2010–11 Baseline Survey Report for the Northern San Ysidro, McMillin, and Little Cedar Canyon Parcels of the the Otay Ranch Preserve

Prepared for

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1.0 Executive Summary

This baseline biological resource report has been prepared for the Northern San Ysidro, McMillin, and Little Cedar Canyon parcels of the Otay Ranch Preserve. The Northern San Ysidro parcel is located on 118 acres on APN 647-090-04, the McMillin parcel comprises 230 acres on APN 647-100-08 and 647-100-10, and the Little Cedar Canyon parcel totals 160 acres on APN 647-110-01 and 647-120-01.The Otay Ranch Preserve is located in an unincorporated portion of southwestern San Diego County, east of the city of Chula Vista.

RECON biologists conducted surveys to gather baseline biological information at the Northern San Ysidro, McMillin, and Little Cedar Canyon parcels during the spring and summer of 2011. The surveys consisted of vegetation mapping and general plant and wildlife surveys. Sensitive species were observed incidentally, and suitable habitat for sensitive wildlife species was also evaluated during general surveys.

During baseline surveys, seven vegetation communities were mapped in the Northern San Ysidro parcels, five vegetation communities were mapped in the McMillin parcels, and six vegetation communities were mapped with the Little Cedar Canyon parcels. A total of 173 plant species, 22 species of invertebrates, 1 species of amphibian, 9 species of reptiles, 44 species of birds, and 7 species of mammals were observed in the Northern San Ysidro parcels. A total of 160 plant species, 18 species of invertebrates, 3 species of amphibians, 7 species of reptiles, 45 species of birds, and 5 species of mammals were observed in the McMillin parcels. A total of 126 plant species, 18 species of invertebrates, 3 species of amphibians, 7 species of reptiles, 45 species of birds, and 5 species of mammals were observed in the Little Cedar Canyon parcels

The baseline data gathered during these surveys will be used to guide future prioritization of preserve management actions. Future focused surveys for Quino checkerspot butterfly (*Euphydryas editha quino*), as well as permanent photo point monitoring, have been recommended as tasks for FY 2011-12 in the Draft FY 2011-12 Annual Work Plan for Conveyed Lands Managed by the Otay Ranch Preserve Owner/Manager.

2.0 Introduction

This baseline biological resources report has been prepared for the City of Chula Vista to be used in support of the Otay Ranch Resource Management Plan. The Otay Ranch Preserve (Preserve) is currently composed of seven parcel sets: Northern San Ysidro, McMillin, Little Cedar Canyon, Jamul Mountains, Dulzura, San Ysidro, and Salt Creek. This baseline biological resource report has been conducted for the Northern San Ysidro, McMillin, and Little Cedar Canyon parcels (parcels). Table 1 lists the associated Assessor's Parcel Numbers (APN) and acreages for each of the parcels.

TABLE 1
PRESERVE PARCELS, APN NUMBERS, AND ACREAGES

Parcel	APN Numbers	Acreage
Northern San Ysidro	647-090-04	118
McMillin	647-100-08, 647-100-10	230
Little Cedar Canyon	647-110-01, 647-120-01	160
Jamul Mountains	598-070-05, 598-070-06	258
Dulzura	598-160-14, 598-170-04, 647-050-04, 647-060-01	801
San Ysidro	647-130-03, 647-140-01	525
Salt Creek	643-070-08, 643-070-10, 644-080-11, 644-080-15, 644-080-09, 644-090-04	775
	Total of Conveyed Land	**2,867**

The city of Chula Vista is located in southwestern San Diego County, which is in southern California near the U.S.-Mexico border. The parcels are in an unincorporated location east of Chula Vista, south of Otay Lakes Road, and west of State Route 94 (Figure 1). The Northern San Ysidro parcel is located on 118 acres on APN 647-090-04, the McMillin parcel comprises 230 acres on APN 647-100-08 and 647-100-10, and the Little Cedar Canyon parcel totals 160 acres on APN 647-110-01 and 647-120-01.

The parcels are located in the Otay River watershed and contain drainages that feed into the Lower Otay reservoir (Figure 2). The parcels are located in the San Ysidro Mountains, which are a part of the Peninsular Ranges in California (Figure 3). The San Ysidro Mountains have been known historically to support a variety of species and habitats, many of which are considered to be endemic to the region or sensitive in California.

Baseline surveys were performed at the parcels in spring 2011. The surveys consisted of vegetation mapping and a general flora and fauna list. This report includes recommendations for focused surveys for selected sensitive species depending on the types of habitat present at each site.

Survey Parcels

Additional Otay Ranch Preserve Parcels

FIGURE 1

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Otay Ranch Preserve Regional Location

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Map Source: USGS 7.5 minute topographic map series, DULZURA, JAMUL MOUNTAINS, OTAY MESA & OTAY MOUNTAIN quadrangles.

