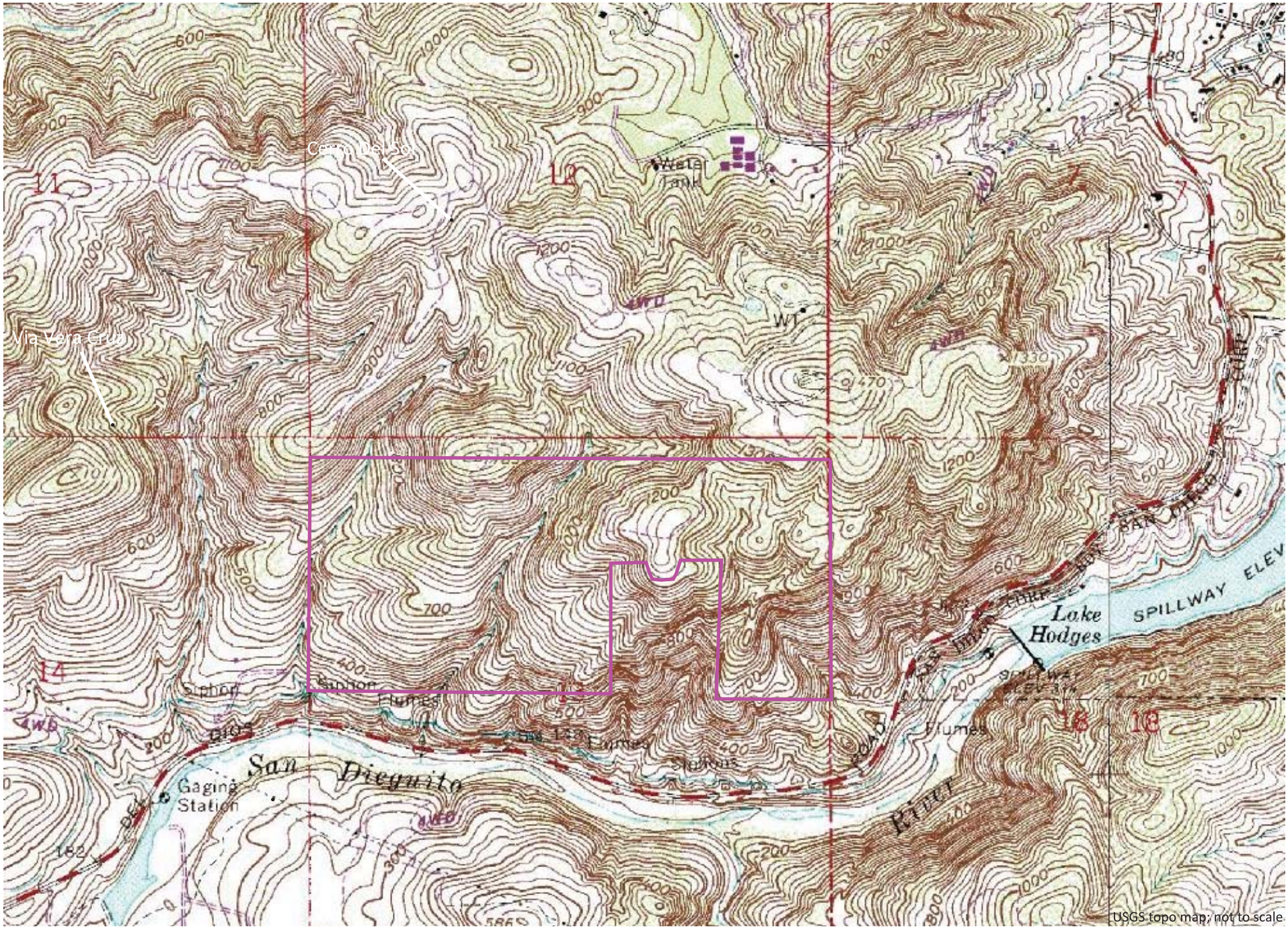
**ATTACHMENTS**

Attached Figures 1-10




Property

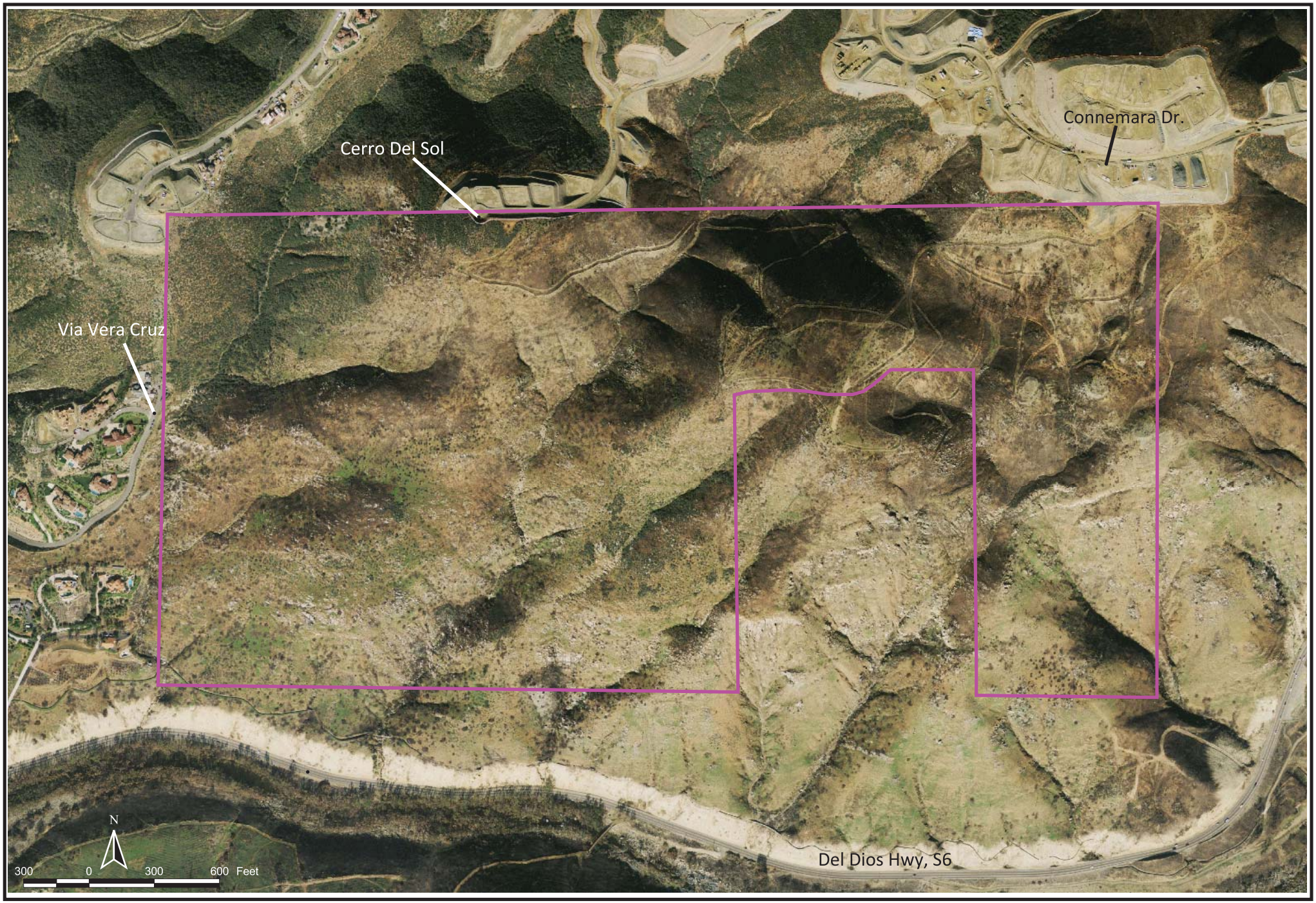
**FIGURE 1**
**Regional Location**




Property
TM 5456 RPL 2; 270.29 acres

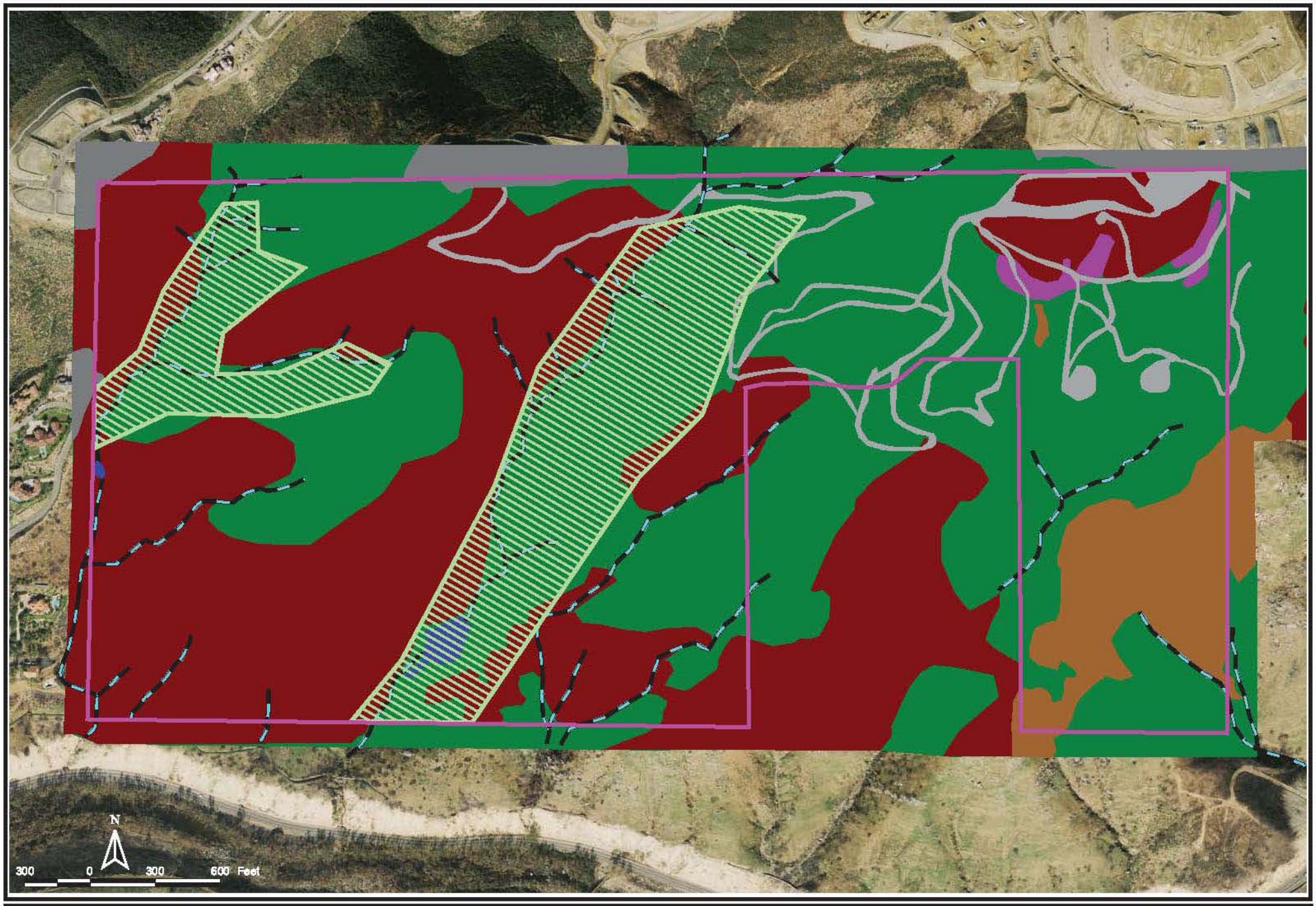
**FIGURE 2**

**Property**
**USGS topo map**




Property
TM 5456 RPL2; 270.29 acres

**FIGURE 3**
**Property Aerial**




Property

Existing Open Space Easements (to be vactated)

Jurisdictonal Unvegetated Non-Wetland Waters

RPO/Jurisdictonal Willow Scrub

Southern Mixed Chaparral

Coastal Sage Scrub; Disturbed

Non-Native Grasslands

Eucaluptus Woodland

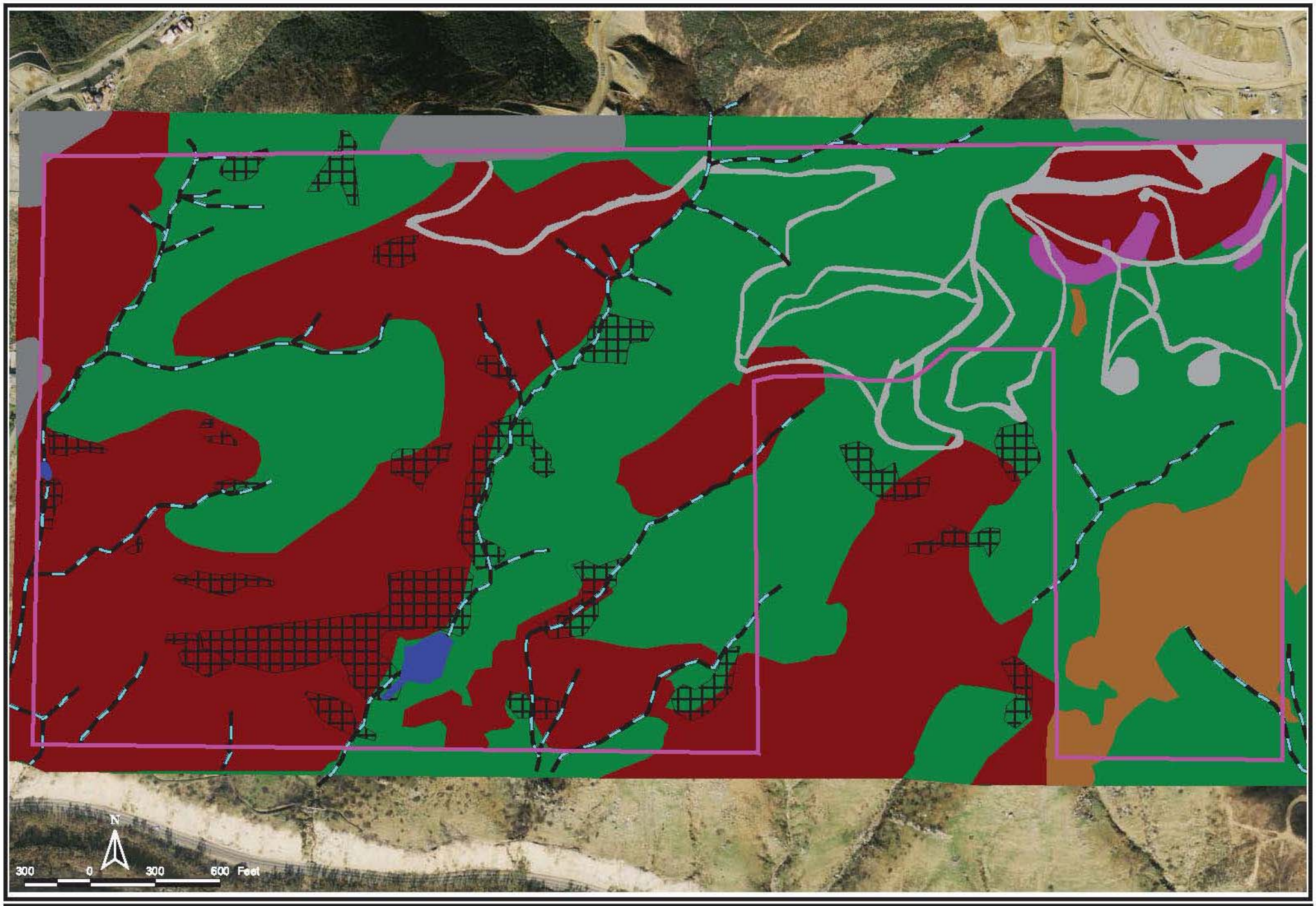
Developed

Disturbed Habitat

**FIGURE 4**

**TM 5456 RPL2**

**Existing Open Space Easements**



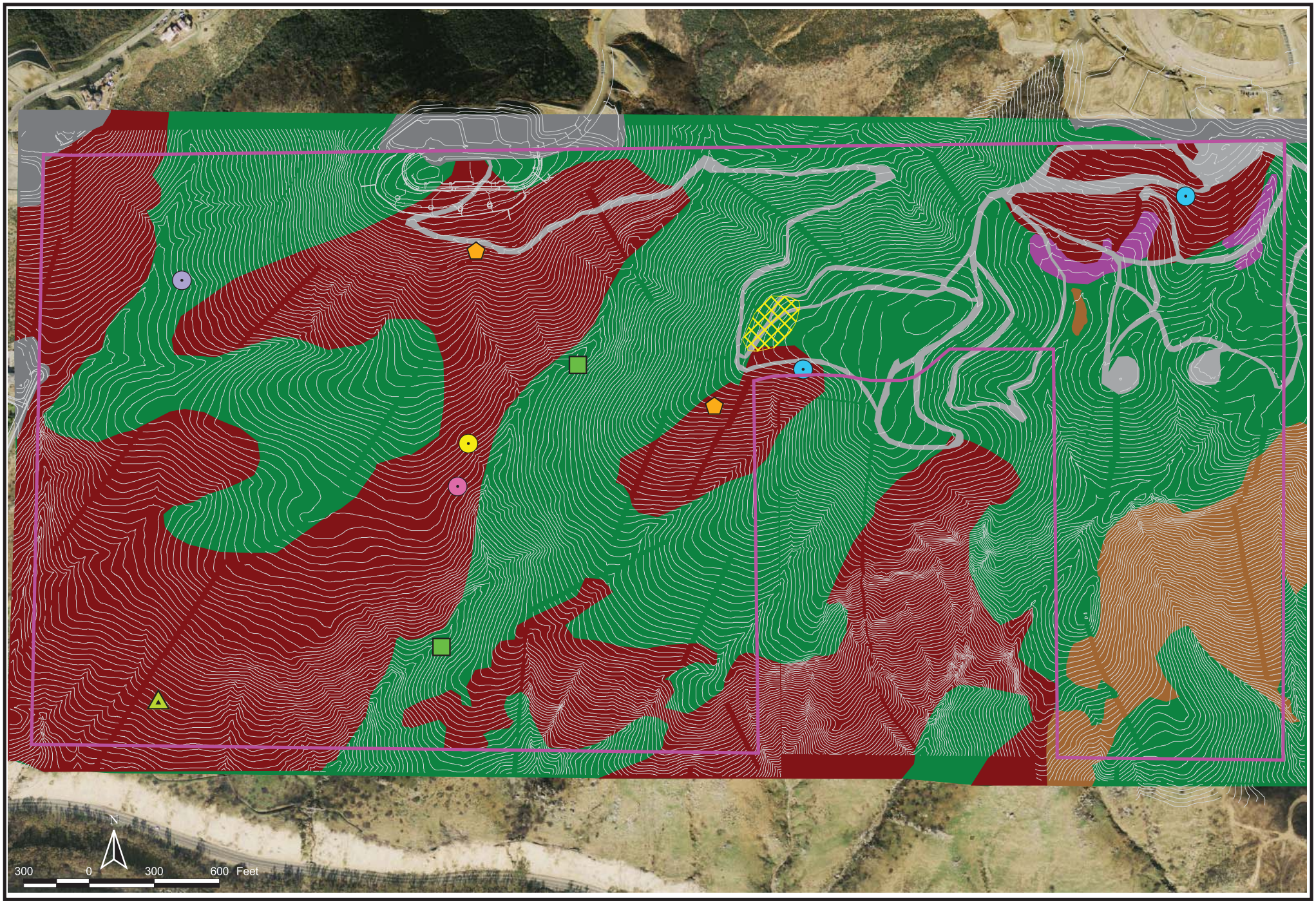

Property
TM 5456; 269 acres

Southern Mixed Chaparral
Coastal Sage Scrub; Disturbed
Non-Native Grasslands
Eucaluptus Woodland