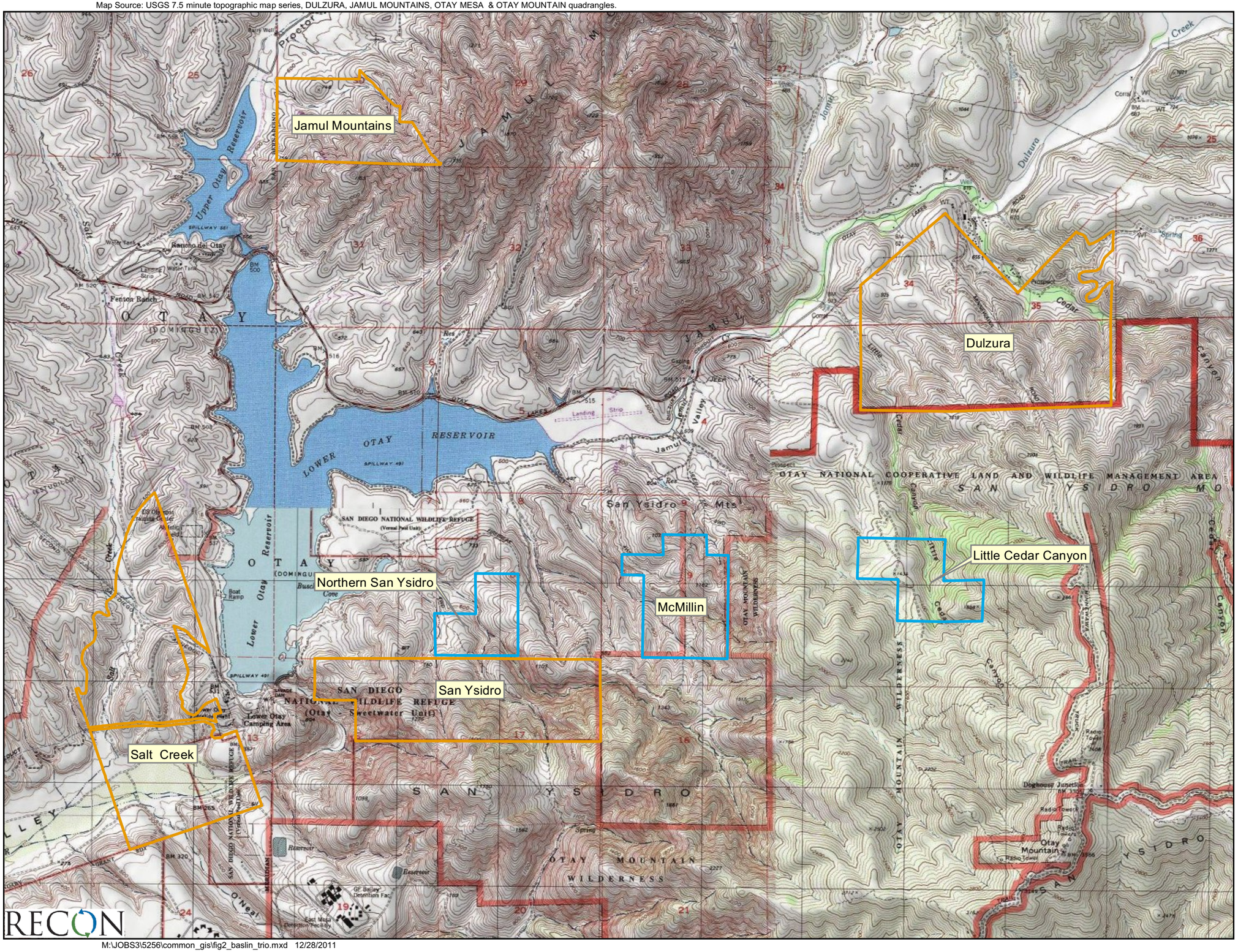

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FIGURE 2

Project Location on USGS Map

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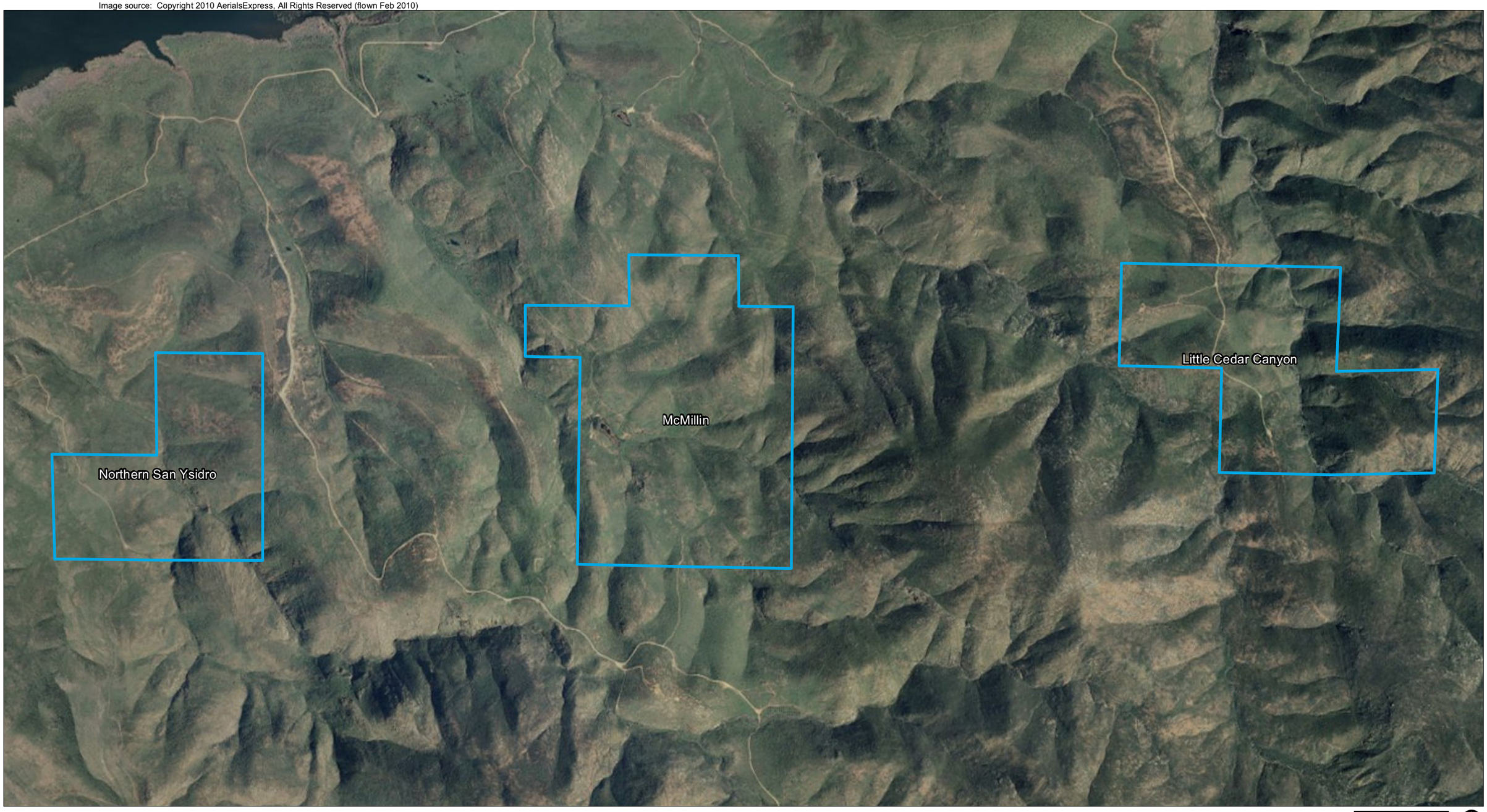

Survey Parcels

FIGURE 3

Northern San Ysidro, McMillin, and
Little Cedar Canyon Survey Parcels on Aerial Photograph

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3.0 Northern San Ysidro

3.1 Survey Methods

Baseline surveys were conducted from March through June 2011. Methods for vegetation mapping and floral and faunal surveys are described in the following sections.

3.1.1 Literature and Database Review

Prior to conducting the surveys, literature and databases were reviewed from various resources, including the California Natural Diversity Database (CNDDB), the Consortium of California Herbaria, San Diego County Department of Planning and Land Use vegetation maps, and previous biological surveys conducted by RECON, in an effort to utilize varying sources of historical data on the flora and fauna present or within the nearby vicinity the parcels. Species sensitivity were determined using the California Native Plant Society's (CNPS) *Inventory of Rare, Threatened, and Endangered Plants of California* (CNPS 2010), California Department of Fish and Game's (CDFG) *Special Vascular Plants, Bryophytes, and Lichens List* (CDFG 2011a) and *Special Animals List* (CDFG 2011b), and the City of Chula Vista Subarea Plan Covered Species (City of Chula Vista 2003). *Rare Plants of San Diego County*, *A Flora of San Diego County*, *Jepson Online Interchange*, and *The Jepson Manual: Higher Plants of California* were reviewed for historical presence and species descriptions of plants that may occur within the San Ysidro Mountains (Reiser 2001; Beauchamp 1986; Jepson Flora Project [JFP] 2011; Hickman 1993).

Scientific articles such as Elvin's description of Jennifer's monardella (*Monardella stoneana*) (Elvin 2003), the International Union for Conservation of Nature and Natural Resources (IUCN) Species Survival Commission's discussion of Thorne's hairstreak (*Mitoura thornei*) in *Conservation Biology of Lycinidae (Butterflies)* (IUCN 1993), and grey literature such as *A Summary of Affected Flora and Fauna in the San Diego County Fires of 2003* (San Diego County Biological Resource Researchers 2003) were reviewed to determine if suitable habitat was present certain sensitive species.

3.1.2 Botanical Resources

RECON personnel conducted baseline surveys for botanical resources by mapping vegetation communities and compiling an inventory of the flora within the Northern San Ysidro parcel. Survey dates and personnel for the baseline surveys are presented in Table 2. The results of these surveys are discussed separately in Section 3.2, Resources and Survey Results. In 2003 and 2007, wildfires severely burned large portions of the San Ysidro Mountains, including the parcels and surrounding landscape

(Figure 4). Consequently, the 2011 vegetation mapping will serve as representative measures of recovering post-burn habitat types.

TABLE 2
DETAILS FOR NORTHERN SAN YSIDRO PARCEL BASELINE VEGETATION SURVEYS

Survey Date	Task	Personnel Present
03/14/2011	Pre-Baseline Survey (Checked access at multiple locations)	Anna Bennett, Mark Dodero
04/04/2011	Baseline Survey	Anna Bennett, Mark Dodero
05/01/2011	Baseline Survey	Anna Bennett, Megan Lahti, JR Sundberg
05/10/2011	Baseline Survey	Megan Lahti, JR Sundberg

3.1.2.1 Vegetation Communities

The main objective of the baseline vegetation community mapping was to identify vegetation communities suitable for sensitive plants and wildlife occurrences and to guide future preserve management decisions. Meandering transects were walked by biologists through the range of habitats and other conditions present within the Northern San Ysidro parcel. Communities were mapped on a 1-inch-equals-200-feet aerial photograph flown in February 2010. Vegetation community maps compiled by the County of San Diego Department of Land Use in August 2004 and November 2005 were used as a reference for the updated 2011 mapping.

Vegetation communities and land cover types were determined by the dominant plant species present and classified using the Draft Vegetation Communities of San Diego County (Oberbauer, et al. 2008), which is based on Holland's 1986 Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986). A minimum of 5 percent cover of shrubs was used as the criterion for assigning a vegetation community to a shrub association rather than native or non-native grassland. Criteria for these determinations are described in further detail in Section 3.2.2, Botanical Resources.

3.1.2.2 General Plant Surveys

General plant surveys were conducted simultaneously with vegetation mapping to identify plant species present within the vegetation communities surveyed. All plant species apparent at the time of the surveys were recorded. Floral nomenclature for species follows that which is specified in the Jepson Online Interchange (JFP 2011). Species that could not be readily identified in the field were collected and identified using a taxonomic key. Although focused sensitive plant surveys were not conducted,

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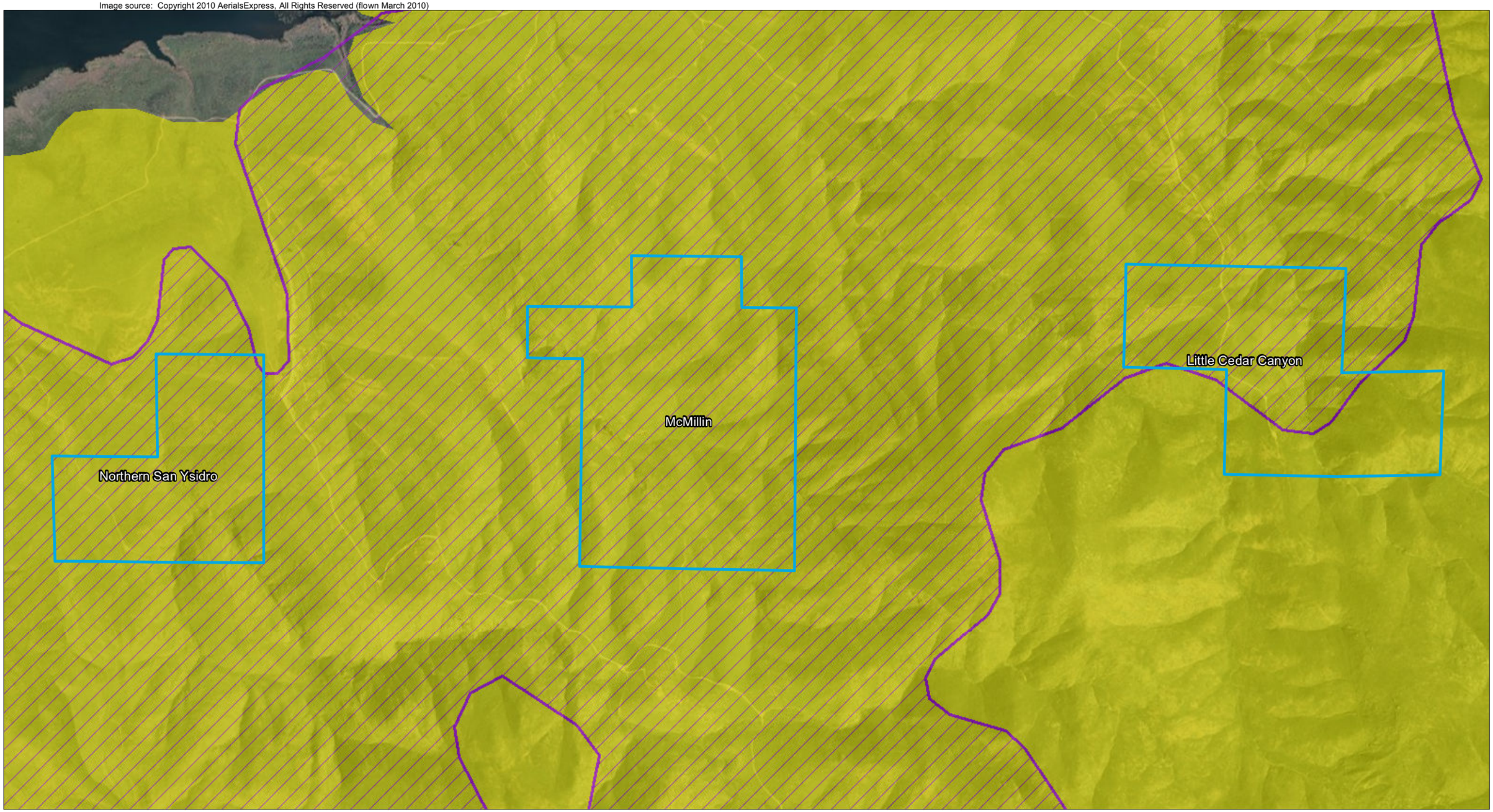

0 Feet 1,200

Survey Parcels

Fire Burn History by Year

Otay/Mine Fire 2003

Harris Fire 2007

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FIGURE 4

Northern San Ysidro, McMillin, and Little Cedar Canyon Survey Parcels Fire History

sensitive plant species identified during the general plant surveys were mapped using a hand held Trimble® Global Position System (GPS) unit, and the species lists were revised accordingly. Assessments of the sensitivity of plant species are based primarily on State of California (2011a), City of Chula Vista (2003), and CNPS (2010).

Assessments for the potential occurrence of sensitive plant species are based upon species occurrence records from the CNDDB within a two-mile radius of the Northern San Ysidro parcel (Figure 5) and additional database and literature reviews discussed in Section 3.1.1. Likelihood for occurrence within the Northern San Ysidro parcel was evaluated based on habitat requirements, range, the timing constraints of the surveys, and visibility potential.

3.1.3 Wildlife

RECON personnel conducted baseline wildlife surveys to (1) document species present or with the potential to be present within the Northern San Ysidro parcel to aid in future management decisions, (2) determine and prioritize focused wildlife surveys to be proposed, (3) identify species assemblages associated with various post-burn vegetation communities, and (4) identify any indicator species that may correspond with particular floristic and/or structural habitat characteristics. Survey dates and personnel for the baseline surveys are presented in Table 3. The results of these surveys are discussed separately in Section 3.2 Resources and Survey Results.

3.1.3.1 General Wildlife Surveys

The baseline wildlife surveys of the Northern San Ysidro parcel were conducted on the basis of defined focal survey areas and were related to specific sets of habitat conditions present at the time the baseline surveys were conducted.

Irregular transects were designed to represent the range of habitats and other conditions (e.g., hydrology, topography) within each focal area. An effort was made to sample each habitat type within a focal area in approximate proportion to its occurrence. Survey effort was allocated among a range of weather conditions conducive to activity by the various target taxa (e.g., cool mornings for birds, warm weather for reptiles and butterflies). Routes were mapped on 1-inch-equals-800-feet aerial photographs flown in February 2010 to allow scaling of quantitative data since route lengths and configurations were not uniform.

An effort was made to conduct repeat visits to certain focal areas so as to document the levels of consistency or seasonal change in wildlife assemblage composition. Repeat visits to focal areas did not repeat the previous survey routes exactly, but often overlapped significantly. The robustness of the above sampling method was examined