Rock Outcrops
Disturbed Habitat
Developed Area

Jurisdictional Non-Wetland Waters; tributary
Willow Scrub; RPO jurisdictional habitat

**FIGURE 5**
**Habitat Map**




Property
TM 5456; 269 acres
Develpoed
Disturbed Habitat

Southern Mixed Chaparral
Coastal Sage Scrub; Disturbed
Non-Native Grasslands
Eucaluptus Woodland

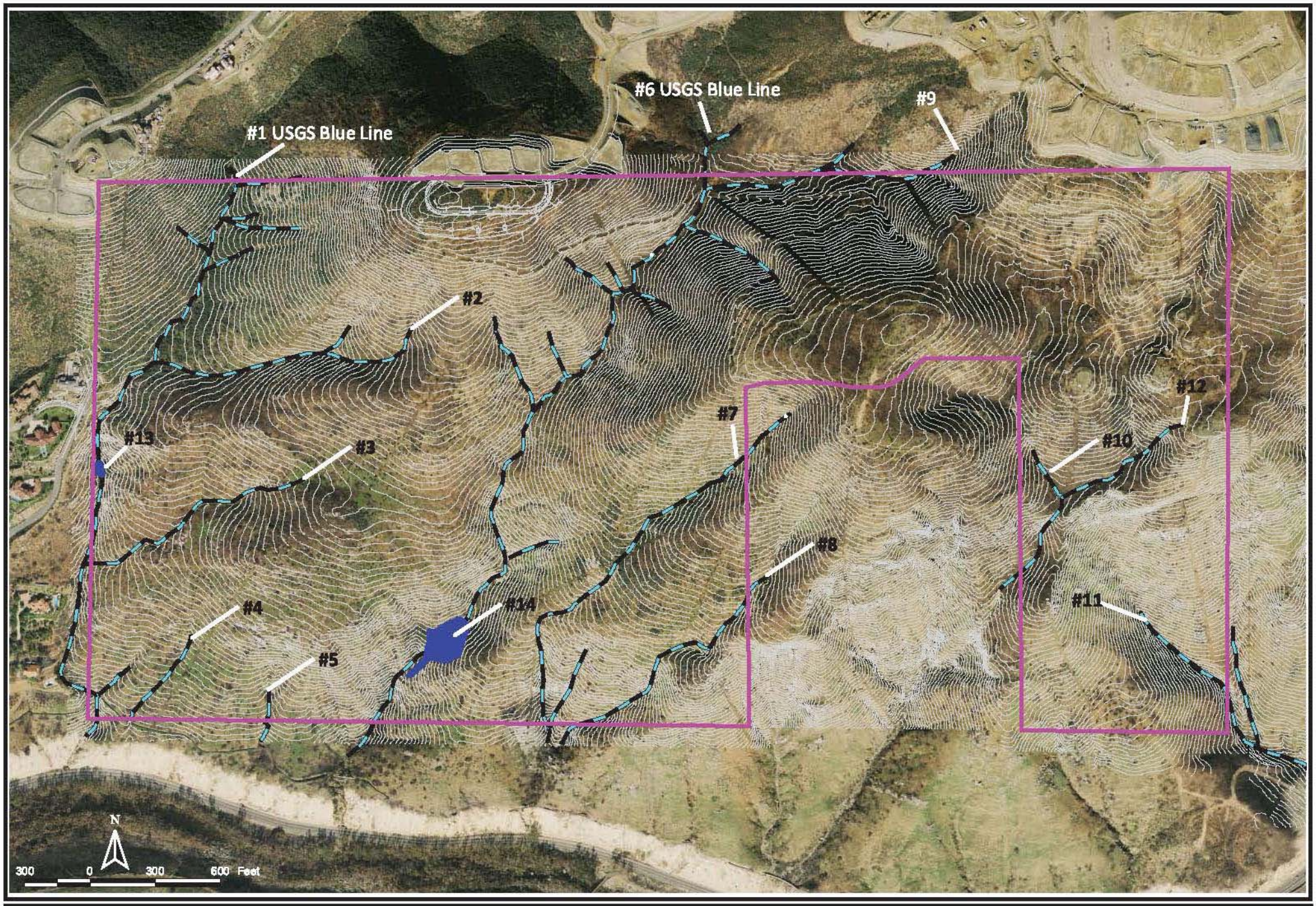
CAGN 6-30 Obs.
CAGN 7-22 Obs.
CAGN 7-21 Obs.
CAGN 8-8 Obs.

Wart-Stemmed Ceanothus
(primarily on steep slopes)
Nuttall's Scrub Oak
California adolphia

Redberry; Low Potential
Hermes Copper Habitat
Rufous crowned sparrow;
30-50 individuals
Deer Carcass

**FIGURE 6**

**Sensitive Species Observed**

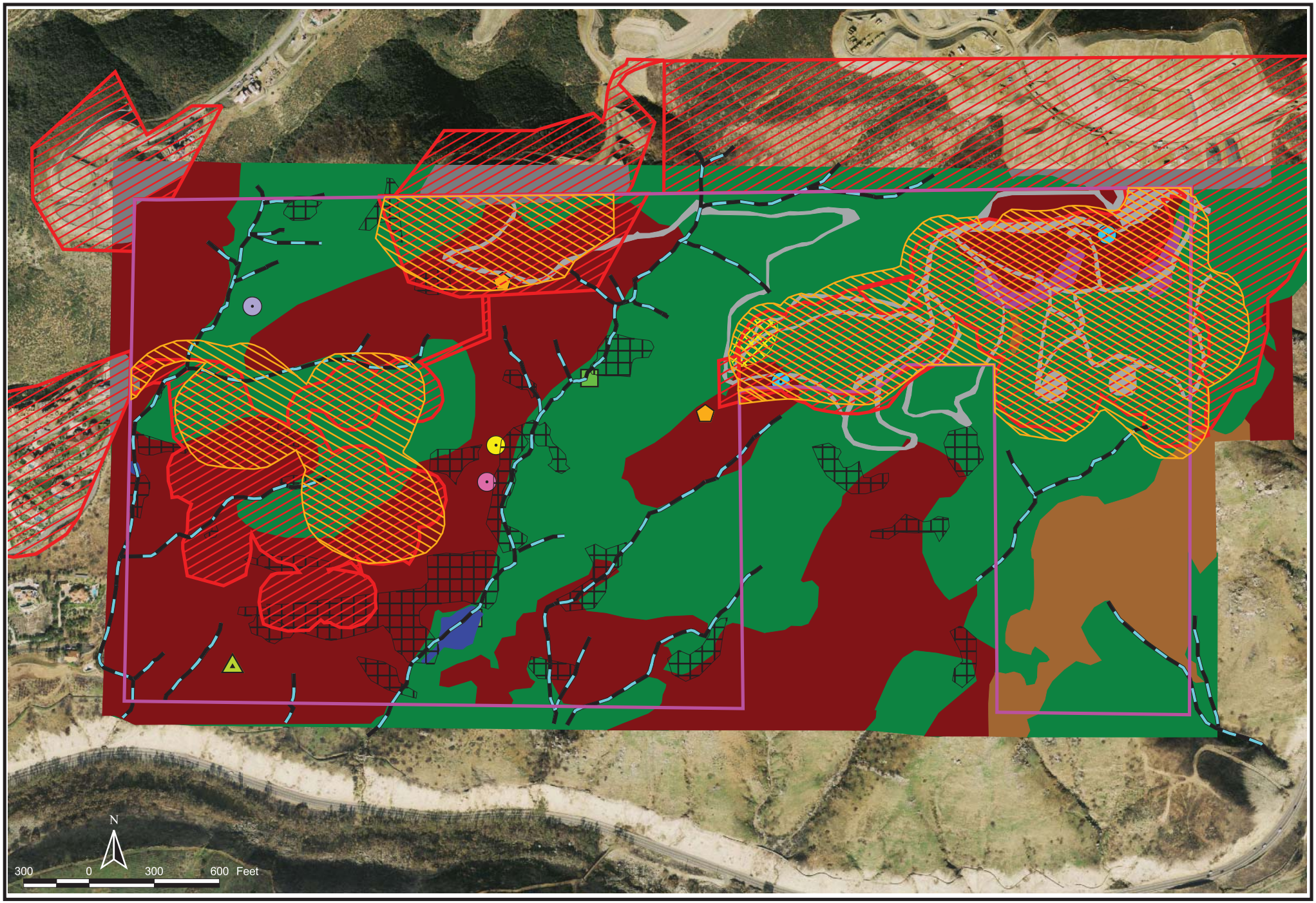



Property
TM 5456; 269 acres

Jurisdictional Non-Wetland Waters; #1-#12 tributaries (20,824 linear feet)

Willow Scrub; RPO/Jurisdictional Habitat (0.91 acres, two locations; #13-#14)

**FIGURE 7**
**Results of Jurisdictional Wetland Delineation**



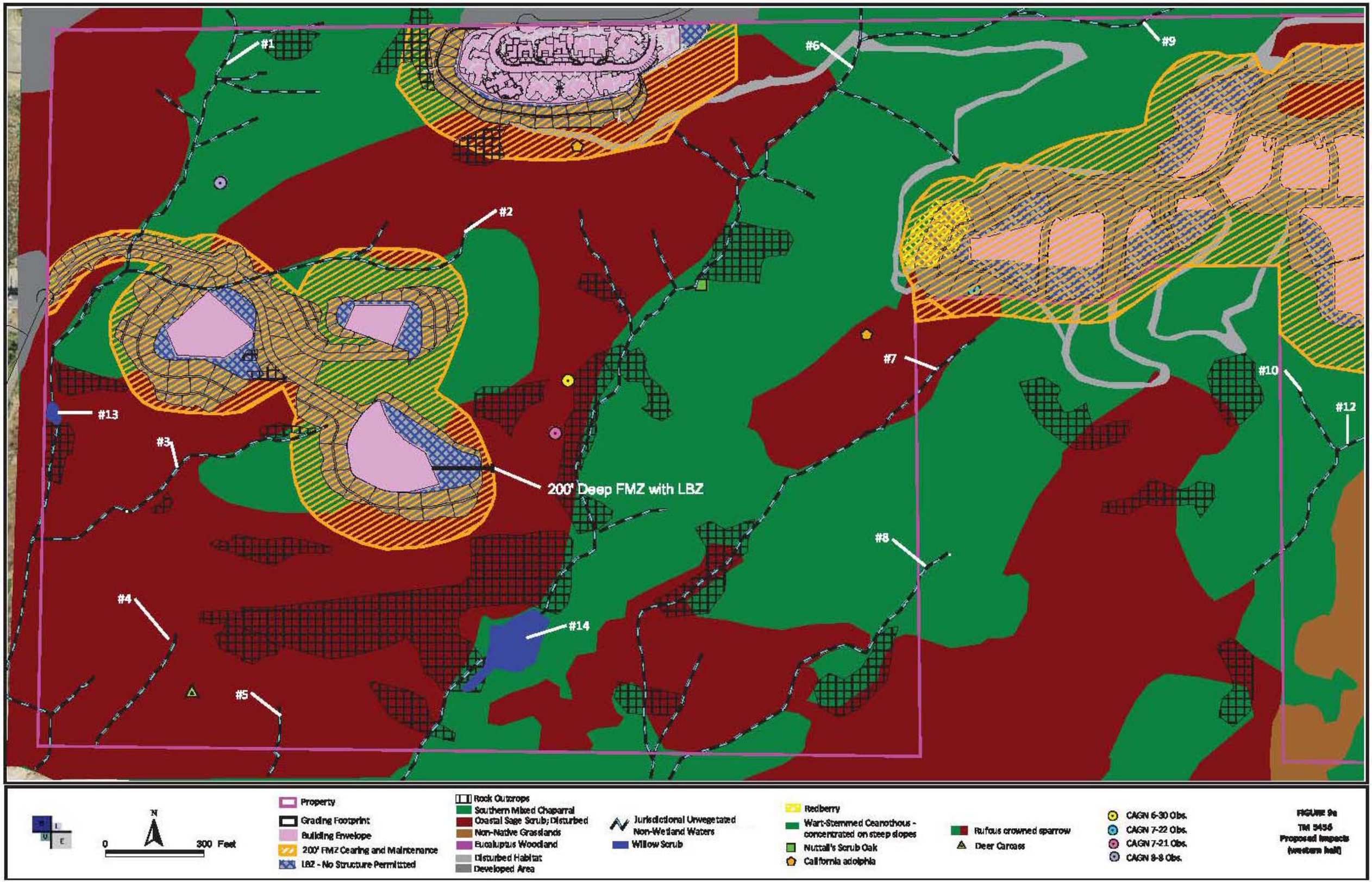

Property

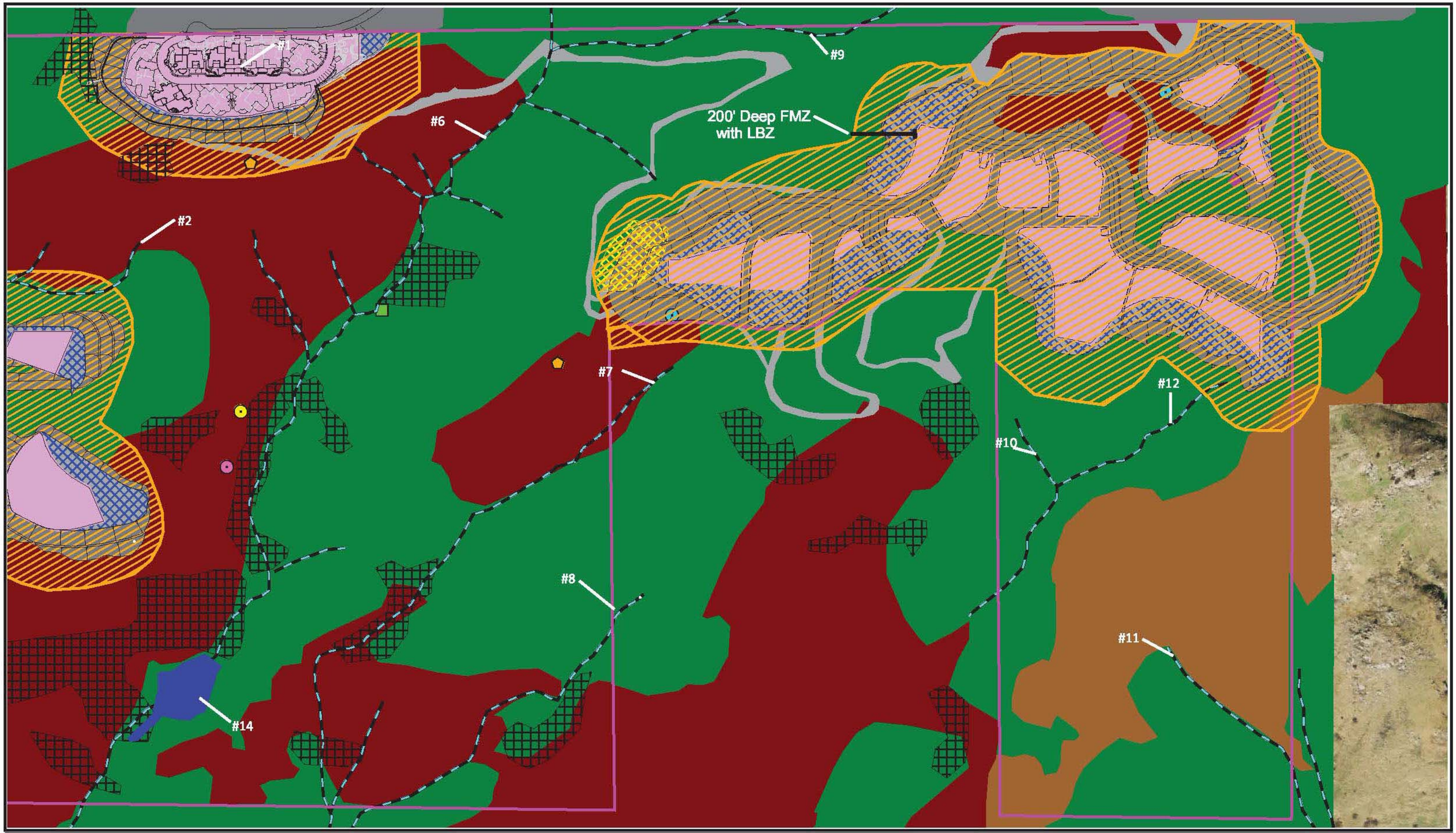
Approved MSCP Take;
Grading , Utility Easements and FMZ (100')
No LBZ was previously required

2012 Proposed Take Footprint;
Grading, LBZ and 200' FMZ

**FIGURE 8**

**MSCP Permitted Take**
**VS.**
**2012 Proposed Impacts**


#1
#2
#3
#4
#5
#6
#7
#8
#9
#10
#12
#13
#14
200' Deep FMZ with LBZ
N
0
300 Feet
Property
Grading Footprint
Building Envelope
200' FMZ Clearing and Maintenance
LBZ - No Structure Permitted
Rock Outcrops
Southern Mixed Chaparral
Coastal Sage Scrub; Disturbed
Non-Native Grasslands
Eucalyptus Woodland
Disturbed Habitat
Developed Area
Jurisdictional Unvegetated Non-Wetland Waters
Willow Scrub
Redberry
Wart-Stemmed Ceanothous - concentrated on steep slopes
Nuttall's Scrub Oak
California adolphia
Rufous crowned sparrow
Deer Carcass
CAGN 6-30 Obs.
CAGN 7-22 Obs.
CAGN 7-21 Obs.
CAGN 8-8 Obs.
FIGURE 9a
TM 5456
Proposed Impacts
(western half)




BLUE

N

0 300 Feet

Property
Grading Footprint
Building Envelope
200' FMZ Cearing and Maintenance
LBZ - No Structure Permittted

Rock Outcrops
Southern Mixed Chaparral
Coastal Sage Scrub; Disturbed
Non-Native Grasslands
Eucaluptus Woodland
Disturbed Habitat
Developed Area

Jurisdictional Unvegetated Non-Wetland Waters
Willow Scrub

Redberry
Wart-Stemmed Ceanothous - concentrated on steep slopes
Nuttall's Scrub Oak
California adolphia

Rufous crowned sparrow
Deer Carcass

CAGN 6-30 Obs.
CAGN 7-22 Obs.
CAGN 7-21 Obs.
CAGN 8-8 Obs.