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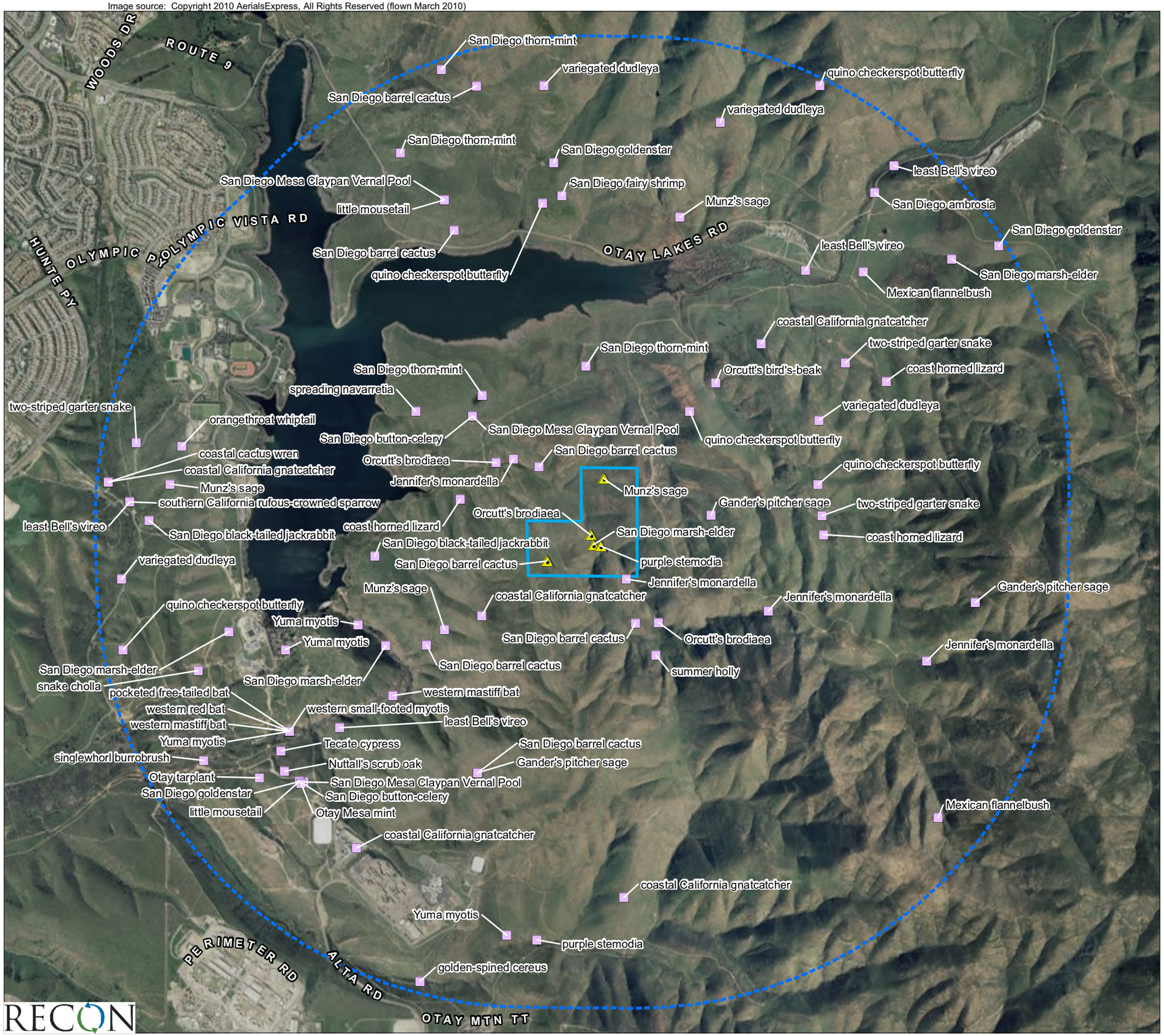

Northern San Ysidro

2 mile Buffer

CNDDB Observations

Species Previously Observed in Project Parcels

Species Previously Observed Within 2 Miles of Project Parcels

0 Feet 2,500

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FIGURE 5

Northern San Ysidro Survey Parcels
California National Diversity Database Species

TABLE 3
DETAILS FOR NORTHERN SAN YSIDRO PARCELS BASELINE WILDLIFE SURVEYS

Date	Observers	Specific Areas	Field Hours	Total Hours	Weather
03/28/2011	Erin McKinney, Beth Proscal	-	0800-1600	8.0	57ºF Winds 0 to 2 mph 100% cloud cover
03/30/2011	Alex Fromer, John Lovio	SW SW & W ½ of SE SW sec. 8, T18S, R1E	1015-1445	8.25	68 to 82ºF Winds 0 to 8 mph Clear to 80% hazy cloudy cover
06/02/2011	John Lovio	SE SW SW, SE SW & S ½ NE SW sec. 8, T18S, R1E	0800-1400	10.75	52 to 72ºF Winds gusty to 2 mph, 5-10 mph Clear
07/20/2011	Anna Bennett, Mark Dodero	Quino checkerspot butterfly (*Euphydryas editha quino*) & California gnatcatcher (*Polioptila californica californica*) habitat assessment	-	-	-
07/25/2011	Anna Bennett, Mark Dodero	Quino checkerspot butterfly (*Euphydryas editha quino*) & California gnatcatcher (*Polioptila californica californica*) habitat assessment	-	-	-

by comparing the degree of similarity of species composition and counts among transects within and among focal areas with similar combinations of habitat features.

All wildlife species apparent at the time of the surveys were recorded. Individuals of the following taxa were counted during inventories: insects, amphibians, reptiles, birds, and mammals. All animal species were observed visually or detected from calls, tracks, scat, or nests. Because surveys were performed during the day, nocturnal animals were identified only by sign.

Bird species and often other species were annotated as to habitat association. Any sensitive wildlife species identified during the general wildlife surveys were also recorded and the species lists revised accordingly.

Assessments for the potential occurrence of sensitive wildlife species are based upon species occurrence records from the CNDDB within a two-mile radius of the Northern San Ysidro parcel (see Figure 5). Likelihood for reoccurrence within the Northern San Ysidro parcel was evaluated based on habitat requirements, range, and the timing constraints of the surveys.

Zoological nomenclature for invertebrates is in accordance with Mattoni (1990) and Opler, et al. (1999); for amphibians and reptiles, Crother (2001, 2008) and Crother et al. (2003); for birds, the American Ornithologists' Union Checklist (1998) and Unitt (1984, 2004); and for mammals, Baker et al. (2003) and Hall (1981). Assessments of the sensitivity of wildlife species are based primarily on State of California (2011b, 2011c) and City of Chula Vista (2003).

3.1.4 Wildlife Movement

Wildlife movement was incidentally observed during baseline wildlife surveys. Constraints to wildlife movement are discussed in Section 5.2.6.2, Wildlife Movement.

3.1.5 Drainages

Major drainages and channels are defined here as either natural or artificial channels that provide a course for the flow of water, whether that flow is continuous or intermittent. These drainages occur in the canyon bottoms and are often associated with riparian vegetation. Drainages were determined using USGS 7.5 minute topographic maps and performing a visual evaluation in the field.

3.1.6 Dumping, Trespassing, and Vagrant Encampments

Dumping, trespassing, and vagrant encampments were incidentally observed and recorded during baseline surveys.

3.2 Resources and Survey Results

3.2.1 Site Description

The following sections describe the topography and soils within the Northern San Ysidro parcel.

3.2.1.1 Topography

The Northern San Ysidro parcel is located in the San Ysidro Mountains. The Northern San Ysidro parcel consists of gently sloping to steep slopes ranging between 0 and 45 degrees. Elevations range from 560 to 840 feet. Lower Otay Reservoir is located directly west of the Northern San Ysidro parcel (see Figures 2 and 3). The topography of the Northern San Ysidro parcel is shown in Figure 6.

3.2.1.2 Soils

One soil series occurs in the Northern San Ysidro parcel: San Miguel-Exchequer rocky silt loam, 9 to 70 percent slopes (Figure 7). The San Miguel-Exchequer series consists of shallow to moderately deep silt loams with clay subsoil derived from metavolcanic rock. This soil occurs on mountainous uplands at elevations between 400 to 3,300 feet. Rock outcrop covers 10 percent of the surface. Chamise (*Adenostoma fasciculatum*), California-lilac (*Ceanothus* spp.), and laurel sumac (*Malosma laurina*) are common dominant species, with a small amount of filaree (*Erodium* spp.), soft chess (*Bromus hordeaceus*), and wild oat (*Avena* spp.) occurring in the understory (U.S. Department of Agriculture [USDA] 1973).

3.2.2 Botanical Resources

3.2.2.1 Common Plant Species

Attachment 1 provides a complete list of all plant species observed in the Northern San Ysidro parcel. A total of 173 plant species were observed in the Northern San Ysidro parcel. Of these species, 134 are native and 39 are non-native. The vegetation communities these plant species occur in are discussed further below.