**FIGURE 9b**
**TM 5456**
**Proposed Impacts (eastern half)**

N

0 300 Feet

Property
Proposed Impact Footprint
Proposed On-Site Open Space

Rock Outcrops
Southern Mixed Chaparral
Coastal Sage Scrub; Disturbed
Non-Native Grasslands
Eucaluptus Woodland
Disturbed Habitat
Developed Area

Jurisdictional Unvegetated Non-Wetland Waters
Willow Scrub

Redberry
Wart-Stemmed Ceanothous - concentrated on steep slopes
Nuttall's Scrub Oak
California adolphia (historic)

Rufous crowned sparrow
Deer Carcass

CAGN 6-30 Obs.
CAGN 7-22 Obs.
CAGN 7-21 Obs.
CAGN 8-8 Obs.

**FIGURE 10a**

**TM 5456**
**Proposed Open Space (western half)**

N

0 300 Feet

Property
Proposed Impact Footprint
Proposed On-Site Open Space

Rock Outcrops
Southern Mixed Chaparral
Coastal Sage Scrub; Disturbed
Non-Native Grasslands
Eucaluptus Woodland
Disturbed Habitat
Developed Area

Jurisdictional Unvegetated Non-Wetland Waters
Willow Scrub

Redberry
Wart-Stemmed Ceanothous - concentrated on steep slopes
Nuttall's Scrub Oak
California adolphia (historic)

Rufous crowned sparrow
Deer Carcass

CAGN 6-30 Obs.
CAGN 7-22 Obs.
CAGN 7-21 Obs.
CAGN 8-8 Obs.

**FIGURE 10b**

**TM 5456**
**Proposed Open Space (eastern half)**

Attached Tables 3-5, 7-8, 11

**TABLE 3**
**SENSITIVE PLANT SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**

| Species | State/Federal Status | MSCP Status | CNPS List/Code | Typical Habitat/Comments |
|---|---|---|---|---|
| *Acanthomintha ilicifolia* San Diego thornmint | CE/FT | NE, CS | 1B/2-3-2 | Chaparral, coastal sage scrub, valley and foothill grassland/ clay soils. No suitable habitat present; not expected to occur. |
| *Adolphia californica* California adolphia* | –/– | – | 2/1-2-1 | Coastal sage scrub, chaparral. Observed by RECON, not since |
| *Ambrosia pumila* San Diego ambrosia | –/– | NE, CS | 1B/3-2-2 | Creekbeds, seasonally dry drainages, floodplains. No suitable habitat present; not expected to occur. |
| *Arctostaphylos glandulosa* ssp. *crassifolia* Del Mar manzanita | –/FE | NE, CS | 1B/3-3-2 | Southern maritime chaparral. Not suitable area/habitat present; not expected to occur. |
| *Arctostaphylos rainbowensis* Rainbow manzanita | –/FE | NE, CS | 1B/3-3-2 | Southern maritime chaparral. Not observed within plan footprint, not expected to occur |
| *Artemisia palmeri* San Diego sagewort | –/– | – | 2/2-2-1 | Coastal sage scrub, chaparral, riparian. Low potential to occur. |
| *Baccharis vanessae* Encinitas coyote bush | CE/FT | NE, CS | 1B/2-3-3 | Chaparral. Not observed within plan footprint, not expected to occur |
| *Brodiaea filifolia* Thread-leaved brodiaea | CE/FT | NE | 1B/3-3-3 | Valley and foothill grassland, vernal pools. Not expected to occur. |
| *Brodiaea orcuttii* Orcutt's brodiaea | –/– | – | 1B/1-3-2 | Closed-cone coniferous forest, meadows, cismontane wood-land, valley and foothill grass-land, vernal pools. Not expected to occur. |
| *Calanthus stenocarpus* (heterophyllus) Slender Pod jewelflower | –/– | CS | Locally rare | Annual Herb. Coastal Sage Scrub, Chaparral, weed, species characteristic of disturbed places. Not surveyed when potentially visible in spring |
| *Ceanothus verrucosus* Wart-stemmed ceanothus* | –/– | CS | 2/1-2-1 | Chaparral. Common shrub species onsite and within the area |

**TABLE 3**
**SENSITIVE PLANT SPECIES**
**OBSERVED (†) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | State/Federal Status | MSCP Status | CNPS List/Code | Typical Habitat/Comments |
|---|---|---|---|---|
| *Chorizanthe procumbens* prostrate spineflower | –/– | CS | 4/ 1-2-2 | Openings in coastal chamise chaparral. regularly occupies recently disturbed microhabitats such as the shoulders of dirt roads or areas of lightly brushed chaparral. Not observed, not expected to occur |
| *Chorizanthe polygonoides* var. *longispina* Long-spined spineflower | –/– | – | 1B/2-2-2 | Open chaparral, coastal sage scrub, montane meadows, valley and foothill grasslands; vernal pools/clay. Not appropriate habitat. Low potential to occur. |
| *Comarostaphylis diversifolia* ssp. *diversifolia* Summer holly | –/– | CS | 1B/2-2-2 | Chaparral. No suitable habitat. Not expected to occur. |
| *Dichondra occidentalis* Western dichondra | –/– | – | 4/1-2-1 | Chaparral, cismontane wood-land, coastal sage scrub, valley and foothill grassland; generally post-burn. Not observed but high potential to occur. |
| *Dudleya blochmaniae* ssp. *blochmaniae* Blochman's dudleya | –/– | NE | 1B/2-2-2 | Coastal sage scrub. Would have been observed if present. Not expected to occur. |
| *Dudleya variegata* Variegated dudleya | –/– | NE | 1B/1-2-2 | Openings in chaparral and coastal sage scrub; open, rocky grasslands. Not observed but high potential to occur. |
| *Dudleya viscida* Sticky-leaved liveforever | –/– | – | 1B/3-2-3 | Coastal sage scrub; steep, north-facing slopes/ gabbroic soils. Not observed but high potential to occur. |
| *Ericameria palmeri* ssp. *palmeri* Palmer's Goldenbush | -- /C2 | | | Seasonally wet/moist locales, coastal drainages, in mesic chaparral sites, or rarely in Diegan Sage Scrub. No suitable habitat present; not expected to occur. |
| *Eryngium aristulatum* var. *parishii* San Diego button celery | CE/FE | NE | | Vernal pools. No suitable habitat present; not expected to occur. |

**TABLE 3**
**SENSITIVE PLANT SPECIES**
**OBSERVED (†) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | State/Federal Status | MSCP Status | CNPS List/Code | Typical Habitat/Comments |
|---|---|---|---|---|
| *Euphorbia misera*<br>Cliff spurge | –/– | CS | 2/2-2-1 | Coastal sage scrub, coastal bluff scrub. Not expected to occur. |
| *Ferocactus viridescens*<br>Coast barrel cactus | –/– | CS | 2/1-3-1 | Chaparral, coastal sage scrub, valley and foothill grassland. Not expected to occur. |
| *Harpagonella palmeri* var. *palmeri*<br>Palmer's grappling hook | –/– | – | 2/1-2-1 | Chaparral, coastal sage scrub, valley and foothill grassland. Moderate potential to occur |
| *Hazardia orcuttii*<br>Orcutt's hazardia | –/– | NE, CS | 1B/3-3-2 | Open chamise chaparral. Only one U.S. population known from Encinitas. No suitable habitat. Not expected to occur. |
| *Juncus acutus ssp. leopoldii*<br>Spiny rush | –/– | – | 4/1-2-1 | Coastal dunes (mesic) meadows (alkaline), coastal salt marsh. No suitable habitat. Not expected to occur. |
| *Lessingia filaginifolia* var. *filaginifolia* (=*Corethrogyne filaginifolia* var. *incana*)<br>San Diego sand aster | –/– | – | 1B/2-2-2 | Coastal sage scrub, chaparral. Out of range. Not expected to occur. |
| *Muilla clevelandii*<br>San Diego goldenstar | –/– | NE | 1B/2-2-2 | Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Not expected to occur. |
| *Navarretia fossalis*<br>Prostrate navarretia | –/FT | NE, CS | 1B/2-3-2 | Vernal pools. No suitable habitat present; not expected to occur. |
| *Nolina cismontana*<br>Chapparal beargrass | –/– | – | – | Chaparral, xeric coastal sage scrub. Not expected to occur. |
| *Quercus dumosa*<br>Nuttall's scrub oak* | –/– | CS | 1B/2-3-2 | Coastal chaparral. Observed onsite in two locations |
| *Selaginella cinerascens*<br>Ashy spike moss* | –/– | – | – | Chaparral, coastal sage scrub. Observed throughout property in habitat and rock outcrops |

**TABLE 3**
**SENSITIVE PLANT SPECIES**
**OBSERVED (†) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | State/Federal Status | MSCP Status | CNPS List/Code | Typical Habitat/Comments |
|---|---|---|---|---|
| *Tetracoccus dioicus* Parry's tetracoccus | –/– | CS | 1B/3-2-2 | Chaparral, coastal sage scrub. Not observed but moderate potential to occur. |

NOTE: See Table 4 for explanation of sensitivity codes.

* Observed

**TABLE 4**
**SENSITIVE WILDLIFE SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**

| Species | Status | Habitat | Occurrence/Comments* |
|---|---|---|---|
| Invertebrates (Nomenclature from Collins 1997) | | | |
| Quino checkerspot butterfly<br>*Euphydryas editha quino* | CSC, MSCP | Chaparral, coastal sage scrub with coarse sandy soils and scattered brush and *plantago* sp. | Outside of USFWS potential habitat area. No potential to occur onsite. |
| Monarch<br>*Danaus plexippus* | CSC, MSCP | Open fields and meadows with milkweed. | No potential to occur onsite. |
| Reptiles (Nomenclature from Collins 1997) | | | |
| Southwestern pond turtle<br>*Clemmys marmorata pallida* | CSC, FSS, MSCP | Ponds, small lakes, marshes, slow-moving, sometimes brackish water. | No appropriate habitat. No potential to occur onsite. |
| San Diego horned lizard<br>*Phrynosoma coronatum blainvillii* | CSC, MSCP, ! | Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage. | Moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Coastal rosy boa<br>*Charina trivirgata roseofusca* | CSC, MSCP | Chaparral, coastal sage scrub with coarse sandy soils and scattered brush. | Moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| San Diego banded gecko<br>*Coleonyx variegates abbottii* | CSC, MSCP | Rocky areas in coastal sage and chaparral. | Moderate potential to occur onsite due to habitat. Not historically observed in the area, not expected to occur. |
| Coastal whiptail<br>*Cnemidophorus tigris stejnegeri* | CSC, MSCP | Chaparral, coastal sage scrub with coarse sandy soils and scattered brush. | Moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Belding's orangethroat whiptail<br>*Cnemidophorus hyperythrus beldingi* | CSC, MSCP | Chaparral, coastal sage scrub with coarse sandy soils and scattered brush. | Moderate potential to occur onsite due to habitat. Not historically observed in the area. |

**TABLE 4**
**SENSITIVE WILDLIFE SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | Status | Habitat | Occurrence/Comments* |
|---|---|---|---|
| Silvery legless lizard<br>*Anniella pulchra pulchra* | CSC | Herbaceous layers with loose soil in coastal scrub, chaparral, and open riparian habitats. Prefers dunes and sandy washes near moist soil. | Low potential to occur onsite due to habitat. Not historically observed in the area, not expected to occur. |
| Red diamond rattlesnake<br>*Crotalus exsul (C. ruber ruber)* | CSC | Desert scrub and riparian habitats, coastal sage scrub, open chaparral, grassland, and agricultural fields. | Moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| San Diego ring neck snake<br>*Diadophis punctatus similis* | CSC | Moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, woodlands. | Low potential to occur onsite. |
| Coast patch-nosed snake<br>*Salvadora hexalepis virgultea* | CSC | Grasslands, chaparral, sagebrush, desert scrub. Found in sandy and rocky areas. | Low to Moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Birds (Nomenclature from American Ornithologists' Union) | | | |
| Great blue heron (rookery site)<br>*Ardea herodias* | ! | Bays, lagoons, ponds, lakes.<br>Non-breeding year-round visitor, some localized breeding. | Low potential to occur onsite. |
| Great egret (rookery site)<br>*Ardea alba* | ! | Lagoons, bays, estuaries. Ponds and lakes in the coastal lowland. Winter visitor, uncommon in summer. | Low potential to occur onsite. |
| White-tailed kite (nesting)<br>*Elanus leucurus* | CFP, ! | Nest in riparian woodland, oaks, sycamores. Forage in open, grassy areas. Year-round resident. | Low potential to occur onsite. |

**TABLE 4**
**SENSITIVE WILDLIFE SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | Status | Habitat | Occurrence/Comments* |
|---|---|---|---|
| Northern harrier (nesting)<br>*Circus cyaneus* | CSC, MSCP | Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident. | Low potential to occur onsite. |
| Sharp-shinned hawk (nesting)<br>*Accipiter striatus* | CSC | Open deciduous woodlands, forests, edges, parks, residential areas. Migrant and winter visitor. | Low potential to occur onsite. |
| Cooper's hawk (nesting)<br>*Accipiter cooperii* | CSC, MSCP | Mature forest, open woodlands, wood edges, river groves. Parks and residential areas. Migrant and winter visitor. | Low potential to occur on site. |
| Ferruginous hawk (wintering)<br>*Buteo regalis* | CSC | Require large foraging areas. Grasslands, agricultural fields. Uncommon winter resident. | Low potential to occur onsite. |
| Golden eagle (nesting and wintering)<br>*Aquila chrysaetos* | CSC, CFP, BEPA, MSCP | Require vast foraging areas in grassland, broken chaparral, or sage scrub. Nest in cliffs and boulders. Uncommon resident. | Moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Merlin<br>*Falco columbarius* | CSC | Rare winter visitor. Grasslands, agricultural fields, occasionally mud flats. | Low potential to occur onsite. |
| Prairie falcon (nesting)<br>*Falco mexicanus* | CSC | Grassland, agricultural fields, desert scrub. Uncommon winter resident. Rare breeding resident. Breeds on cliffs. | Low potential to occur onsite. |
| Western yellow-billed cuckoo (breeding)<br>*Coccyzus americanus occidentalis* | SE | Large riparian woodlands. Summer resident. Very localized breeding. | Low potential to occur onsite. |

**TABLE 4**
**SENSITIVE WILDLIFE SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | Status | Habitat | Occurrence/Comments* |
|---|---|---|---|
| Western burrowing owl (burrow sites)<br>*Speotyto cunicularia hypugaea* | CSC, MSCP | Grassland, agricultural land, coastal dunes. Require rodent burrows. Declining resident. | Low potential to occur onsite. |
| Southwestern willow flycatcher<br>*Empidonax traillii extimus* | SE, FE, FSS, MSCP | Nesting restricted to willow thickets. Also occupies other woodlands. Rare spring and fall migrant, rare summer resident. Extremely localized breeding. | Low potential to occur onsite. |
| Turkey Vulture*<br>*Cathartes aura* | CSC, MSCP | Grassland, agricultural land, coastal sage, chaparral. Declining resident. | Observed flying overhead.<br>Limited potential nesting onsite |
| California horned lark<br>*Eremophila alpestris actia* | CSC | Sandy shores, mesas, disturbed areas, grasslands, agricultural lands, sparse creosote bush scrub. | Low potential to occur onsite. |
| Coastal cactus wren<br>*Campylorhynchus brunneicapillus couesi* | CSC, MSCP, ! | Maritime succulent scrub, coastal sage scrub with *Opuntia* thickets. Rare localized resident. | Low potential to occur onsite. |
| Coastal California gnatcatcher*<br>*Polioptila californica californica* | FT, CSC, MSCP | Coastal sage scrub, maritime succulent scrub. Resident. | Two pairs and 2 individuals (juveniles potentially) observed onsite |
| Loggerhead shrike<br>*Lanius ludovicianus* | CSC | Open foraging areas near scattered bushes and low trees. | Low potential to occur onsite. |
| Least Bell's vireo (nesting)<br>*Vireo bellii pusillus* | SE, FE, MSCP | Willow riparian woodlands. Summer resident. | Low potential to occur onsite. |
| Yellow warbler (nesting)<br>*Dendroica petechia brewsteri* | CSC | Breeding restricted to riparian woodland. Spring and fall migrant, localized summer resident, rare winter visitor. | Low potential to occur onsite. |