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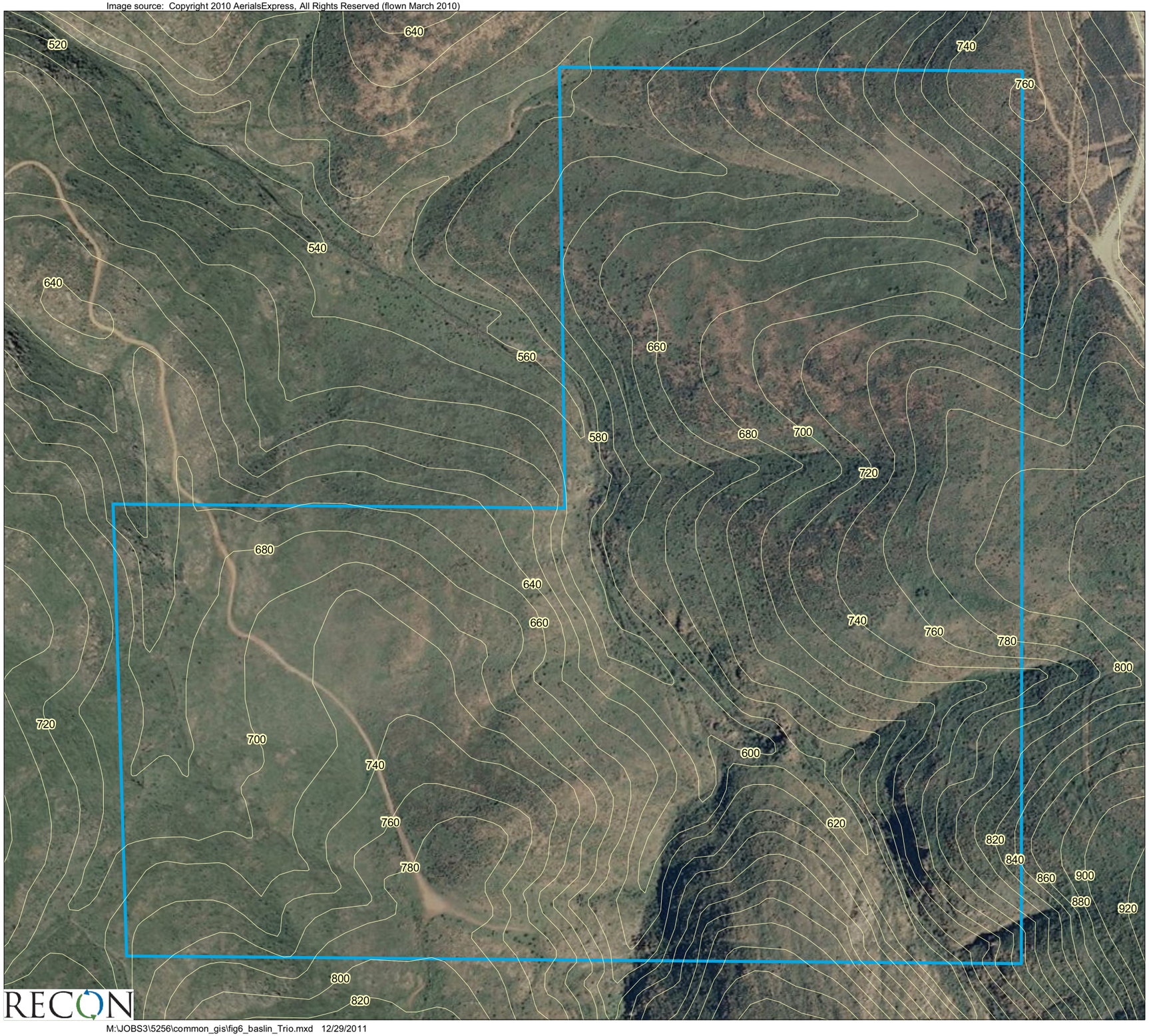

Northern San Ysidro

20ft Contour

0 Feet 300

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FIGURE 6

Northern San Ysidro
Survey Parcels Topography

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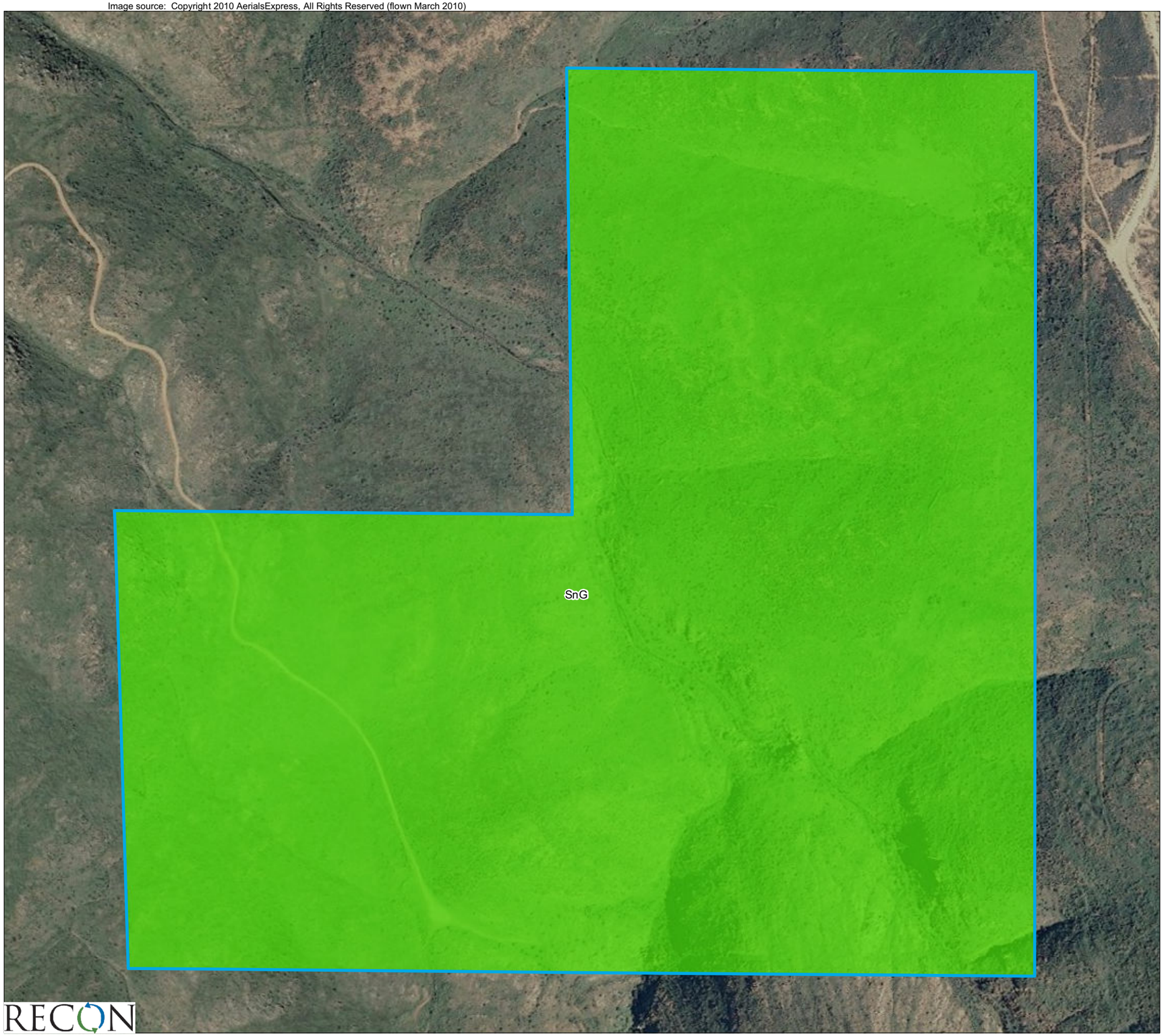

Northern San Ysidro

Soil Classification

SnG - San Miguel-Exchequer rocky silt loams, 9 to 70 percent slopes

0 Feet 300

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FIGURE 7

Northern San Ysidro
Survey Parcels Soils

3.2.2.2 Vegetation Communities

There were seven vegetation communities and land cover types present in the Northern San Ysidro parcel: Diegan coastal sage scrub, chamise chaparral, coastal sage-chaparral transition, southern mixed chaparral, southern riparian scrub, southern interior cypress forest, native grassland, and wildflower field. The acreages of these vegetation communities within the Northern San Ysidro parcel are shown in Table 4. Vegetation communities mapped on-site are shown on Figure 8. The following text provides general descriptions of the vegetation communities based on the Vegetation Communities of San Diego County (Oberbauer, et al. 2008). More detailed description specific to the Northern San Ysidro parcel follow the general descriptions.

TABLE 4
NORTHERN SAN YSIDRO PARCELS:
VEGETATION TYPES WITH ACREAGES

Vegetation Types	Acres	Percent	Tier
Diegan Coastal Sage Scrub	45	38%	II
Chamise Chaparral	40	34%	III
Coastal Sage-Chaparral Scrub	18	15%	II
Southern Mixed Chaparral	11	9%	III
Southern Riparian Scrub[1]	3	3%	N/A
Native Grassland	<1	<1%	I
Wildflower Field[2]	<1	<1%	N/A

[1] Southern riparian scrub is a wetland community which does not have designated tiers by the City of Chula Vista.
[2] Wildflower fields do not have designated tiers by the City of Chula Vista.

a. Diegan Coastal Sage Scrub (Oberbauer 32500)

Diegan coastal sage scrub is a vegetation community considered sensitive by federal and state resource agencies and Tier II (uncommon upland) by the City of Chula Vista's Multiple Species Conservation Program Subarea Plan (MSCP; City of Chula Vista 2003). Diegan coastal sage scrub is the southern form of coastal sage scrub composed of low-growing, aromatic, drought-deciduous, soft-woody shrubs. Diegan coastal sage scrub is found in coastal areas from Los Angeles County south into Baja California. The community is typically found on sites that have low moisture availability, 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, where the community can act as a successional phase in chaparral development. The plant community is typically dominated by facultatively drought-deciduous species such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac, and white sage (*Salvia apiana*) (Oberbauer, et al. 2008). These species tend to be dominant, with San Diego County viguiera (*Bahiopsis lacinata*), golden-yarrow (*Eriophyllum confertiflorum*) and deerweed (*Acmispon glaber*) often present.

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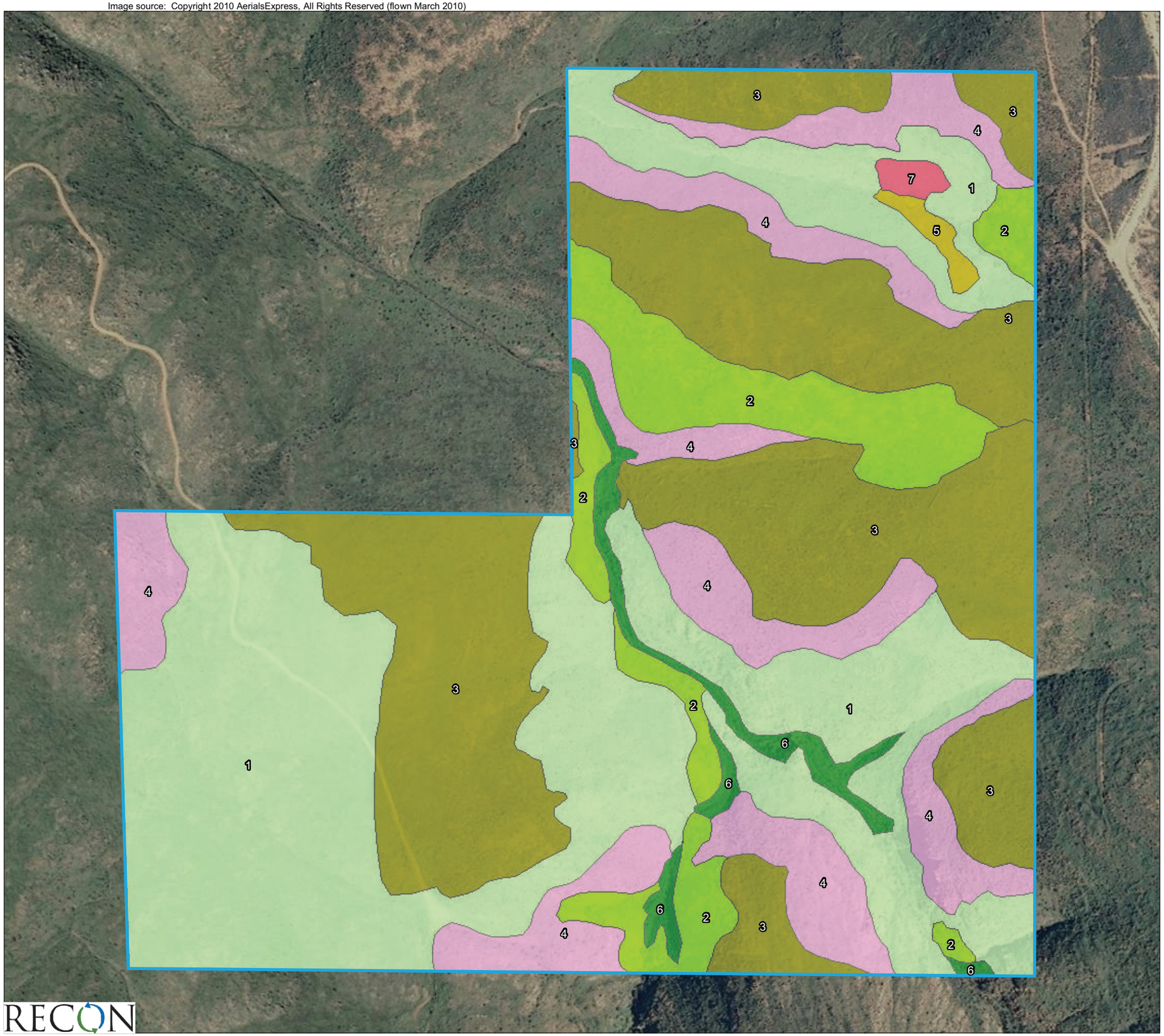

Northern San Ysidro

Vegetation Classification

- 1 - Diegan Coastal Sage Scrub
- 2 - Southern Mixed Chaparral
- 3 - Chamise Chaparral
- 4 - Coastal Sage-Chaparral Transition
- 5 - Native Grassland
- 6 - Southern Riparian Scrub
- 7 - Wildflower Field

0 Feet 300

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FIGURE 8

Northern San Ysidro Survey Parcels
Vegetation Communities and Land Cover

The Diegan coastal sage scrub at the Northern San Ysidro parcel was typically dominated by California sagebrush, California buckwheat, and deerweed (Photograph 1). There was some variability within Diegan coastal sage scrub on the parcel. Some Diegan coastal sage scrub areas were dominated by golden-yarrow and chaparral bush-mallow (*Malacothamnus fasciculatus*). A few east-facing slopes were dominated by golden-yarrow and deerweed. Often the northern areas had a low density of shrubs and more non-native annual grasses. The north- and west-facing slopes had more laurel sumac.

Diegan coastal sage scrub occurred on 45 acres, representing 38 percent of the Northern San Ysidro parcel.

b. Chamise Chaparral (Oberbauer 37200)

Chamise chaparral is considered Tier III (common upland) by the MSCP (City of Chula Vista 2003). Chamise chaparral is the most common type of chaparral community in southern California. This plant community is dominated by chamise, a shrub that is three to ten feet in height. Associated species contribute little to cover and mature stands are densely interwoven with very little herbaceous understory or litter. Chamise chaparral is often found on xeric slopes and ridges at low elevations. This habitat type is adapted to repeated fires by its ability to stump sprout (Oberbauer, et al. 2008). Though chamise is the dominant plant in this community, peak rush-rose (*Helianthemum scoparium*), mission manzanita (*Xylococcus bicolor*), and our Lord's candle (*Yucca whipplei*) can occur.

The chamise chaparral at the Northern San Ysidro parcel was dominated by chamise, with peak rush-rose and our Lord's candle often present (Photograph 2). Frequent understory species are fringed spineflower (*Chorizanthe fimbriata*), ashy spike-moss (*Selaginella cinerascens*), and cryptantha (*Cryptantha* sp.). There were a few stands with Munz's sage (*Salvia munzii*) and California buckwheat occurring. This community was often found on the tops of ridges where the soil is hard packed and rocky.