**TABLE 4**
**SENSITIVE WILDLIFE SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | Status | Habitat | Occurrence/Comments* |
|---|---|---|---|
| Yellow-breasted chat (nesting)<br>*Icteria virens* | CSC, MSCP | Dense riparian woodland. Localized summer resident. | Low potential to occur onsite. |
| Southern California rufous-crowned sparrow*<br>*Aimophila ruficeps canescens* | CSC, MSCP | Coastal sage scrub, grassland. Resident. | Observed in great numbers throughout the property. Approximately 30-50 individuals |
| Bell's sage sparrow<br>*Amphispiza belli belli* | CSC, MSCP | Chaparral, coastal sage scrub. Localized resident. | Low potential to occur onsite. |
| Tricolored blackbird<br>*Agelaius tricolor* | CSC, MSCP | Freshwater marshes, agricultural areas, lakeshores, parks. Localized resident. | Low potential to occur onsite. |
| Blue grosbeak (nesting)<br>*Guiraca caerulea* | ! | Riparian woodland edges, mule fat thickets. Summer resident, spring and fall migrant, winter visitor. | Low potential to occur onsite. |
| Mammals (Nomenclature from Jones et al. 1982) | | | Low potential to occur onsite. |
| Pallid bat<br>*Antrozous pallidus* | CSC | Caves, mines, buildings. Found in a variety of habitats, arid and mesic. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Ringtail cat<br>*Bassariscus astutus* | CSC | Desert dune, rock outcrops, chaparral, forest (scrub) and mountains. | Low potential to occur onsite. |
| Pale big-eared bat<br>*Corynorhinus townsendii pallescens* | CSC | Caves, mines, buildings. Found in a variety of habitats, arid and mesic. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Townsend's western big-eared bat<br>*Corynorhinus townsendii townsendii* | CSC, MSCP | Caves, mines, buildings. Found in a variety of habitats, arid and mesic. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |

**TABLE 4**
**SENSITIVE WILDLIFE SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | Status | Habitat | Occurrence/Comments* |
|---|---|---|---|
| Californai leaf nosed bat<br>*Macrotus californicus* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Western mastiff bat<br>*Eumops perotis californicus* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Western small-footed myotis<br>*Myotis ciliolabrum* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Long-eared myotis<br>*Myotis evotis* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Yuma myotis<br>*Myotis yumanensis* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Friged myotis<br>*Eumops perotis californicus* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Long legged myotis<br>*Myotis volans* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Big free-tailed bat<br>*Nyctinomops macrotis* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |

**TABLE 4**
**SENSITIVE WILDLIFE SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | Status | Habitat | Occurrence/Comments* |
|---|---|---|---|
| Pocketed free-tailed bat<br>*Nyctinomops femorosacca* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Californai leaf nosed bat<br>*Macrotus californicus* | CSC, MSCP | Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows. | Low to moderate potential to occur onsite due to habitat. Not historically observed in the area. |
| Mountain lion*<br>*Felis concolor* | CSC, MSCP | Grassland, agricultural land, coastal sage, chaparral. Declining resident. | Occur onsite. Tracks/evidence observed outside plan footprint |
| Southern Mule Deer*<br>*Odocolleus hemionus* | CSC, MSCP | Grassland, agricultural land, coastal sage, chaparral. Declining resident. | Occur onsite. Tracks/evidence observed outside plan footprint |
| San Diego black-tailed jackrabbit<br>*Lepus californicus bennettii* | CSC, MSCP | Open areas of scrub, grasslands, agricultural fields. | High potential to occur onsite due to habitat. Not historically observed in the area. |
| Dulzura California pocket mouse<br>*Chaetodipus californicus femoralis* | CSC, MSCP | San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils. | No appropriate habitat, out of range, no potential to occur onsite. |
| Northwestern San Diego pocket mouse<br>*Chaetodipus fallax fallax* | CSC, MSCP | San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils. | No appropriate habitat, out of range, no potential to occur onsite. |
| Stephen's kangaroo rat<br>*Dipodomys stephensi* | CSC, MSCP | Sparse perennial plant cover is preferred (Thomas 1975). Burrows may be excavated in firm soil that is "neither extremely hard nor sandy" (Lackey 1967a) | No appropriate habitat, out of range, no potential to occur onsite. |

**TABLE 4**
**SENSITIVE WILDLIFE SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

| Species | Status | Habitat | Occurrence/Comments* |
|---|---|---|---|
| San Diego desert woodrat<br>*Neotoma lepida intermedia* | CSC | Coastal sage scrub and chaparral. | Low potential to occur onsite. |
| Southern grasshopper mouse<br>*Onychomys torridus ramona* | FE, CSC, MSCP | Grasslands and sparse coastal sage scrub. | No appropriate habitat, out of range, no potential to occur onsite. |
| Los Angeles little pocket mouse<br>*Perognathus longimembris brevinasus* | FE, CSC, MSCP | Fine, sandy soils, typically in arid grassland or coastal sage scrub habitats. | No appropriate habitat, out of range, no potential to occur onsite. |
| Pacific little pocket mouse<br>*Perognathus longimembris pacificus* | FE, CSC, MSCP | Open coastal sage scrub; fine, alluvial sands near ocean. | No appropriate habitat, out of range, no potential to occur onsite. |
| American badger<br>*Taxidea taxus* | MSCP | Dry, open grasslands, fields, and pastures. | No appropriate habitat, no potential to occur onsite. |

Status Codes

Listed/Proposed
FE = Listed as endangered by the federal government
FT = Listed as threatened by the federal government
SE = Listed as endangered by the state of California

Other
BEPA = Bald and Golden Eagle Protection Act
CFP = California fully protected species
CSC = California Department of Fish and Game species of special concern
FC = Federal candidate for listing (taxa for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support proposals to list as endangered or threatened; development and publication of proposed rules for these taxa are anticipated)
FSS = Federal (Bureau of Land Management and U.S. Forest Service) sensitive species
MSCP = Multiple Species Conservation Program target species list
! = Taxa listed with an asterisk fall into one or more of the following categories:
- Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines

**TABLE 4**
**SENSITIVE WILDLIFE SPECIES**
**OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**
**(continued)**

- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range
- Population(s) in California that may be peripheral to the major portion of a taxon's range, but which are threatened with extirpation within California
- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands)

**TABLE 5**
**SENSITIVITY CODES**

**FEDERAL CANDIDATES AND LISTED PLANTS**

FE = Federally listed, endangered
FT = Federally listed, threatened
FPE = Federally proposed endangered
FPT = Federally proposed threatened

**STATE LISTED PLANTS**

CE = State listed, endangered
CR = State listed, rare
CT = State listed, threatened

**SAN DIEGO COUNTY MSCP STATUS**

NE = Narrow endemic species
CS = MSCP Covered Species List

**CALIFORNIA NATIVE PLANT SOCIETY**

**LISTS**

1A = Species presumed extinct.

1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.

2 = Species rare, threatened, or endangered in California but which are more common elsewhere. These species are eligible for state listing.

3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed.

4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

**R-E-D CODES**

**R (Rarity)**

1 = Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time.

2 = Occurrence confined to several populations or to one extended population.

3 = Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

**E (Endangerment)**

1 = Not endangered
2 = Endangered in a portion of its range
3 = Endangered throughout its range

**D (Distribution)**

1 = More or less widespread outside California
2 = Rare outside California
3 = Endemic to California

**TABLE 7**
**Vegetation in Existing MSCP Project Footprint Versus**
**Proposed Rancho Cielo Subdivision Redesign**
**TOTAL IMPACTS**

| Plant Community | Habitat Tier | Onsite Acres | Total MSCP Project Impact Acreage | Existing MSCP On-Site Impacts | Existing On-Site MSCP OS Acres | Total Proposed Impact Acres | Proposed On-Site Impacts | Proposed On-Site MSCP OS Acres | Impact Neutral |
|---|---|---|---|---|---|---|---|---|---|
| Diegan coastal sage scrub* | II | 100.14 | 27.68* | 27.24* | 72.91 | 21.22* | 20.85* | 79.45 | |
| Southern mixed chaparral* | III | 137.93 | 47.4* | 45.24* | 92.69 | 51.83* | 46.56* | 91.37 | |
| Willow Scrub | I | 0.91 | N/A | N/A | 0.91 | 0.0 | 0.0 | 0.91 | 0.91 |
| Jurisdictional /RPO unvegetated Non Wetland Waters* | I | 1.20 | 0.06* | 0.06* | 1.14 | 0.04* | 0.04* | 1.16 | 1.16 |
| Non-Native Grasslands* | III | 15.92 | 0.08* | 0.05* | 15.87 | 0.3* | 0.15* | 15.77 | |
| Rock Outcrop** | | 17.78** | 3.12** | 3.12** | 14.66** | 0.05** | 0.05** | 17.73** | |
| Eucalyptus Woodland | IV | 2.31 | 1.64 | 1.64 | 0.67 | 2.31 | 2.31 | 0.0 | |
| Disturbed habitat | IV | 10.86 | 7.43 | 6.80 | 4.06 | 7.45 | 7.12 | 3.74 | |
| Developed Area | IV | 0.96 | 0.68 | 0.68 | 0.28 | 0.65 | 0.65 | 0.31 | |
| TOTAL | | 270.29 | 84.97 | 81.71 | 188.63**** | 83.8 | 77.68 | 192.61 | 2.07 |
| Impacts Within Pre-Approved Offsite MSCP Take Areas | | | 1.16 | | | 4.67 | | | |
| Offsite FMZ Impacts; Outside Pre-Approved MSCP Take Areas | | | 2.15*** | | | 1.45*** | | | |
| MHPA Preserve TOTAL | | | | | 186.48 acres | | | 191.16 acres | |

Totals may not compute exactly due to rounding to the nearest 100th place

*potentially significant impacts unless mitigated

** habitat type(s) underlay 'Rock Outcrop' designation, not counted as part of acreage total

*** habitat type incorporated in habitat take totals, acreage subtracted against MHPA preserve contribution total

**** Acreage does not impact onsite MSCP Preserve Area;

*****Federal Register states that the total onsite OS for the combined projects totals 193.2 acres. This incorrectly includes approximately 4.57 acres of impacted habitat as avoided habitat and part of the OS calculation. These impacts included within the MSCP OS include: Manufactured slope and sewer line within Lot "A" (0.91 acres), sewer line joining upper and lower Madura (0.56 acres), FMZ for the Cielo project completed on the Madura property (0.56 acres) and approximately 2.54 acres of isolated ungraded habitat to be cleared for FMZ and as part of the mass grading operations. When these impacted areas are removed from the MSCP project OS calculation the actual existing MSCP project OS totals approximately 188.63 acres

**TABLE 8**
**Vegetation in Existing MSCP Project Footprint**
**Versus**
**Proposed Rancho Cielo Subdivision Redesign**
**OFFSITE IMPACTS**

| Plant Community | Habitat Tier | MSCP Project Central Impact Acreage | MSCP Project East Impact Acreage | Total MSCP Offsite Impacts | Proposed Project Central Impact Acreage | Proposed Project Eastern Impact Acreage | Total Proposed Project Offsite Impacts |
|---|---|---|---|---|---|---|---|
| Diegan coastal sage scrub* | II | 0.44 | 0.0 | 0.44 | 0.46 | 0.0 | 0.46 |
| Southern mixed chaparral* | III | 1.25 | 0.91 | 2.16 | 0.86 | 4.13 | 4.99 |
| Willow Scrub | I | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Jurisdictional /RPO unvegetated Non Wetland Waters* | I | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Non-Native Grasslands* | III | 0.0 | 0.08 | 0.08 | 0.0 | 0.16 | 0.16 |
| Rock Outcrop** | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Eucalyptus Woodland | IV | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Disturbed habitat | IV | 0.46 | 0.17 | 0.63 | 0.13 | 0.38 | 0.51 |
| Developed Area | IV | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL | | 2.15 | 1.16 | 3.31 | 1.45 | 4.67 | 6.12 |
| Impacts Within Pre-Approved Offsite MSCP Take Areas | | | | 1.16 | | | 4.67 |
| Offsite FMZ Impacts Outside Pre-Approved MSCP Take Areas (Reduction of MHPA) | | | | 2.15 | | | 1.45 |
| TOTAL OFFSITE IMPACTS | | | | 3.31 | | | 6.12 |

Totals may not compute exactly due to rounding

*potentially significant impacts unless mitigated

** habitat type(s) underlay 'Rock Outcrop' designation, not counted as part of acreage total

**TABLE 9a**
**Proposed Rancho Cielo Subdivision Redesign**
**TOTAL IMPACTS**

| Plant Community | Habitat Tier | Onsite Acres | Total Proposed Impact Acres | On-Site Impacts | Proposed On-Site MSCP OS Acres | Impact Neutral |
|---|---|---|---|---|---|---|
| Diegan coastal sage scrub* | II | 100.14 | 21.22* | 20.85* | 79.45 | |
| Southern mixed chaparral* | III | 137.93 | 51.83* | 46.56* | 91.37 | |
| Willow Scrub | I | 0.91 | 0.0 | 0.0 | 0.91 | 0.91 |
| Jurisdictional /RPO unvegetated Non Wetland Waters* | I | 1.20 | 0.04* | 0.04* | 1.16 | 1.16 |
| Non-Native Grasslands* | III | 15.92 | 0.3* | 0.15* | 15.77 | |
| Rock Outcrop** | | 17.78** | 0.05** | 0.05** | 17.73** | |
| Eucalyptus Woodland | IV | 2.31 | 2.31 | 2.31 | 0.0 | |
| Disturbed habitat | IV | 10.86 | 7.45 | 7.12 | 3.74 | |
| Developed Area | IV | 0.96 | 0.65 | 0.65 | 0.31 | |
| TOTAL | | 270.29 | 83.8 | 77.68 | 192.61 | 2.07 |
| Impacts Within Pre-Approved Offsite MSCP Take Areas | | | 4.67 | | | |
| Offsite FMZ Impacts Outside Pre-Approved MSCP Take Areas | | | 1.45*** | | | |
| MHPA Preserve Contribution TOTAL | | | | | 191.16 acres | |

*potentially significant impacts unless mitigated

** habitat type(s) underlay 'Rock Outcrop' designation, not counted as part of acreage total

*** habitat type incorporated in habitat take totals, acreage subtracted against onsite preservation total

**** Acreage does not impact onsite MSCP Preserve Area; represents 1.45 acres reduction in total MHPA preservation due to Offsite road easement and FMZ Impacts, outside Pre-Approved MSCP Take Area; (192.61-1.45=191.16)

**TABLE 9b**
**Proposed Rancho Cielo Subdivision Redesign**
**OFFSITE IMPACTS**

| Plant Community | Habitat Tier | Proposed Project Central Impact Acreage | Proposed Project Eastern Impact Acreage | Total Proposed Project Offsite Impacts |
|---|---|---|---|---|
| Diegan coastal sage scrub* | II | 0.46 | 0.0 | 0.46 |
| Southern mixed chaparral* | III | 0.86 | 4.13 | 4.99 |
| Willow Scrub | I | 0.0 | 0.0 | 0.0 |
| Jurisdictional /RPO unvegetated Non Wetland Waters* | I | 0.0 | 0.0 | 0.0 |
| Non-Native Grasslands* | III | 0.0 | 0.16 | 0.16 |
| Rock Outcrop** | | 0.0 | 0.0 | 0.0 |
| Eucalyptus Woodland | IV | 0.0 | 0.0 | 0.0 |
| Disturbed habitat | IV | 0.13 | 0.38 | 0.51 |
| Developed Area | IV | 0.0 | 0.0 | 0.0 |
| TOTAL | | 1.45 | 4.67 | 6.12 |
| Impacts Within Pre-Approved Offsite MSCP Take Areas | | | | 4.67 |
| Offsite FMZ Impacts Outside Pre-Approved MSCP Take Areas | | | | 1.45 |
| TOTAL | | | | 6.12 |

*potentially significant impacts unless mitigated

** habitat type(s) underlay 'Rock Outcrop' designation, not counted as part of acreage total

**TABLE 11**
**Proposed Rancho Cielo Subdivision Redesign**
**Habitat/Vegetation Communities, Impacts, Mitigation**

| Plant Community | Tier | Onsite Acres | On-Site Impacts | Total Proposed Impact Acres | Mitigation Ratio | Mitigation Required | Preserved On-Site | Excess On-Site Preservation | Impact Neutral |
|---|---|---|---|---|---|---|---|---|---|
| Diegan coastal sage scrub* | II | 100.14 | 20.85* | 21.22* | 1.5:1 | 31.59 | 79.45 | 47.7 | |
| Southern mixed chaparral* | III | 137.93 | 46.56* | 51.83* | 1:1 | 51.83 | 91.37 | 39.54 | |
| Willow Scrub | I | 0.91 | 0.0 | 0.0 | N/A | N/A | 0.91 | 0.91 | 0.91 |
| Jurisdictional /RPO unvegetated Non Wetland Waters* | I | 1.20 | 0.04* | 0.04* | 2:1 | 0.08*** | 1.16 | 1.16 | 1.16 |
| Non-Native Grasslands* | III | 15.92 | 0.15* | 0.3* | 1:1 | 0.3 | 15.77 | 15.57 | |
| Rock Outcrop** | | 17.78** | 0.05** | 0.05** | N/A | N/A | 17.73** | 17.73** | |
| Eucalyptus Woodland | IV | 2.31 | 2.31 | 2.31 | N/A | N/A | 0.0 | 0.0 | |
| Disturbed habitat | IV | 10.86 | 7.12 | 7.45 | N/A | N/A | 3.74 | 3.41 | |
| Developed Area | IV | 0.96 | 0.65 | 0.65 | N/A | N/A | 0.31 | 0.31 | |
| TOTAL | | 270.29 | 77.68 | 83.8 | | 83.87 | 192.61 | 108.60 | 2.07 |