Chamise chaparral occurred on 40 acres, representing 34 percent of the Northern San Ysidro parcel.

c. Coastal Sage-Chaparral Transition (Oberbauer 37G00)

Coastal sage–chaparral transition is considered Tier II (uncommon upland) by the MSCP (City of Chula Vista 2003). Coastal sage–chaparral transition contains a mix of woody chaparral species and drought-deciduous sage scrub species. This vegetation type is found from the outer Coast Ranges and Peninsular Range from Big Sur south to Baja California. The association is an intermediate between coastal scrub and chaparral associations and tends to be a post-fire successional community (Oberbauer, et al. 2008).

PHOTOGRAPH 1
California Buckwheat (*Eriogonum fasciculatum*)
Dominated CSS with San Diego County Viguiera (*Bahiopsis laciniata*) and California Sagebrush (*Artemisia californica*)

PHOTOGRAPH 2
Chamise Chaparral

Coastal sage-chaparral transition was distributed throughout the Northern San Ysidro parcel (Photograph 3). Areas with typical Diegan coastal sage scrub species and significant quantities of chamise, manzanita (*Arctostaphylos* spp.), California-lilac, scrub oak (*Quercus berberidifolia*), or mission manzanita were considered coastal sage-chaparral transition. Areas similar to southern mixed chaparral dominated by toyon (*Heteromeles arbutifolia*), mission manzanita, scrub oak, hairy ceanothus (*Ceanothus oliganthus*), and laurel sumac, but with low quantities of Diegan coastal sage scrub species, such as California sagebrush, deerweed, or laurel sumac, were mapped as southern mixed chaparral rather than coastal sag-chaparral transition. Similarly, areas dominated by California sagebrush, California buckwheat, black sage (*Salvia mellifera*), white sage, deerweed, golden-yarrow, and chaparral bush-mallow, but with low quantities of southern mixed chaparral or chamise chaparral species, such as chamise, manzanita, California-lilac, or scrub oak, were mapped as Diegan coastal sage scrub rather than coastal sage-chaparral transition. The most common type of coastal sage-chaparral transition at Northern San Ysidro parcel set had deerweed, golden-yarrow, and laurel sumac as the primary members.

Coastal sage-chaparral transition occurred on 18 acres, representing 15 percent of the Northern San Ysidro parcel.

d. Southern Mixed Chaparral (Oberbauer 37120)

Southern mixed chaparral is considered Tier III (common upland) by the MSCP (City of Chula Vista 2003). Southern mixed chaparral is a plant community typically dominated by broad-leaved sclerophyllous shrubs or small trees. Southern mixed chaparral typically is found in coastal foothills of San Diego County at elevations below 3,000 feet. It usually occupies canyon slopes or ravines where mesic conditions are present. The vegetation is usually dense, with little or no understory cover, but may include patches of bare soil. Many species in this community are adapted to repeated fires by their ability to stump sprout. Dominant shrubs in this community range from 4 to 10 feet tall and may include manzanita, toyon, sugar bush (*Rhus ovata*), California-lilac, and mission manzanita (Oberbauer, et al. 2008).

The southern mixed chaparral at the Northern San Ysidro parcel was typically dominated by hairy ceanothus, chamise, and peak rush-rose (Photograph 4). Sugar bush and scrub oak were often present in the southern mixed chaparral stands. Steeper and more north-facing areas were strongly dominated by hairy ceanothus.

Southern mixed chaparral occurred on 11 acres, representing 9 percent of the Northern San Ysidro parcel.

PHOTOGRAPH 3
Coastal Sage-Chaparral Transition with California Sagebrush (*Artemisia californica*) and Chamise (*Adenostoma fasciculatum*)

PHOTOGRAPH 4
Southern Mixed Chaparral at Northern San Ysidro Parcel

e. Southern Riparian Scrub (Oberbauer 63300)

Southern riparian scrub is a riparian community dominated by small trees or shrubs. Taller riparian trees are not present. This community is mostly in major river systems where flood scour occurs and has expanded due to increased urban and agricultural runoff. Mule fat scrub and southern willow scrub are forms of the broader category of southern riparian scrub (Oberbauer, et al. 2008).

Characteristic shrub species at the Northern San Ysidro parcel include mule fat (*Baccharis salicifolia*), willows (*Salix* spp.), and western poison oak (*Toxicodendron diversilobum*). Herbs present include San Diego sedge (*Carex spissa*), California fuchsia (*Epilobium canum*), cattail (*Typha* sp.), rushes (*Juncus* spp.), and spike-rush (*Eleocharis* sp.). Western sycamore (*Platanus racemosa*) and Fremont cottonwood (*Populus fremontii* ssp. *fremontii*) occasionally occur within the southern riparian scrub; however, there were not enough individuals for the community to be mapped as a southern riparian forest or woodland. Within the Northern San Ysidro parcel, this community was represented by a fairly continuous narrow strip along the drainage at the bottom of the main canyon. This community was interrupted by rocky areas with a steeper gradient. In some cases this community was too small for mapping and was included in the adjacent community, but effort was put into representing it as accurately as possible.

The southern riparian scrub at the Northern San Ysidro parcel was variable with no species clearly dominating. Mule fat and rushes were present in most stands. Black willow (*Salix gooddingii*) was present in a stand just below a waterfall (Photograph 5). A western sycamore was observed near the confluence of two canyons. Despite the presence of willows and western sycamore, this vegetation community was not dense enough to qualify as southern willow scrub. Saltcedar (*Tamarix ramosissima*), San Diego marsh-elder (*Iva hayesiana*), and narrow-leaf milkweed (*Asclepias fascicularis*) were also common in some stands of southern riparian scrub.

Southern riparian scrub occurred on three acres, representing 3 percent of the Northern San Ysidro parcel.

f. Native Grassland (Oberbauer 42100)

Native grassland is considered Tier I (rare upland) by the MSCP (City of Chula Vista 2003). This vegetation community is a mid-height grassland (up to two feet) dominated by native perennial grasses. Native grasslands often contain a high percentage of native and non-native annuals, but are considered native grassland if 20 percent aerial cover of native species is present. This association often occurs on fine-textured soils that are moist to waterlogged in winter and dry in the summer (Oberbauer, et al. 2008).

The native grassland found on the Northern San Ysidro parcel was dominated by dune bent grass (*Agrostis pallens*) with purple needlegrass (*Nassella pulchra*) as a sub-

PHOTOGRAPH 5
Southern Riparian Scrub with Black Willow (*Salix goodingii*)

PHOTOGRAPH 6
Native Grassland Dominated by Bent Grass (*Agrotis pallens*) and Purple Needlegrass (*Nassella pulchra*)

dominant (Photograph 6). Due to the dominance of dune bent grass rather than purple needlegrass, the grassland was not mapped as valley needlegrass grassland. Native grassland occurred on a north- to northeast-facing slope with clay soil in the northeast corner of the parcel.

Native grassland occurred on less than one acre, representing less than 1 percent of the Northern San Ysidro parcel.

g. Wildflower Field (Oberbauer 42300)

Wildflower fields are described as "an amorphous grab bag of herb-dominated types noted for conspicuous annual wildflower displays" (Oberbauer, et al. 2008).

The form of this vegetation community found at the Northern San Ysidro parcel was dominated by golden tarplant (*Deinandra fasciculata*) with some tocalote (*Centaurea melitensis*). The soil was clayey and readily formed deep cracks during the summer. The area where this wildflower field occurred is a southwest-facing moderate slope in the northeast corner of the parcel. This area had potential for other clay endemics to occur.

Wildflower field occurred on less than one acre, representing less than 1 percent of the Northern San Ysidro parcel.

3.2.3 Zoological Resources

Attachment 2 provides a complete list of all wildlife species observed in the Northern San Ysidro parcel. Wildlife observed includes 22 species of invertebrates, 1 species of amphibian, 9 species of reptiles, 44 species of birds, and 7 species of mammals.