Totals may not compute exactly due to rounding

*potentially significant impacts unless mitigated

** habitat type(s) underlay 'Rock Outcrop' designation, not counted as part of acreage total

***Jurisdictional non-wetland water impacts require additional permitting and offsite mitigation (no net loss) as determined in consultation with ACOE, RWQCB and CDFG

**TABLE 12**
**MSCP PRESERVE HABITAT COMMUNITIES INCREASE**
**EXISTING VS PROPOSED**

| Plant Community | Onsite Acres | Existing On-Site MSCP OS Acres | Proposed On-Site MSCP OS Acres | Difference |
|---|---|---|---|---|
| **Diegan coastal sage scrub*** | **100.14** | **72.91** | **79.45** | **+6.54** |
| **Southern mixed chaparral*** | **137.93** | **92.69** | **91.37** | **-1.32** |
| **Willow Scrub** | **0.91** | **0.91** | **0.91** | **0.0** |
| **Jurisdictional /RPO unvegetated Non Wetland Waters*** | **1.20** | **1.14** | **1.16** | **+0.02** |
| **Non-Native Grasslands*** | **15.92** | **15.87** | **15.77** | **-0.01** |
| Eucalyptus Woodland | 2.31 | 0.67 | 0.0 | -0.67 |
| Disturbed habitat | 10.86 | 4.06 | 3.74 | -0.32 |
| Developed Area | 0.96 | 0.28 | 0.31 | +0.03 |
| TOTAL | 256.10 | 188.63** | 192.61 | +3.98 |
| MHPA Preserve Contribution TOTAL | | 186.48** | 191.16 acres | +4.73 |

Totals may not compute exactly due to rounding to the nearest 100th place

*potentially significant impacts unless mitigated

**Federal Register states that the total onsite OS for the combined projects totals 193.2 acres. This incorrectly includes approximately 4.57 acres of impacted habitat as avoided habitat and part of the OS calculation. These impacts included within the MSCP OS include: Manufactured slope and sewer line within Lot "A" (0.91 acres), sewer line joining upper and lower Madura (0.56 acres), FMZ for the Cielo project completed on the Madura property (0.56 acres) and approximately 2.54 acres of isolated ungraded habitat to be cleared for FMZ and as part of the mass grading operations. When these impacted areas are removed from the MSCP project OS calculation the actual existing MSCP project OS totals approximately 188.63 acres

Attached Photographs 1-4

**Photograph 1** Looking North-East; Madura Property from the Western Property Line. Mixed Chaparral and CSS

**Photograph 2** Looking South; Within USGS Blue Line Channel #1; CSS and Mulefat Scrub to be Preserved

**Photograph 3** Looking South; Cielo de Lusardi property from the Northern Property Line.
Eucalyptus Woodland and Recovering Mixed Chaparral, CSS, and Upland Erosion Channel

**Photograph 4** Looking South; Overlooking the Preserved OS Habitat within the Eastern Half of the Property

# ADDITIONAL TECHNICAL ATTACHMENTS

Plant Species Observed

**ATTACHMENT 4**
**PLANT SPECIES OBSERVED**

| Scientific Name | Common Name | Habitat | Origin |
|---|---|---|---|
| *Adenostoma fasciculatum* Hook. & Arn. | Chamise | CHAP,CSS | N |
| *Adolphia californica* Wats. | California adolphia, spineshrub | CSS,CHAP | N |
| *Allium praecox* | Early onion | CSS | N |
| *Ambrosia psilostachya* DC. | Western ragweed | CSS | N |
| *Apiastrum angustifolium* | Mock parsley | CSS | N |
| *Artemisia californica* Less. | California sagebrush | CSS, CHAP | N |
| *Artemisia palmeri* A. Gray | San Diego sagewort, Palmer sagewort | CSS | N |
| *Atriplex semibaccata* R.Br. | Australian saltbush | CSS | I |
| *Avena* sp. | Wild oats | CHAP,CSS | N |
| *Baccharis pilularis* DC. | Coyote bush | CSS,CHAP | N |
| *Baccharis salicifolia* (Ruiz Lopez & Pavón) Pers. | Mule fat, seep-willow | CSS | N |
| *Brassica nigra* (L.) Koch. | Black mustard | CSS | I |
| *Bromus diandrus* Roth. | Ripgut grass | CSS | I |
| *Bromus hordaceus* L. | Smooth brome | CSS | I |
| *Bromus madritensis* L. ssp. *rubens* (L.) Husnot | Foxtail chess | CSS | I |
| *Carex barbarae* | Valley sedge | WIS | |
| *Calochortus* sp. | Mariposa lily | CSS | N |
| *Calystegia macrostegia* | Morning glory | CSS | N |
| *Ceanothus verrucosus* | Wart-stemmed ceanothus | CHAP | N |
| *Centaurea melitensis* L. | Tocolote, star-thistle | CSS | I |
| *Chamaesyce albomarginata* (Torrey & A. Gray) Small | Rattlesnake weed | CSS | N |
| *Chlorogalum pomeridianum* | Wavyleaf soap plant | CSS | N |
| *Daucus carota* | Wild carrot | CSS | N |
| *Dichelostemma pulchellum* | Bluedicks | CSS | N |
| *Dudleya pulverlenta* | Chalk lettuce | CSS | N |
| *Eriogonum fasciculatum* Benth. var. *fasciculatum* | California buckwheat | CSS,CHAP | N |
| *Eriophyllum confertiflorum* (DC.) A. Gray var. *confertiflorum* | Golden-yarrow | CSS | N |
| *Erodium cicutarium* (L.) L. Her. | White-stemmed filaree | CSS | I |
| *Filago california* | California filago | CSS | N |
| *Gnaphalium* sp. | Cudweed, everlasting | CSS | N |
| *Gutierrezia californica* (DC.) Torrey & A. Gray | California matchweed | CSS | N |
| *Hazardia squarrosa* (Hook. & Arn.) E. Greene | Sawtoothed goldenbush | CSS | N |
| *Helianthemum scoparium* Nutt. | Peak rush-rose | CSS | N |
| *Hemizonia fasciculata* (DC.) Torrey & A. Gray | Golden tarplant | CSS | N |

**ATTACHMENT 4**
**PLANT SPECIES OBSERVED**
**(continued)**

| Scientific Name | Common Name | Habitat | Origin |
|---|---|---|---|
| *Heteromeles arbutifolia* (Lindley) Roemer | Toyon, Christmas berry | CSS,CHAP | N |
| *Heterotheca grandiflora* Nutt. | Telegraph weed | CSS | N |
| *Lessingia filaginifolia* (Hook. & Arn.) M.A. Lane var. *filaginifolia* | California-aster | CSS | N |
| *Lotus scoparius* (Nutt. in Torrey & A. Gray) Ottley var. *scoparius* | California broom | CSS, CHAP | N |
| *Malacothamnus fasciculatus* (Torrey & A. Gray) E. Greene | Chaparral mallow | CSS,CHAP | N |
| *Malosma laurina* (Nutt.) Abrams | Laurel sumac | CSS,CHAP | N |
| *Marah macrocarpus* (E. Greene) E. Greene | Wild cucumber | CSS | N |
| *Marrubium vulgare* L. | Horehound | CSS | I |
| *Medicago polymorpha* L. | California bur clover | CSS | I |
| *Mimulus aurantiacus* Curtis | Bush monkeyflower | CHAP,CSS | N |
| *Mirabilis californica* var. *californica* | Coastal wishbone plant | CSS | N |
| *Pellaea andromaedifolia* | Coffee fern | CSS | N |
| *Phacelia parryi* | Parry phacelia | CHAP | N |
| *Pityrogramma triangularis var. viscosa* | Silverback fern | CSS | N |
| *Plantago erecta* | Dot-seed plantain | CSS | N |
| *Polypogon monspeliensis* (L.) Desf. | Annual beard grass | DIS | I |
| *Quercus dumosa* Nutt. | Nuttall's scrub oak | CHAP,CSS | N |
| Rafinesquia californica | California chicory | CSS | N |
| *Rhus integrifolia* (Nutt.) Brewer & Watson | Lemonadeberry | CSS | N |
| *Salix exigua* | Narrow leaved willow | WIS | N |
| *Salix hindsiana* | Sandbar willow | WIS | N |
| *Salix lasiolepis* | Arroyo willow | WIS | N |
| *Salsola tragus* L. | Russian thistle, tumbleweed | DIS | I |
| *Salvia apiana* | White sage | CSS | N |
| *Salvia columbariae* Benth. | Chia | CSS | N |
| *Salvia mellifera* E. Greene | Black sage | CSS,CHAP | N |
| *Selaginella biglovii* | Bigelow's mossfern | CSS,CHAP | N |
| *Selaginella cinerascens* Maxon | Ashy spike-moss | CSS,CHAP | N |
| *Sisyrinchium bellum* Wats. | Blue-eyed-grass | CSS | N |
| *Urtica dioica sp. holosericea* | Mountain nettle | WIS | N |
| *Vulpia myuros* (L.) var. *hirsuta* (Hackel.) Asch. & Graebr. | Rattail fescue | CHAP | I |
| *Xylococcus bicolor* Nutt. | Mission manzanita | CHAP | N |
| *Yucca whipplei* | Our lords candle | CSS,CHAP | N |

**ATTACHMENT 4**
**PLANT SPECIES OBSERVED**
**(continued)**

| HABITATS | | OTHER TERMS |
|---|---|---|
| CHAP | = | Southern mixed chaparral |
| CSS | = | Diegan coastal sage scrub |
| DIS | = | Disturbed |
| WIS | = | Willow Scrub |

| | | |
|---|---|---|
| N | = | Native to locality |
| I | = | Introduced species from outside locality |

Wildlife Species Observed/Detected

**ATTATCHMENT 5**
**WILDLIFE SPECIES OBSERVED/DETECTED ONSITE**

| Common Name | Scientific Name | Occupied Habitat | Status | Evidence of Occurrence |
|---|---|---|---|---|
| Invertebrates (Nomenclature from Brown, Real, and Faulkner 1992) | | | | |
| Cabbage white | *Pieris rapae* | CSS, SMC | | O |
| Behr's metalmark | *Apodemia mormo virgulti* | CSS, SMC | | O |
| Amphibians (Nomenclature from Collins 1997) | | | | |
| California tree frog | Pseudacris cadaverina | WET | | V |
| Reptiles (Nomenclature from Collins 1997) | | | | |
| Side-blotched lizard | *Uta stansburiana* | CSS | | O |
| Southern pacific rattlesnake | *Crotalus viridis helleri* | SMC/Rock | | |
| Birds (Nomenclature from American Ornithologists' Union) | | | | |
| Red-shouldered hawk | *Buteo lineatus elegans* | all | | O |
| Red-tailed hawk | *Buteo jamaicensis* | all | | O |
| California quail | *Callipepla californica californica* | CSS | | V |
| Mourning dove | *Zenaida macroura marginella* | CSS, SMC | | O |
| Costa's hummingbird | *Archilochus costae* | CSS, SMC | | V |
| Anna's hummingbird | *Calypte anna* | CSS, SMC | | O |
| Black phoebe | *Sayornis nigricans semiatra* | CSS | | O |
| Cassin's kingbird | *Tyrannus vociferans vociferans* | CSS, SMC | | O |
| Western scrub-jay | *Aphelocoma californica* | CSS, SMC | | O |
| Common raven | *Corvus corax clarionensis* | all | | O |
| Northern rough-winged swallow | *Stelgidopteryx serripennis* | all | | O |
| Bushtit | *Psaltriparus minimus minimus* | CSS, SMC | | O |
| Wrentit | *Chamaea fasciata henshawi* | CSS | | O |
| Coastal California gnatcatcher | *Polioptila californica californica* | CSS | FT,CSC | O |
| Rock wren | *Salpinctes obsoletus obsoletus* | CSS | | O |
| Bewick's wren | *Thyromanes bewickii* | CSS, SMC | | O |
| Northern mockingbird | *Mimus polyglottos polyglottos* | CSS, SMC, DIS | | O |

**ATTACHMENT 5**
**WILDLIFE SPECIES OBSERVED/DETECTED ON THE PROJECT SITE**
**(continued)**

| Common Name | Scientific Name | Occupied Habitat | Status | Evidence of Occurrence |
|---|---|---|---|---|
| California thrasher | *Toxostoma redivivum redivivum* | CSS | | O |
| Phainopepla | *Phainopepla nitens lepida* | SMC | | O |
| Southern California rufous-crowned sparrow | *Aimophila ruficeps canescens* | CSS, SMC | CSC | O |
| Spotted towhee | *Pipilo maculatus* | CSS, SMC | | O |
| California towhee | *Pipilo crissalis* | CSS, SMC | | O |
| House finch | *Carpodacus mexicanus frontalis* | CSS, SMC, DIS | | O |
| Barn owl | *Tyto alba* | CSS, SMC, DIS | | O |
| Turkey vulture | *Cathertes aura* | CSS, SMC | | O |
| Lesser goldfinch | *Carduelis psaltria hesperophilus* | CSS, SMC | | O |
| Mammals (Nomenclature from Jones et al. 1982) | | | | |
| Cottontail rabbit | *Sylvilagus audubonii* | CSS | | O |
| Coyote | *Canis latrans* | CSS, SMC | | scat |
| striped skunk | *Mephitis mephitis* | CSS, SMC | | O |
| bobcat | *Lynx rufus* | CSS, SMC | | scat |
| mountain lion | *Puma concolor* | CSS, SMC | | Scat/carcass of deer |
| California ground squirrel | *Spermophilus beecheyi* | CSS, SMC | | O |
| Mule deer | *Odocoileus hemionus* | SMC | | O, carcass, antler, scat |

Habitats

CSS = Coastal sage scrub sage scrub
DIS = Disturbed
SMC = Southern mixed chaparral
WET = Mulefat scrub
NNG = Non-native grassland

Status

CSC = California Department of Fish and Game species of special concern
FT = Listed as threatened by the federal government

Wetland Delineation Sheet

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Lusardi; Cielo TM 5456 RPL2 City/County: /San Diego Sampling Date: 8-20-2011

Applicant/Owner: Lusardi State: CA Sampling Point: 1

Investigator(s): MKJ Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Steep rocky canyon Local relief (concave, convex, none): concave Slope (%): -510

Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | | |
|---|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes ☒ | No ☐ | **Is the Sampled Area within a Wetland?** | **Yes ☒ No ☐** |
| Hydric Soil Present? | Yes ☒ | No ☐ | | |
| Wetland Hydrology Present? | Yes ☒ | No ☐ | | |

Remarks: This pit was dug within the rocky channel that flows towardsdel dios, the pit is in the bottom of the channel where soil was present..

## VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size:_____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. *Salix lasiolepis* | 25 | yes | FACW |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | t | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 50% = _____, 20% = _____ | 25 | = Total Cover | |
| **Sapling/Shrub Stratum (Plot size:_____)** | | | |
| 1. *Baccharis salicifolia* | 20 | no | FACW |
| 2. *Typha latifolia* | 80 | yes | OBL |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 5. _____ | _____ | _____ | _____ |
| 50% = _____, 20% = _____ | 100 | = Total Cover | |
| **Herb Stratum (Plot size:_____)** | | | |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 5. _____ | _____ | _____ | _____ |
| 6. _____ | _____ | _____ | _____ |
| 7. _____ | _____ | _____ | _____ |
| 8. _____ | _____ | _____ | _____ |
| 50% = _____, 20% = _____ | _____ | = Total Cover | |
| **Woody Vine Stratum (Plot size:_____)** | | | |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 50% = _____, 20% = _____ | _____ | = Total Cover | |

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

**Dominance Test Worksheet:**

| | | |
|---|---|---|
| Number of Dominant Species That Are OBL, FACW, or FAC: | 2 | (A) |
| Total Number of Dominant Species Across All Strata: | 2 | (B) |
| Percent of Dominant Species That Are OBL, FACW, or FAC: | 1 | (A/B) |

**Prevalence Index worksheet:**

| Total % Cover of : | | Multiply by: | |
|---|---|---|---|
| OBL species | 80 | x1 = | 80 |
| FACW species | 45 | x2 = | 90 |
| FAC species | ____ | x3 = | ____ |
| FACU species | _____ | x4 = | _____ |
| UPL species | _____ | x5 = | _____ |
| Column Totals: | 125 (A) | | 170 (B) |

Prevalence Index = B/A = 1.36

**Hydrophytic Vegetation Indicators:**

- ☒ Dominance Test is >50%
- ☒ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** **Yes ☒ No ☐**

Remarks: Site is restricted to bottom of the canyon

Project Site: Lusardi Cielo

## SOIL

Sampling Point: 1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (Moist) | Redox % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-6 | gley 2 2.5/10G | | | | | | coarse | Sand like |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☒ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☒ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

**Indicators for Problematic Hydric Soils[3]:**

- ☐ 1 cm Muck (A9) **(LRR C)**
- ☐ 2 cm Muck (A10) **(LRR B)**
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: _____

Depth (Inches): _____

**Hydric Soils Present?** **Yes** ☒ **No** ☐

Remarks: soil appears to have a gley color, sulfur smell in soil also

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☒ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) **(Nonriverine)**
- ☐ Sediment Deposits (B2) **(Nonriverine)**
- ☐ Drift Deposits (B3) **(Nonriverine)**
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) **(Riverine)**
- ☐ Sediment Deposits (B2) **(Riverine)**
- ☐ Drift Deposits (B3) **(Riverine)**
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

**Field Observations:**

| | | | | | | |
|---|---|---|---|---|---|---|
| Surface Water Present? | Yes | ☒ | No | ☐ | Depth (inches): | 2-4 |
| Water Table Present? | Yes | ☒ | No | ☐ | Depth (inches): | at surface |
| Saturation Present? (includes capillary fringe) | Yes | ☒ | No | ☐ | Depth (inches): | at surface |

**Wetland Hydrology Present?** **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Site is in steep channel

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Lusardi; Cielo TM 5456 RPL2 City/County: /San Diego Sampling Date: 8-20-2011

Applicant/Owner: Lusardi State: CA Sampling Point: 2

Investigator(s): MKJ Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Steep rocky canyon Local relief (concave, convex, none): concave Slope (%): -510

Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | | |
|---|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes ☒ | No ☐ | **Is the Sampled Area within a Wetland?** | **Yes ☒ No ☐** |
| Hydric Soil Present? | Yes ☒ | No ☐ | | |
| Wetland Hydrology Present? | Yes ☒ | No ☐ | | |

Remarks: This pit was dug within the rocky channel that flows towardsdel dios, the pit is in the bottom of the channel where soil was present..

## VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size:_____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. *Salix lasiolepis* | 85 | yes | FACW |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 50% = _____, 20% = _____ | 85 | = Total Cover | |
| **Sapling/Shrub Stratum (Plot size:_____)** | | | |
| 1. *Baccharis salicifolia* | 20 | yes | FACW |
| 2. *Mallachatamnus* | 20 | no | FACU |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 5. _____ | _____ | _____ | _____ |
| 50% = _____, 20% = _____ | 20 | = Total Cover | |
| **Herb Stratum (Plot size:_____)** | | | |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 5. _____ | _____ | _____ | _____ |
| 6. _____ | _____ | _____ | _____ |
| 7. _____ | _____ | _____ | _____ |
| 8. _____ | _____ | _____ | _____ |
| 50% = _____, 20% = _____ | _____ | = Total Cover | |
| **Woody Vine Stratum (Plot size:_____)** | | | |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 50% = _____, 20% = _____ | _____ | = Total Cover | |

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

**Dominance Test Worksheet:**

| | | |
|---|---|---|
| Number of Dominant Species That Are OBL, FACW, or FAC: | 2 | (A) |
| Total Number of Dominant Species Across All Strata: | 2 | (B) |
| Percent of Dominant Species That Are OBL, FACW, or FAC: | 1 | (A/B) |

**Prevalence Index worksheet:**

| Total % Cover of : | | Multiply by: | |
|---|---|---|---|
| OBL species | _____ | x1 = | 0 |
| FACW species | 105 | x2 = | 210 |
| FAC species | _____ | x3 = | _____ |
| FACU species | 15 | x4 = | 60 |
| UPL species | _____ | x5 = | _____ |
| Column Totals: | 120 (A) | | 270 (B) |

Prevalence Index = B/A = 2.25

**Hydrophytic Vegetation Indicators:**

- ☒ Dominance Test is >50%
- ☒ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** **Yes ☒ No ☐**

Remarks: Site is restricted to bottom of the canyon

Project Site: Lusardi Cielo

## SOIL

Sampling Point: 2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth | Matrix | | Redox Features | | | | | |
|---|---|---|---|---|---|---|---|---|
| (inches) | Color (moist) | % | Color (Moist) | % | Type[1] | Loc[2] | Texture | Remarks |
| 0-6 | 10yr 2/1 | | | | | | coarse | Sand like |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☒ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☒ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

**Indicators for Problematic Hydric Soils[3]:**

- ☐ 1 cm Muck (A9) **(LRR C)**
- ☐ 2 cm Muck (A10) **(LRR B)**
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: _____

Depth (Inches): _____

**Hydric Soils Present?** **Yes** ☒ **No** ☐

Remarks: soil appears to have a gley color, sulfur smell in soil also, underlain with bed rock.

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☒ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) **(Nonriverine)**
- ☐ Sediment Deposits (B2) **(Nonriverine)**
- ☐ Drift Deposits (B3) **(Nonriverine)**
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) **(Riverine)**
- ☐ Sediment Deposits (B2) **(Riverine)**
- ☐ Drift Deposits (B3) **(Riverine)**
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

**Field Observations:**

| | | | | | | |
|---|---|---|---|---|---|---|
| Surface Water Present? | Yes | ☒ | No | ☐ | Depth (inches): | 2-4 |
| Water Table Present? | Yes | ☒ | No | ☐ | Depth (inches): | at surface |
| Saturation Present? (includes capillary fringe) | Yes | ☒ | No | ☐ | Depth (inches): | at surface |

**Wetland Hydrology Present?** **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Site is in steep channel

Cumulative Impact Project List (to come)

# Glossary of Terms

**GLOSSARY OF STANDARD TERMS AND ACRONYMS**

**ACOE (USACOE):** U.S. Army Corps of Engineers

**Adaptive Management:** A systematic process for continually improving management policies and practices by learning from the outcomes of operational programs.

**Alluvium:** Material, including clay, silt, sand, gravel, or similar unconsolidated sediments, deposited by a streambed or other body of running water.

**Biological Open Space Easement (BOSE):** An easement dedicated to the County of San Diego or other jurisdictional body for the purposes of the preservation of natural resources.

**Blue-line Stream:** A watercourse shown as a blue line on a U.S. Geological Service (USGS) topographic quadrangle map.

**BLM:** Bureau of Land Management

**BMPs:** Best Management Practices

**Buffer Zone:** An area of land separating two distinct land uses that acts to soften or mitigate the effects of one land use on the other.

**California Department of Fish and Game** (**CDFG):** a department of the California Resources Agency.

**California Endangered Species Act (CESA):** The California Endangered Species Act (California Fish and Game code, Section 2050, et seq.) and all rules, regulations and guidelines promulgated hereunder, as amended.

**California Environmental Quality Act (CEQA):** The California Environmental Quality Act (California Public Resources Code, Section 21000, et seq.) and all guidelines promulgated hereunder, as amended.

**CCC:** California Coastal Commission

**CFGC:** California Fish and Game Code

**CNDDB:** California Natural Diversity Data Base

**CNPPA:** California Native Plant Protection Act

**CNPS:** California Native Plant Society

**Candidate Species:** Any species of animal or plant or population thereof for which the USFWS currently has on file substantial information on their biological vulnerability and threat(s) to support proposals to list them as endangered or threatened species. Issuance of proposed rules for listing is presently precluded by other higher priority listing actions.

**Canopy Cover:** The cover of leaves and branches formed by the tops or crowns of plants as viewed from above.

**Carrying Capacity:** Maximum stocking rate possible without inducing damage to vegetation or related resources. It may vary from year to year on the same area due to fluctuating weather conditions and forage production (see grazing capacity).

**Community:** A group of plants and animals living together in a common area and having close interactions.

**Conservation Easement:** A legal agreement between a landowner and a land trust or government agency, such as the CDFG, that permanently limits uses of the land in order to protect its conservation values (California Government Code Section 27255)

**GLOSSARY OF STANDARD TERMS AND ACRONYMS cont.**

**Conserve:** To use "all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Endangered Species Act are no longer necessary...."

**Conserved Land:** Land that is permanently protected and managed for the benefit of natural resources under legal arrangements, including a Conservation Easement that prevent its conversion to other uses and the institutional arrangements that provide for its ongoing management.

**Constrained Linkage:** A constricted connection expected to provide for movement of identified species between core areas, where options for assembly of the connection are limited due to existing patterns of land use.

**Consult/Consultation:** A cooperative effort established by the FESA between Federal agencies and the USFWS. The purpose is to ensure that agency actions conserve listed species, aid in recovery of listed species, and protect critical habitat.

**Core Area:** A block of habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more Covered Species.

**Corridor:** A direct or indirect connection that links separate patches of habitat.

**Covered Species:** Those species within a Subarea Planning Area that will be “adequately conserved” by an existing approved Plan or at the time the ‘DRAFT’ Plan(s) are implemented.

**Covered Species Adequately Conserved:** Covered Species that are adequately conserved by a Subarea Plan and which are provided in the Incidental Take Coverage Section 10(a) Permit and NCCP Permit and for animals through the Section 10(a) permit issued in conjunction with an Implementing Agreement.

**Cumulative Impact:** As used in CEQA, the total impact resulting from the accumulated impacts of individual projects or programs over time.

**Dedication:** The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used. Dedications for roads, parks, school sites, or other public uses often are made conditions for approval of a development by a city or county.

**Easement:** Usually the right to use property owned by another for specific purposes or to gain access to another property. For example, utility companies often have easements on the private property of individuals to be able to install and maintain utility facilities.

**Edge Effects:** Adverse direct and indirect effects to species, habitats and vegetation communities, generally along the natural wildlands/urban interface.

**Endangered:** A formal designation under CESA and FESA. Under CESA, a taxon which is “in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes” (CFGC § 2062). Under FESA, a taxon which is “in danger of extinction throughout all or a significant portion of its range” (FESA § 3 (6)).

**Endangered Species:** Those species listed as Endangered under FESA and/or CESA.

**GLOSSARY OF STANDARD TERMS AND ACRONYMS cont.**

**Environment:** CEQA defines environment as "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historic or aesthetic significance."**Environmental Impact Report (EIR):** A report required pursuant to CEQA which assesses all the environmental characteristics of an area, determines what effects or impacts will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts.

**Exotic Species:** A species of plant or animal that is not indigenous, native, or naturalized to the area where it is found.

**Federal Endangered Species Act (FESA):** The Federal Endangered Species Act (16 U.S.C., Section 1531, et seq.) and all rules and regulations promulgated hereunder, as amended.

**Forb:** Any herbaceous plant other than those in the Gramineae (true grasses), Cyperaceae (sedges), and Juncaceae (rushes) families, i.e. any non-grasslike plant having little or no woody material on it. A broad-leaved plant with above ground stems that do not become woody or persistent.

**FPA:** Focused Planning Area

**FSC:** Federal Species of Concern

**Ground Cover:** Surface materials including the basal areas of grass and forbs, and aerial coverage of shrubs that provide protection to the soils surface.

**Habitat:** The combination of environmental conditions of a specific place providing for the needs of a species or a population.

**Habitat Conservation Plan (HCP):** An area-specific plan prepared pursuant to Section 10(a)(2) of FESA that is a mandatory component of an incidental take permit for a project with no Federal nexus for a listed species, designed to minimize and mitigate the authorized take of the species.

**Habitat Requirements:** A specific set of physical and biological conditions that surround a single species, group of species, or community of species upon which the species or associations are dependent for their existence. In wildlife management the major components of habitat are considered to be food, water, cover, and living space.

**Herbaceous:** Vegetation with little or no woody component, such as grasses and forbs.

**Implementing Agreement (IA):** A contractual obligation between individual jurisdictions within a Subarea and the Wildlife Agencies to implement the requirements of a Subarea Plan.

**Incidental Take:** Take which is incidental to the pursuit of an otherwise legal activity. Legal incidental take is set forth by the USFWS in a biological opinion under Section 7 of FESA.

**Incidental Take Permit/Incidental Take Authorization:** The authorization from the USFWS for taking of a federally listed wildlife species, if such taking is incidental to and not the purpose of carrying out otherwise lawful activities.

**Indicator:** Quantitative measure of an ecosystem element used to describe the condition of an ecosystem; changes in indicators over relatively short periods of time are used to measure the effects of management.

**GLOSSARY OF STANDARD TERMS AND ACRONYMS cont.**

**Lead Agency:** Under CEQA, the public agency that has the primary responsibility for approving the proposed project/action.

**Linkage:** A connection between Core Areas with adequate size, configuration, and vegetation characteristics to generally provide biological viability and/or provide for genetic flow for identified species.

**List 1A.** A CNPS ranking applied to plants presumed extinct in California.

**List 1B.** A CNPS ranking applied to plants rare, threatened, or endangered in California and elsewhere.

**List 2.** A CNPS ranking applied to plants rare, threatened, or endangered in California, but more common elsewhere.

**List 3.** A CNPS ranking applied to plants about which we need more information—a "review" list.

**List 4.** A CNPS ranking applied to plants of limited distribution—a "watch" list.

**Limited Building Zone (LBZ):** A structural setback easement established by the County of San Diego that prohibits the construction of habitable structures. The LBZ extends from the edge of conserved habitat in the direction of development.

**Listed Species:** A taxon that is protected under the FESA or CESA. Listing categories include: Threatened, Endangered, Species of Special Concern, State Protected Species, Federally Proposed Threatened or Endangered, and Federally Petitioned Threatened or Endangered.

**LORS:** Acronym for the applicable Laws, Ordinances, Regulations, and Standards relative to the property

**Migratory Bird Treaty Act (MBTA):** The Federal Migratory Bird Treaty Act (50 C.F.R., Section 21, et seq.) and all rules and regulations promulgated hereunder, as amended.

**MHCOSP:** County of San Diego Multiple Habitat Conservation and Open Space Program

**MHCP:** County of San Diego Multiple Habitat Conservation Program, a Subregional Plan

**MOU:** Memorandum of Understanding

**MSCP:** A Subregional Plan. Also refers to the County of San Diego's Multiple Species Conservation Program Subarea Plan or City of San Diego's Multiple Species Conservation Program Subarea Plan.

**Mean Sea Level (MSL):** The average altitude of the sea surface for all tidal stages.

**Mima Mound** : A hump of soil in a vernal pool grassland. Mima mounds can range from a few inches to a few feet in height.

**Mitigation:** In general, a combination of measures to lessen the impacts of a project or activity on an element of the natural environment or various other cultural or historic values. More specifically, as defined by the Council on Environmental Quality in its regulations for implementing NEPA, mitigation includes: (a) avoiding the impact, (b) minimizing the impact, (c) rectifying (i.e., repairing, rehabilitating, or restoring) the impact (d) reducing or eliminating the impact through operations during the life of the project, or (e) compensating by replacing or substituting resources.

**Monitoring:** The timed collection of information to determine the effects of resource management and to identify changing resource conditions or needs.

**GLOSSARY OF STANDARD TERMS AND ACRONYMS cont.**

**Narrow Endemic Species:** Species that are highly restricted by their habitat affinities, soil requirements, or other ecological factors.

**Native Plant Protection Act (NPPA):** A 1977 law which gave the California Fish and Game Commission the authority to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants (CFGC §§ 1900-1913).

**Native (Indigenous) Species:** A species of plant or animal that naturally occurs in an area and that was not introduced by humans.

**Natural Community Conservation Planning Act:** A habitat conservation program instituted by the State of California in 1991 to encourage the preservation of natural communities before species within those communities are threatened with extinction.

**Natural Community Conservation Plan (NCCP)**: A plan prepared under the Natural Community Conservation Planning Program designed to conserve natural communities at the ecosystem scale while accommodating compatible land use.

**NCCP Permit:** The Permit issued in accordance with the IA by CDFG under the NCCP to permit the take of identified species, including rare species, species listed under CESA as threatened or endangered, species that are candidates for listing, and unlisted species.

**Natural State:** The condition existing prior to development.

**Non-contiguous Habitat Block:** A block of habitat not connected to other habitat areas.

**Occurrence:** A location where an element (plant, animal, or natural community) is found. The occurrence can consist of a single population or several colonies in the nearby vicinity. The separation distance between discrete occurrences as per CNDDB is 0.25 miles in California.

**Perennial Plant Species:** A plant that has a life cycle of three years or more.

**Plant Community:** Assemblage of plant populations in a defined area or physical habitat; an aggregation of plants similar in species composition and structure, occupying similar habitats over the landscape.

**Population**: A group of individuals of a given species that inhabits a relatively well-defined geographic area and has the opportunity to interbreed freely.

**Pre-Approved Mitigation Area (PAMA)**: Lands that have been identified through an extensive computer modeling process and independent scientific review as being of high biological importance. PAMA lands are “pre-approved” as being suitable for conservation.

**Preserve:** Noun: an area set apart for the protection of wildlife and natural resources. Verb: to keep intact or unimpaired; maintain.

**Proposed Species**: A species of plant or animal formally proposed by the USFWS to be listed as threatened or endangered under FESA.

**Raptor:** Any predatory bird (such as falcon, hawk, eagle, vulture, or owl) that has feet with sharp talons or claws adapted for seizing prey and a hooked beak for shearing flesh.

**Rare:** A species of plant or animal existing in such small numbers throughout all or a significant portion of its range that it may become endangered or threatened (as defined by CESA or FESA) if its environment worsens.

**GLOSSARY OF STANDARD TERMS AND ACRONYMS cont.**

**Regional Water Quality Control Board (RWQCB):** A State permitting agency

**Recovery:** Improvement in the status of a Listed Species to the point at which listing is no longer appropriate under the criteria set forth in Section 4 of FESA. Also, the process by which species and/or their ecosystems are restored to be self-sustaining.

**Recruitment:** Addition to a plant or animal population from all sources, including reproduction, immigration, and stocking.

**Regional:** Pertaining to activities or economies at a scale affecting a broad geographic area.

**Resource Management Plan (RMP):** An activity plan for wildlife resources for a specific geographical area of land. It identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

**Resource Protection Ordinance (RPO):** San Diego County Ordinance No. 9842 relating to wetlands, prehistoric and historic sites, agricultural operations, enforcement, and other matters

**Right-of-Way (ROW):** An easement or permit, which authorizes land to be used for a specified purpose that generally requires a long narrow strip of land. Examples are roads, power lines, pipelines, etc.

**Riparian:** In reference to the transitional area between an aquatic ecosystem and an adjacent terrestrial ecosystem identified by soil characteristics or distinctive vegetation communities that require significant hydration.

**Section 7:** The section of FESA that requires all federal agencies, in consultation with USFWS, to insure that their actions are not likely to jeopardize the continued existence of Listed Species or result in destruction or adverse modification of critical habitat.

**Soil Compaction:** A decrease in the volume of soil as a result of compression stress.

**SCS:** Soils Conservation Service

**SLRR:** The San Luis Rey River, a major riverine system in northern San Diego County

**Species:** A fundamental category of plant or animal classification.

**SSC:** Species of Special Concern (State of California)

**Special Status Species:** Plant or animal species listed as endangered, threatened, candidate, or sensitive by federal, state, or local governments.

**Subarea:** Pertaining to a portion of a Sub-region. Generally used to mean a discrete planning area under a single jurisdiction.

**Subdivision:** The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed.

**Subregional:** Pertaining to a portion of a region. Generally used to mean a discrete planning area under multiple jurisdictions.

**Successional:** Reference to the constantly occurring process of community change; the sequence of communities that replace one another in a given area over time.

**Take:** Under FESA and CESA: to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct relative to a Listed Species.

**GLOSSARY OF STANDARD TERMS AND ACRONYMS cont.**

**Taxon:** A taxonomic category or group, such as a phylum, order, family, genus, species, subspecies, or variety.

**Third Party Take Authorization:** Take Authorization received by a landowner, developer, or other public or private entity pursuant to an IA, thereby allowing the Incidental Take of Covered Species.

**Threatened Species:** Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, and as further defined by FESA and the CESA.

**T&E:** Threatened and Endangered (Species)

**Upland:** Land at a higher elevation than the alluvial plain or low stream terrace; all lands outside the riparian-wetland and aquatic zones.

**USFS:** United States Forest Service

**United States Fish and Wildlife Service (FWS/USFWS):** An agency of the United States Department of the Interior.

**USGS:** United States Geological Survey

**Vegetative Community:** Refers to the species or various combinations of species which dominate or appear to dominate an area of habitat (see plant community).

**Viable Populations:** Populations of plants and/or animals that persist for a specified period of time across their range despite normal fluctuations in population and environmental conditions.

**Watershed:** The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.

**Wetlands:** An area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

**Wildlife Agencies:** The USFWS and CDFG, collectively.

**Wildlife Corridor**: A landscape feature that allows animal movement between two patches of habitat or between habitat and sources of essential resources.

Project History

Project History

A summary of the consolidated TM's making up the current submittal TM 5456 RPL2, follows:

1 - TM 5058 – TM 5456 (RPL), APN 265-300-02 formerly known as Rancho de Lusardi and TM 5109 APN 265-300-03 formerly known as Cielo Ridge.

In September of 2001 these two properties successfully completed a major amendment together. The approval considered the development of the approved 24 homes and only their grading impacts, which totaled 35.4 acres and preserved 51.2 acres as part of the MSCP. No Fuel Management Zone (FMZ) clearing impacts were calculated at the time. Through discussions with the County staff (Bill Stocks and Maggie Loy) an assessment of the impacts associated with a 100 foot deep FMZ was completed and determined that no additional significant impacts would be assessed. No additional mitigation was required.

Therefore, if the approved development had occurred (FMZ would have been required) and the 100 foot wide FMZ were applied, those projects impact totals would be approximately 41.27 acres (an increase from the 35.4 acres initially calculated) with a preserve of approximately 45.33 acres, not 51.2 acres. Furthermore, offsite impacts related to the required FMZ would have been unavoidable.

2 - TM 4909/rejected TM 4909R, APN 265-300-05 formerly known as the Madura Project

The MSCP footprint of the Madura project supports the grading footprint of fourteen (14) single family residence lots and a "future planning area" approved for condominium development within approximately 182 acres. The northern 'Future Development Area' and the original 14 SFR lots on the southern portion of Madura were connected by a utility easement, splitting the natural habitat within the Del Dios habitat corridor.

As stated, through 2007 TM 4909R was finalizing the details required for approval when the fires raged through San Diego County. Consequently the fire requirements for Tentative Maps were significantly increased for those homes in rural areas. While the revised TM 4909R was shown to increase to the initial goals of the Subarea Plan with a reduction of impacts and increase in biological functions and values it was not deemed acceptable due to the increased fire requirements including additional access points and a deeper Fuel Management Zone (FMZ).

Therefore, a new project was designed to incorporate the increased FMZ from 100 feet to 200 feet deep and the addition of an additional access point; proposed consolidated project, TM 5456 RPL2.

The original approved tentative maps, TM 4909, required mitigation requirements were taken into account when San Diego County wrote the Subarea Plan (County of San Diego, revised 1997). In the County's Subarea Plan, specifically the Lake Hodges Segment (LHS) of the Subarea Plan, mitigation for the approved project and its impacts consists of dedicating 142 acres on site to open space. In addition, due to the previous projects impacts to CSS onsite and the limited acreage remaining on the 182 acre

parcel the original TM4909 project was required to provide approximately 23.3 acres of California gnatcatcher occupied offsite coastal sage scrub adjacent to the County's 1000 acres Sycamore Canyon Regional Open Space Park. However, due to the revised consolidated projects impacts and onsite habitat preservation, the required mitigation for occupied CSS has been significantly reduced while the onsite acreage available for mitigation has increased. Therefore, due to a reduction of impacts, the previously required offsite occupied CSS (as referenced above) is no longer required as mitigation for the proposed TM 5456 RPL 2 combined projects impact.

As with the case of the TM 5058 and TM 5456 (as discussed above) no FMZ clearing impacts were assessed in the original calculations. Therefore, if TM 4909 was built as approved, as opposed to providing 142 acres of onsite preserve, TM 4909 with a 100 foot deep FMZ incorporated would impact approximately 43.37 acres (increased from 39.7 acres) and preserve approximately 138.63 acres.

Proposed Consolidated Project, TM 5456 RPL2

The proposed reduced and consolidated project, TM 5456 RPL2, includes a total of 18 single family residences (from the original 42 approved) and the previously approved 19 unit condominium development area (TM 4909; future building zone). The original individual maps permitted a total of 42 single family residences and the same 19 unit condominium development area; the proposed project contains 57% less single family residences that originally planned. Furthermore the utility easement connecting the upper and lower development, which split the open space's contiguous natural habitat corridor, has been removed from the plans.

Taken as independent projects, the previously approved projects on TM's 5058, 5109 and 4909 (which together make up proposed TM 5456 RPL2) permitted a total of 42 single family residences and a nineteen (19) unit condominium development area. These three independent projects would have generated greater direct and indirect significant impacts than the proposed TM 5456 RPL2.

The driving force combining the three previously separate projects into the single TM5456 RPL2 was to comply with the revised Fire Marshal requirements as it related to the increased fuel modification zone and multiple ingress/egress requirements.

In sum, comparing the currently proposed consolidated TM's onsite impacts (Grading, FMZ, etc.) to the original/existing MSCP onsite impact footprint with its' 100 foot wide FMZ, a total of approximately 3.98 additional acres would be preserved onsite by the proposed TM 5456 RPL2.

# MSCP Preserve Boundary Adjustment Justification

Attachment 10
MSCP Boundary Adjustment Justification:

The proposed TM 5456 RPL 2 (Project) is a combination of three pre-existing maps; Madura 182, Rancho de Lusardi, and Cielo Ridge. The revised project has reduced the number of single family lots from 42 to 18 as well as increased the total area preserved within the MSCP Preserve.

For the Madura property, the preserve would remain in private ownership but would have a conservation (open space) easement dedicated to the County. The existing OS easement on the Madura property was required for the previous approval that was not relied upon. Therefore, these easements will be vacated and rededicated for this project's mitigation. In the case of Rancho Cielo, the dedications of the open space easement for much of the original project have also occurred, and will require vacation and rededication for this project's mitigation.

The original MSCP project footprint permitted the Cielo portion (eastern development) of the approved project to incorporate a total of 3.2 acres of a manufactured cut slope to be incorporated into the total calculated Open Space (as part of Lot "A" grading for the construction of Street "C"). Therefore, while the total original MSCP project Open Space is stated to be 193.2 acres of habitat, the preserve included 188.6 acres of existing habitat and 3.19 acres of manufactured cut slope. The proposed projects' onsite Open Space is comprised entirely of avoided and preserved habitat.

Inclusive of the pads, roads, associated manufactured slopes, utility improvements, and fuel management zone clearing impacts, the proposed project will impact a total of approximately 83.8 acres of habitat. This includes: fire recovering disturbed coastal sage scrub, southern mixed chaparral, non-native grasslands and RPO unvegetated non-wetland jurisdictional waters of the U.S. A total of 192.6 acres are proposed be preserved as open space on-site, and the proposed project proposes to contribute a total of 191.2 acres to the Cielo MSCP Preserve. This equates to 4.7 acres more preserved onsite habitat that the prior three projects analyzed as separate TM's .

Coastal California gnatcatchers, a federally threatened species, were observed onsite and will be impacted indirectly due to the loss of habitat, coastal sage scrub. In addition, observed southern California rufous crowned sparrows (*Aimophilia ruficeps canescens*), a California Department of Fish and Game (CDFG) species of special concern, will be displaced and impacted indirectly due to the loss of habitat. A total of 0.04 acres of United States Army Corps of Engineers (USACOE), CDFG and County RPO jurisdictional unvegetated non-wetland waters of the U.S. will be impacted.

All vegetated jurisdictional/RPO wetland habitat (0.91 acres of willow scrub) areas will be avoided and preserved in perpetuity (with a buffer) within the proposed 192.61 acres of onsite Open Space Preserve.

As stated, the proposed project TM 5456 RPL 2, is a combination of three parcels and four development areas previously referred to as TM 5058, TM 5109 and TM 4909. As separate projects, two were approved projects which have expired (TM 5058 and TM 5109) and TM 4909 initiated a minor

As stated, the proposed project TM 5456 RPL 2, is a combination of three parcels and four development areas previously referred to as TM 5058, TM 5109 and TM 4909. As separate projects, two were approved projects which have expired (TM 5058 and TM 5109) and TM 4909 initiated a minor amendment to the MSCP (TM 4909R). However, redesigned TM 4909R and its' minor amendment was ultimately rejected due to fire mitigation issues which, in its' prior configuration, could not be met. To meet the updated fire requirements, a full project redesign was required. As part of the redesign, in order to maintain the integrity of the MSCP preserve, and the least impactive project, it was determined that the most efficient methodology would be to combine the original three (3) TM's into one map for processing, including the MSCP boundary adjustment process.

As a result of the doubling of the required Fuel Management Zone (FMZ; from 100 linear feet wide to 200 linear feet wide) as well as adding the additional emergency secondary access requirement and associated fire mitigation improvements, the proposed re-designed project has reduced the number of single family residences from 42 to 18 (a reduction of 24 lots) and increased the onsite preserve by approximately 3.98 acres and the MSCP preserve as a whole by approximately 4.73 acres.

**MSCP Preserve Boundary Adjustment Justification**

The proposed project is within a 'hardlined' portion of the County MSCP. The MSCP Subregional Plan provides for adjustments to the boundaries of the MSCP or subarea plan preserves through a "like or equivalent" exchange concept. As per Section 5.4.2 of the MSCP Subregional Plan, since the physical configuration of Preserve in the proposed project is different than the Preserve configuration of the existing MSCP, the Preserve biological value of the original MSCP preserve design must be analyzed and deemed the same or greater than the Preserve biological value of the proposed project. The MSCP Subregional Plan states:

> *Adjustments to the MSCP and/or Preserve boundaries can be made without the need to amend the MSCP Subregional Plan or subarea plan if the adjustment will result in the same or higher biological value of the Preserve. The determination of biological value of the proposed change is made by the local jurisdiction and must have concurrence of the wildlife agencies. No amendment of the subarea plan is needed for an approved equivalent exchange. The comparison of biological value will be based on the following biological factors:*
>
> *1 • Effects on significantly or sufficiently conserved habitats (i.e., the exchange maintains or improves the conservation, configuration, or status of significantly or sufficiently conserved habitats, as defined in Section 4.2.4 [of the MSCP Subregional Plan]);*
>
> *2 • Effects to covered species (i.e., the exchange maintains or increases the conservation of covered species);*

*3 • Effects on habitat linkages and function of Preserve areas (i.e., the exchange maintains or improves a habitat linkage or wildlife corridor);*

*4 • Effects on Preserve configuration and management (i.e., the exchange results in similar or improved management efficiency and/or protection for biological resources);*

*5 • Effects on ecotones or other conditions affecting species diversity (i.e., the exchange maintains topographic and structural diversity and habitat interfaces of the Preserve); and/or*

*6 • Effects to species of concern not on the Covered Species list (i.e., the exchange does not significantly increase the likelihood that an uncovered species will meet the criteria for listing under either the Federal or State Endangered Species Acts).*

The following discussion provides the analysis and justification through all six (6) findings per Section 5.4.2 of the MSCP Plan.

**MSCP Preserve Boundary Adjustment Project Background**

As stated in the Summary, the currently proposed Rancho Cielo Madura Major Subdivision TM 5456 RPL 2 {3100 4909 (TM) RPL2; 3910 90-080-27B (ER)} is comprised of three (3) parcels totaling approximately 270.29 acres located in the central portion of the Lake Hodges Segment of the San Diego County Subarea Plan.

A graphic comparison of the complete impact footprint of the currently approved MSCP projects onsite and the proposed Rancho Cielo Subdivision Redesign is presented in Figure 8. The primary physical differences between the Rancho Cielo Subdivision Redesign and the existing MSCP approved project footprints are related to complying with the additional fire protection mitigation measures required after the 2007 fires. In addition, the relevant previously approved the TM's were not planned with a FMZ and a single ingress and egress was all that was required (no secondary access).

To comply with the updated fire prevention requirements of maintaining a 200 foot wide Fuel Management Zone (FMZ), which was increased from requiring a depth of 100 feet, as well as secondary access to the Cielo project(s) while at a minimum maintaining the MSCP preserves biological functions and values and, maintaining or improving upon the original MSCP impact footprint, the project was redesigned with the intent of superseding the required findings per Section 5.4.2 of the MSCP Plan.

In summary, if the two projects (existing MSCP individual projects vs. proposed consolidated project) impacts are compared (both on and offsite), the proposed project not only creates a reduction in onsite acreage impacts and increases the MHCP preserve area both onsite and offsite, but the redesign of the project itself incorporates methodologies to increase the biological functions and values of the preserve both on and offsite.

These design elements include:

- Significantly reduced perimeter linear edge length and consequently a significant reduction in negative potential direct and indirect 'edge effects',
- Reduced grading footprint and impact footprint as a whole (FMZ inclusive) which is a significant reduction in negative potential direct and indirect impacts to both habitat and species,
- The elimination of all isolated 'pockets' of Open Space (OS) within the development,
- Significant reduction in lots, from 42 single family lots to 14 single family lots
- More efficient clustering of the lots together and adjacent to existing/planned future impacts
- Siting of the combustible structures in such a manner which resulted in significantly reducing the footprint of the FMZ clearing impacts,
- Removing the sewer utility easement linking the proposed 3 single family residence lots to the 19 condo units at the northern PL on the Madura property; an over 600 foot connection was planned/required
- Increases the potential movement of species through the Cielo and Del Dios wildlife movement corridor.

**MSCP Preserve Boundary Analysis and Findings of the Biological Value of the combined Madura/Cielo Subdivision Redesign**

The re-designed project proposes to impact 1.45 acres within the MSCP hard-line preserve. This area supports 0.45 acres of CSS, 0.86 acres of chaparral and 0.13 acres of disturbed habitat (dirt trails). The proposed project requires a total of 84.23 acres of habitat be provided as mitigation for the projects impacts. A total of 192.61 acres of habitat will be preserved, managed and contributed to the MSCP preserve. Specifically comparing the previously biologically approved project to the proposed project, in the area in question, the original MSCP project impacted a total of 2.15 acres of habitat within the MSCP hard-line preserve. The proposed project shall impact 1.45 acres, approximately 32% less offsite habitat than the original. These, as well as significantly reducing the units, clustering, reduced edge effects and grading, are significant positive improvements between the proposed Rancho Cielo Subdivision Redesign and the existing MSCP project impact boundary as described in the MSCP Subregional Plan, the associated Final EIR/EIS and the project specific correspondence.

As such, the current redesign provides, at a minimum, an equivalent exchange in biological value between the proposed MSCP hard-line preserve area impacts and the significant habitat areas the proposed projects' avoided and preserved and contributed to the MSCP.

Differences include reduction of impact footprint (grading and FMZ), increase of onsite MSCP preserve habitat and total MSCP preserve habitat, limited location of combustible structure improvements, reduction in the location and type of edge effects and finally, improvements in wildlife movement and linkage features of the Preserve.

The area proposed to be impacted, requiring the MSCP Boundary adjustment, is within the center of the properties on the southern property line, immediately south of Lots 4-6. The clearing will be a

requirement of the 200 foot deep FMZ from the structure. The buildable pads within these lots have been reduced to allow for the clearing required for the development of the future potential road easement and the required clearing of 30 feet on either side. By shrinking the onsite buildable pad area, per County staff recommendation, offsite impacts in this area have been reduced from 2.15 acres to 1.45 acres. This avoidance of offsite impacts allows for an increase of 0.7 acres of preserved MSCP habitat (from offsite impact avoidance).

As such, the proposed Rancho Cielo Subdivision Redesign has been specifically designed and mitigated to meet or exceed the conservation goals and the biological value for the MSCP Preserve in Cielo. As a result, there are no new potentially significant impacts arising from the Rancho Cielo Subdivision Redesign that were not previously analyzed in the Final EIR/EIS under the MSCP Project.

**TABLE 13**
**Vegetation in Existing MSCP Project Footprint versus**
**Proposed Rancho Cielo Subdivision Redesign**
**MSCP Preserve Gains**

| Habitat/ Species | Tier/List | Gains (Acres/Individuals) | Losses (Acres/Individuals) | Net Change |
|---|---|---|---|---|
| Diegan coastal sage scrub | II | 6.37 | 0.0 | +6.37 |
| Southern mixed chaparral | III | 0.0 | 0.93 | -0.93 |
| Willow Scrub | I | 0.0 | 0.0 | 0.0 |
| Jurisdictional /RPO Non Wetland Waters | I | 0.02 | 0.0 | +0.02 |
| Non-Native Grasslands | III | 0.0 | 0.1 | -0.1 |
| Rock Outcrop (also included with habitat)* | | (3.07) | 0.0 | (+3.07) |
| Eucalyptus Woodland | IV | 0.0 | 0.67 | -0.67 |
| Disturbed | IV | 0.01 | 0.0 | +0.01 |
| Developed | IV | 0.03 | 0.0 | +0.03 |
| Nuttall's scrub oak | List A | 0 | 0 | 0 |
| Wart-stemmed ceanothus** | List B | insignificant; ≤20 | Insignificant; ≤20 | 0 |
| San Diego Adolphia | List B | 0 | 0 | 0 |
| **TOTAL** | | **+6.43** | **-1.7** | **+4.73** |

Totals may not compute due to rounding error
* While a valuable preserved habitat type, rock outcrop is not counted towards the contribution to Preserve
** there are greater than aprx. 10,000 individuals onsite; greater than 80% shall be preserved

When compared to the 3 individual existing projects, the Rancho Cielo subdivisions' Cumulative Redesign results in an overall native habitat preservation increase of approximately 4.73 acres of habitat within the MSCP Preserve. Tables -7, 8 and 13 delineate the gains to the MSCP preserve, the approved

MSCP footprint vs. proposed footprint impact comparison (total) and the offsite impact comparison of the approved MSCP footprint vs. proposed footprint; respectively.

The additional MSCP preservation includes sensitive habitats such as: 6.62 acres of coastal sage scrub, 0.02 acres of RPO/jurisdictional non-wetland waters and 3.07 acres of rock outcrop. The proposed project shall impact a total of 4.14 acres of additional mixed chaparral. These, and any other impacts proposed to occur within a pre-existing MSCP approved impact area, no change to the acreage of the MSCP preserve is made. These proposed impacts within the pre-approved MSCP impact footprint (of other independent projects) are on the eastern edge of the property where the required offsite secondary access road is located.

The area proposed to be impacted by FMZ activities within an area requiring a MSCP Boundary Adjustment is located in the central portion of the property, south of the southern property line where the MSCP approved Cielo projects FMZ impacts are located. This impact, totaling approximately 1.45 acres will occur within the existing road easement leading to the southern property (offsite) and is inclusive of the required 30 foot clearing on either side of the access road.

The Rancho Cielo Subdivision Redesign would not result in the impact of additional habitat containing point data for sensitive species, including the observed gnatcatchers and southern California rufous crowned sparrows and/or wart stemmed ceanothus. The proposed project would in fact increase the total MSCP preserve by 4.66 acres. The following is a detailed comparison of biological value of the Rancho Cielo Subdivision Redesign to the approved take areas on and offsite based on these six biological factors.

1. Effects on Significantly or Sufficiently Conserved Habitats.
   The physical boundaries of the Rancho Cielo Subdivision Redesign would result in a net <u>increase</u> of 3.98 acres of additionally preserved habitat onsite and a total of approximately 4.73 additional acres of preserved habitat within Cielo MSCP subarea MHCP. The 4.73 acres of additionally preserved habitat can be calculated when comparing the MSCP approved project to the currently proposed project.

   Furthermore, as previously stated, the original MSCP project footprint permitted the Cielo portion (eastern development) of the approved project to incorporate a total of 3.19 acres of un-restored manufactured slope to be incorporated into the total calculated Open Space (as part of Lot “A” grading for the construction of Street “C”). Therefore while the original MSCP project Open Space, as stated in the Federal Register totals 193.2 acres, this total incorrectly included 4.46 acres of impacted habitat as avoided habitat and part of the OS. These impacts include: the previously discussed manufactured slope within Lot “A” (3.19 acres), the sewer line joining upper and lower Madura (0.62 acres) and the required FMZ for the Cielo project which would have had to be completed on the Madura property (0.67 acres). When these impacted areas are removed, the actual existing MSCP project OS totals approximately 188.63 acres; not the stated 193.2 acres.

When calculating the net increase to the MSCP preserve boundary it is important to differentiate pre-approved impact footprints offsite within the MSCP versus those impacts offsite and not within the pre-approved impact footprint (specifically FMZ impacts south of the PL). Only those acres impacted offsite and not within a pre-approved impact footprint area alter the total MSCP preserve calculation when combined with the onsite preservation total.
Finally, while the proposed project would create a net numeric acreage increase to the preserve, the proposed revised projects positive effects are even more significant when considering the overall functions and values of the biological system with the proposed project in place - as opposed to the existing MSCP project.

These supplementary benefits include the additional removal of 0.67 acres of non-native eucalyptus woodland which poisons the surrounding soils preventing native recruits and 1.63 acres of disturbed habitat. This disturbed habitat represents the dirt trails which criss-cross the property and allow pedestrian/pet and off-road use which further degrade the environment through bringing in and/or spreading non native species, widening the trails and creating generally erosive conditions. The projects development of these generally biologically negatively contributing habitats, totaling 2.30 acres, (hence in the 'removal' from the MSCP preserve category) are in reality an additional significant direct and indirect benefit to the preserve as a whole.

2. Effects to Covered Species.
Observed covered Species on the Cielo property area include coastal California gnatcatcher, southern California rufous crowned sparrow, Nuttall's scrub oak, California adolphia, and wart stemmed ceanothus. The BLUE analysis identified an equivalent impact in terms of point data for the California gnatcatcher, Nuttall's scrub oak, California adolphia, and wart stemmed ceanothus. Furthermore, the proposed project shall preserve more habitat for the rufous crowned sparrow, the California gnatcatchers as well as increase the viability of the preserve and wildlife corridor onsite.

In sum, the effects and negative pressure to the covered species overall will be reduced relative to the existing MSCP footprint due to the fact that:

- Onsite proposed project impact footprint has been reduced by 3.98 acres,
- Reduction of the number of Single Family lots by over 57% (proposed 18 vs. MSCP 42),
- Removal of the internal Open Space islands/patches planned in the MSCP project
- Significantly reduces the perimeter linear edge distance adjacent to the preserved habitat (significantly reducing 'edge effect'); a reduction of 5,251 linear feet.
- Significantly reduced edge effects within the MSCP approved development footprint

<u>Wart-stemmed ceanothus (*Ceanothus verrucosus).*</u> Wart-stemmed ceanothus is a MSCP covered species County List B plant and a California Rare Plant Rank 2B species. This large evergreen

shrub occurs in San Diego county and northern Baja California, Mexico (Reiser 1994). Wart-stemmed ceanothus is typically found on North facing slopes as a component of southern mixed chaparral or southern maritime chaparral plant communities (Holland 1986). Wart-stemmed ceanothus is in the buckthorn, or Rhamnaceae family. This species produces clusters of small, white, lilac-like flowers that appear between January and April. The small thick leaves and corky "warts" on the stem are characteristic of the species (Munz, 1994). This plant is threatened by loss of habitat to development (Skinner and Pavlik 1994).

While the fire of 2007 significantly damaged the population of Wart-stemmed ceanothus onsite, it is clearly coming back from the burn remnants and recruits. While it is difficult to tell currently it is one of the dominant shrubs in the southern mixed chaparral habitat on site, particularly on the steeper southern and north facing slopes of the property. In those areas where the area is not as steep, Ramona lilac (Wooly-leaf Mountain Lilac) was the dominant shrub. The densest stands of the population were virtually impenetrable prior to the fires due to the steepness of the terrain they inhabit. Due to the fire and the large number of individuals onsite (greater than 10,000 over 137.93 acres) an estimation of impacts to individuals was required. Due to the fact that the density of individuals was not uniformly dispersed, but a significant percentage of the population (greater than approximately 70%) is located on the steep slopes of the property. Therefore, while a total of approximately 51.83 acres (out of 137.93 acres, or approximately 37%) of wart stemmed ceanothus habitat (southern mixed chaparral) is being impacted the 63% of the habitat remaining supports greater than 80% of the population.

Nuttall's scrub oak (*Quercus dumosa*). Nuttall's scrub oak is a County List A plant and a California Rare Plant Rank 1B species. This plant is a large, evergreen shrub that grows in coastal areas of Santa Barbara, Orange, and San Diego Counties and northern Baja California, Mexico (Roberts 1995). Nuttall's scrub oak is in the oak family, Fagaceae. This plant is typically found on north-facing slopes in chaparral and coastal scrub habitats. It produces clusters of tiny yellow-white flowers in late winter and early spring (Munz 1974). This scrub oak is threatened by development of the coastal areas of southern California (Skinner and Pavlik 1994). Nuttall's scrub oak is represented by a few individuals in the southern mixed chaparral on the site and will not be impacted by the proposed project or the existing approved MSCP project.

California adolphia (*Adolphia californica*). This xeric shrub is a County List B plant and a California Rare Plant Rank 2 species that occurs in Diegan coastal sage scrub, often associated with California buckwheat and California sagebrush. While looked for in the historic locations, the historically observed California adolphia was not observed onsite. The California adolphia was first observed by RECON in their biological reporting and while the area burned, it can be assumed that the adolphia continues to be present in two locations on-site, within the Diegan coastal sage scrub. Impacts to one of the two historically observed locations will be impacted by both the proposed project and the existing approved MSCP project.

Red-tailed hawks *(Buteo jamaicensis).* County of San Diego Sensitive Animal List, Group 1 species. Two red tailed hawks were observed onsite during the surveys. Turkey vultures *(Cathartes aura)* were also observed flying over the site. It is reported that a golden eagle is ranging resident in the area, however it was not observed during any of the surveys. These species and others raptors are not expected to nest on-site, because of the absence of large trees/nesting areas. The onsite populations of these species are not anticipated to be large or regionally significant, as these species occur throughout cismontane southern California in areas of suitable habitat.

Turkey Vulture (*Cathartes aura*). County of San Diego Sensitive Animal List, Group 1 species. Turkey vultures are rarely seen on or near the ground unless they are feeding. The Turkey Vultures *only* feed on carcasses. A turkey vulture was observed soaring high above the property.

Southern California rufous-crowned sparrow *(Aimophila ruficeps canescens).* County of San Diego Sensitive Animal List, Group 1 species. The southern California rufous-crowned sparrow is a state species of special concern. This subspecies of rufous-crowned sparrow is a resident and ranges throughout southern California from Los Angeles County to Baja California, Mexico, along the Transverse and Peninsular Ranges (Collins 1997). Southern California rufous-crowned sparrows are found in chaparral and coastal sage scrub habitats and occasionally in grasslands adjacent to these habitats.

Southern California rufous-crowned sparrows were observed throughout the property during the surveys. It appears to be a healthy population with between 30 and 50 individuals identified onsite within the recovering habitat.

Coastal California gnatcatcher *(Polioptila californica californica).* County of San Diego Sensitive Animal List, Group 1 species. The coastal California gnatcatcher (CAGN) is a Multiple Species Conservation Program (MSCP) covered species, a federally listed threatened species, and a CDFG species of special concern. The coastal California gnatcatcher is a resident species restricted to the coastal slopes of southern California, from Ventura County southward through Los Angeles County, Orange, Riverside, and San Diego Counties into Baja California, Mexico (Atwood 1980; Jones and Ramirez 1995). The coastal California gnatcatcher typically occurs in coastal sage scrub, although this bird also uses chaparral, grassland, and riparian woodland habitats where they occur adjacent to coastal sage scrub. Populations of this species have declined as a result of both urban and agricultural development (Unitt 1984; Atwood 1990).

Onsite, there were sightings of CAGN on four separate days (of the six protocol surveys completed) and it is believed that the area supports a total of two pairs and at least one single individual who may be a juvenile.

Barn Owl (*Tyto alba*). County of San Diego Sensitive Animal List, Group 2 species. The common barn owl is the most widely distributed species of owl, and one of the most widespread of all

birds. The Barn Owl is a pale, long-winged, long-legged owl with a short squarish tail. Depending on subspecies, it measures about 9.8–18" in overall length, with a wingspan of some 30–43". Tail shape is a way of distinguishing the Barn Owl from true owls. Onsite, this owl was observed within the eucalyptus woodland.

Mule deer (*Odocoileus hemionus*). County of San Diego Sensitive Animal List, Group 2 species. Mule deer are indigenous to western North America and are a dark gray-brown in color. It has a white tail with a black tip that it carries in the drooped position. Mule deer prefer to eat high amounts of fresh grass and populations tend to move up or down with those of their preferred foods. Mule deer rarely travel far from water or forage, and tend to bed down within easy walking distance of both. Onsite, the mule deer population appears to be a thriving with the number of direct observations and sign through the property. In addition, a mule deer buck carcass (Figure 6) was observed in the south-west portion of the property. From the look of the kill, it is assumed to be a resident mountain lion.

Mountain Lion (*Puma concolor).* County of San Diego Sensitive Animal List, Group 2 species. The Mountain Lion is a large, slender cat with a smallish head and noticeably long tail. Its fur is a light, tawny brown color which can appear gray or almost black, depending on light conditions. Mountain Lions generally are found in remote mountains, canyonlands, or hilly areas with good cover. Mountain Lions are relatively uncommon, secretive animals. They are carnivores that prey on a variety of animals; some favorites include deer and wild hogs. Other prey animals included in the Mountain Lion's diet are rabbits, jackrabbits, and rodents. Some lions occasionally kill livestock or dogs. No mountain lion was directly observed, but a large mule deer kill and prints in the area indicate that a lion is present onsite and within the area in general.

Therefore, these covered species are not expected to be negatively impacted by the proposed project; conversely these species may potentially benefit from the proposed revised reduced impact alternative project.

3. Effects on Habitat Linkages and Function of Preserve Areas.

The Rancho Cielo Subdivision Redesign restores a split wildlife corridor that provides an east-west link along the south facing slopes within Del Dios Canyon. This restored (preserved instead of graded across) corridor is located on the Madura side (western property) and located between the proposed 3 Single Family Residences (SFR) and the 19 condominium units at the northern property line.

In the proposed project, the two development pockets on Madura are approximately 650 feet (north – south) apart. There are no proposed water-sewer utility easements or access requirements crossing the preserved MSCP habitat; as in the existing approved MSCP impact footprint. In the existing approved MSCP project footprint, the northern 19 condo units are connected to the southern 14 SFR by a maintained sewer and water easement. This not only creates a split in the continuity of the corridor, but the project maintains a reduced corridor width due to the larger development bubble.

Furthermore, due to the significant reduction of the western projects (Madura) development area/'Project Bulk' through a 57% reduction of lots, reduced grading impacts, reduced FMZ impacts, reduced public use/exposure and the subsequent increase in proposed MSCP Open Space and reduced edge perimeter and associated negative edge effects; the overall quality of the preserved habitat will be of higher quality than the existing MSCP proposed preserve, as well as the quality of the unencumbered corridor.

Based on these factors, the Rancho Cielo Subdivision Redesign would at least maintain, or in some cases likely improve habitat linkages in the Preserve.

4. Effects on Preserve Configuration and Management.
   The modifications to the Preserve boundaries represented by the Rancho Cielo Subdivision Redesign are significantly beneficial in terms of management efficiency and effectiveness.

   In total the perimeter of the proposed project is 25% smaller than the approved MSCP projects. Furthermore, the circumference of the proposed project has been designed to create the smoothest boundary between the grading limits with the FMZ and in the FMZ's interaction with the preserved natural habitat.

   The proposed projects' total impact circumference totals 16,274 perimeter feet while the approved MSCP projects' total 21,525 perimeter feet, a reduction of 5,251 linear feet; over 17 football field lengths or almost mile in length.

   As such, the total MSCP preserve area subject to edge effects is significantly reduced overall for the Rancho Cielo Subdivision Redesign as compared to the MSCP Project. Overall edge effects are therefore considered to be at a functional minimum equivalent in nature and are an improvement quantitatively when comparing the MSCP Project to the Rancho Cielo Subdivision Redesign.

5. Effects of Ecotones or Other Conditions Affecting Species Diversity.
   The Rancho Cielo Subdivision Redesign results in a Preserve with a greater area (4.73 acres total, 3.98 acres onsite) of similar topographic and structural diversity as the local MSCP Project area. The general consideration for this issue is that the components of the Preserve reconfiguration are all within a confined geographical area with significant variation in ecotone elements and habitat diversity throughout.

   Therefore, the proposed minor adjustments, which increase the size and viability of the Preserve boundary, would not result in a significant overall difference in ecotone considerations. Conversely, the changes to the proposed redesigned project could result in an overall positive contribution to ecotone viability within the preserve. Ecotones preserved relative to the MSCP impact footprint include the slopes on the south side of Cielo containing an interdigitated

mosaic of coastal sage scrub and chaparral habitats as well as jurisdictional non-wetland unvegetated channels and topographic features such as rock outcrops. The proposed project preserves an additional 3.07 acres of 'rock outcrop' ecotone not counted within the 'habitat type' calculations.

6. Effects to Species of Concern Not on the Covered Species List.
   Most of the species of concern found in areas affected by the Preserve boundary modifications that would result from the Rancho Cielo Subdivision Redesign are included on the Covered Species list. The Rancho Cielo Subdivision Redesign includes the additional conservation within the MSCP of an additional 4.73 acres of habitat in total, 3.98 acres onsite, providing for additional conservation potential for these species. The proposed boundary modification, which reduces both the direct and indirect impacts to the MSCP preserve, is therefore not anticipated to increase the likelihood that an uncovered species will meet the criteria for listing under either the Federal or State ESAs.

**Conclusion; MSCP Preserve Boundary Adjustment Justification**

The biological value for the Rancho Cielo Subdivision Redesign included in the revised project design is at a minimum equivalent or higher than the existing approved impacts included in the MSCP preserve design. As a result, the Rancho Cielo Subdivision Redesign meets the requirements of the MSCP Subregional Plan for adjustments to the boundary of the MSCP, under the *"Like or Equivalent"* exchange concept. In all cases the Rancho Cielo Subdivision Redesign provides additional benefits to conservation, including 4.73 acres of additional preserved habitat in total (3.98 acres onsite of additional habitat conservation), significantly reduced edge effects and the protection of a significant wildlife movement features: one expanding the connection and facilitating wildlife movement to the north, east and west. The Rancho Cielo Subdivision Redesign meets or exceeds the habitat/species exchange and is therefore consistent with all conservation objectives for the Covered Species within the Hodges Reservoir Subarea under the MSCP Subregional Plan.