3.2.3.1 Invertebrates

A total of 23 butterfly species were observed. Twenty-two species are not considered sensitive and one species is considered sensitive (See Section 3.2.4.2, Sensitive Invertebrates). Common butterfly species observed include southern blue (*Glaucopsyche lygdamus australis*), western tiger swallowtail (*Paillio rutulus*), banded wooly bear (*Pyrrharctia isabella*), and common hairstreak (*Strymon melinus pudica*).

3.2.3.2 Amphibians

A total of one amphibian species was observed: Pacific treefrog (*Pseudacris regilla*). This species is not considered sensitive.

3.2.3.3 Reptiles

A total of nine reptile species were observed. Five species are not considered sensitive and four species are considered sensitive (see Section 3.2.4.3, Sensitive Reptiles). The five common reptile species observed were: southwestern speckled rattlesnake (*Crotalus mitchellii pyrrhus*), California striped racer (*Masticophis lateralis lateralis*), western fence lizard (*Scleroporus occidentalis*), granite spiny lizard (*Scleroporous orcutti*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*).

3.2.3.4 Birds

A total of 44 bird species were observed. Thirty-seven species are not considered sensitive and seven species are considered sensitive (see Section 3.2.4.4, Sensitive Birds). Some common bird species observed include: yellow-rumped warbler (*Dendroica coronata*), Bewick's wren (*Thryomanes bewickii*), tree swallow (*Tachycineta bicolor*), and hooded oriole (*Icterus cucullatus nelson*).

3.2.3.5 Mammals

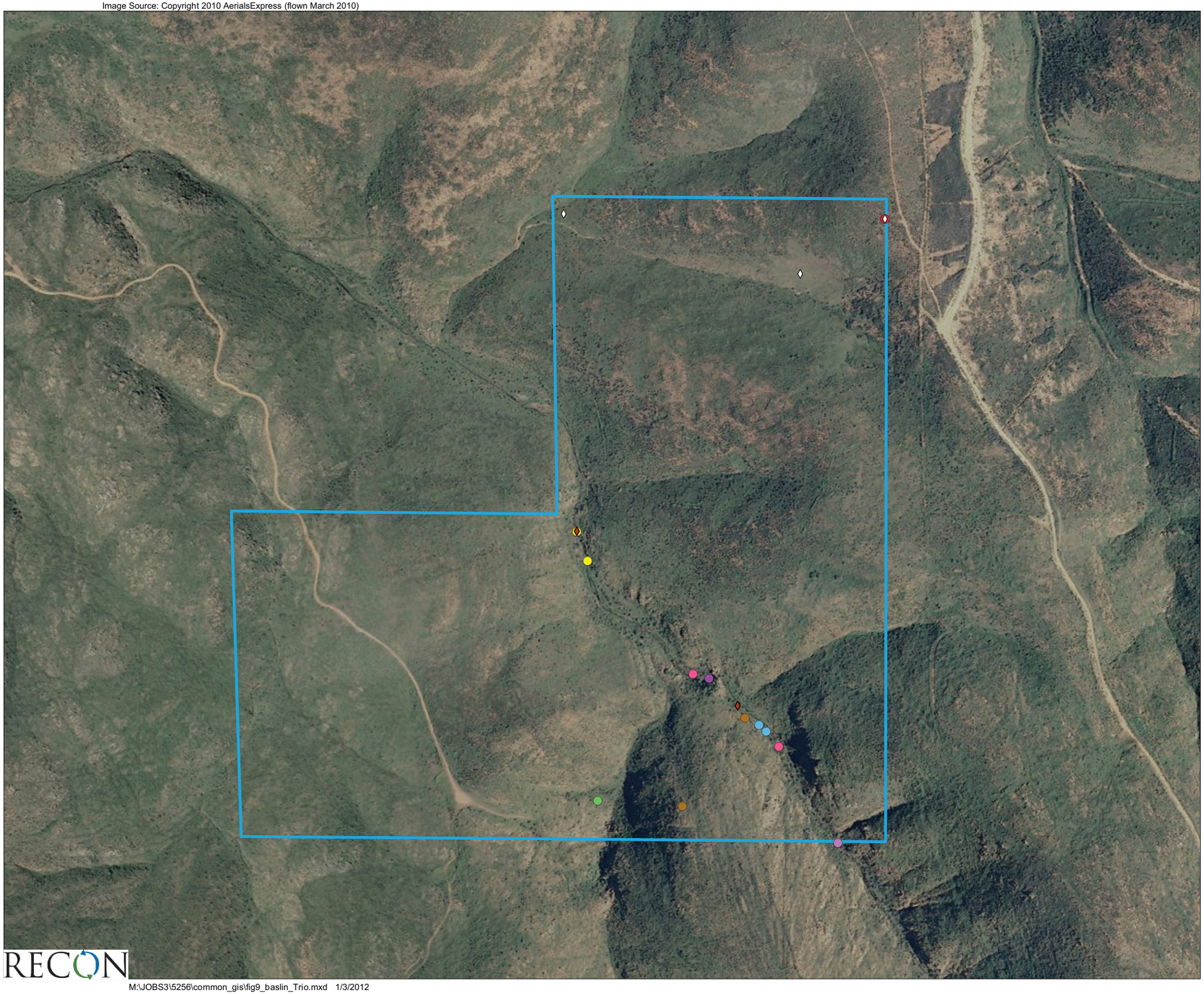
A total of seven mammal species were observed. Five species are not considered sensitive and two species are considered sensitive (see Section 3.2.4.5, Sensitive Mammals). The five common mammal species observed were: desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), woodrat (*Neotoma* sp.), and mouse (*Peromyscus* sp.).

3.2.4 Sensitive Species

For the purposes of this report, a species is considered sensitive if it is: (1) listed by state or federal agencies as threatened or endangered or is a candidate or proposed for such listing; (2) considered rare, endangered, or threatened by the State of California (State of California 2011a, 2011b, 2011c); (3) a narrow endemic or covered species in the MSCP (City of Chula Vista 2003); (4) considered by the CNPS to have a California Rare Plant Rank of 1B or 2 (CNPS 2010); or (5) considered rare, sensitive, or noteworthy by local conservation organizations or specialists. Noteworthy plant species are considered to be those that are considered by CNPS to have a California Rare Plant Rank of 3 or 4. Assessments for the potential occurrence of sensitive or noteworthy species are based upon species occurrence records from the CNDDB and a database and literature review (see Section 3.1.1).

Attachment 3 provides a complete list of all sensitive plant species observed in the Northern San Ysidro parcel. Sensitive plant species in the Northern San Ysidro parcel are shown on Figure 9. Attachment 4 provides a complete list of all sensitive wildlife

Image Source: Copyright 2010 AerialsExpress (flown March 2010)



Northern San Ysidro

Sensitive Plant Observations

- Ashy Spike Moss
- Jennifer's Monardella
- Orcutt's Brodiaea
- Otay Mountain Lotus
- Purple Stemodia
- San Diego County Needle Grass
- San Diego Marsh-elder
- Tecate Cypress
- Spiny Rush
- Munz's Sage

0 Feet 400

FIGURE 9

Northern San Ysidro Survey
Parcels Sensitive Plant Species

RECON

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species observed in the Northern San Ysidro parcel. Sensitive wildlife species in the Northern San Ysidro parcel are shown on Figure 10.

3.2.4.1 Sensitive Plant Species

Eleven sensitive plant species were identified in the Northern San Ysidro parcel. Seventeen other sensitive plant species have the potential to occur. Several sensitive plant species are historically known to occur in the vicinity of the site, but were not observed during surveys. Many of these species are considered to have low potential for occurrence because of habitat requirements lacking within the Northern San Ysidro parcel. In other cases, species that are perennial or annual herbs may not have been detected due to timing constraints. These species are discussed below.

Eleven sensitive plant species were identified in the Northern San Ysidro parcel. Seventeen other sensitive plant species have the potential to occur. Several sensitive plant species are historically known to occur in the vicinity of the site, but were not observed during surveys. Many of these species are considered to have low potential for occurrence because of habitat requirements lacking within the Northern San Ysidro parcel. In other cases, species that are perennial or annual herbs may not have been detected due to timing constraints. These species are discussed below.

a. Observed

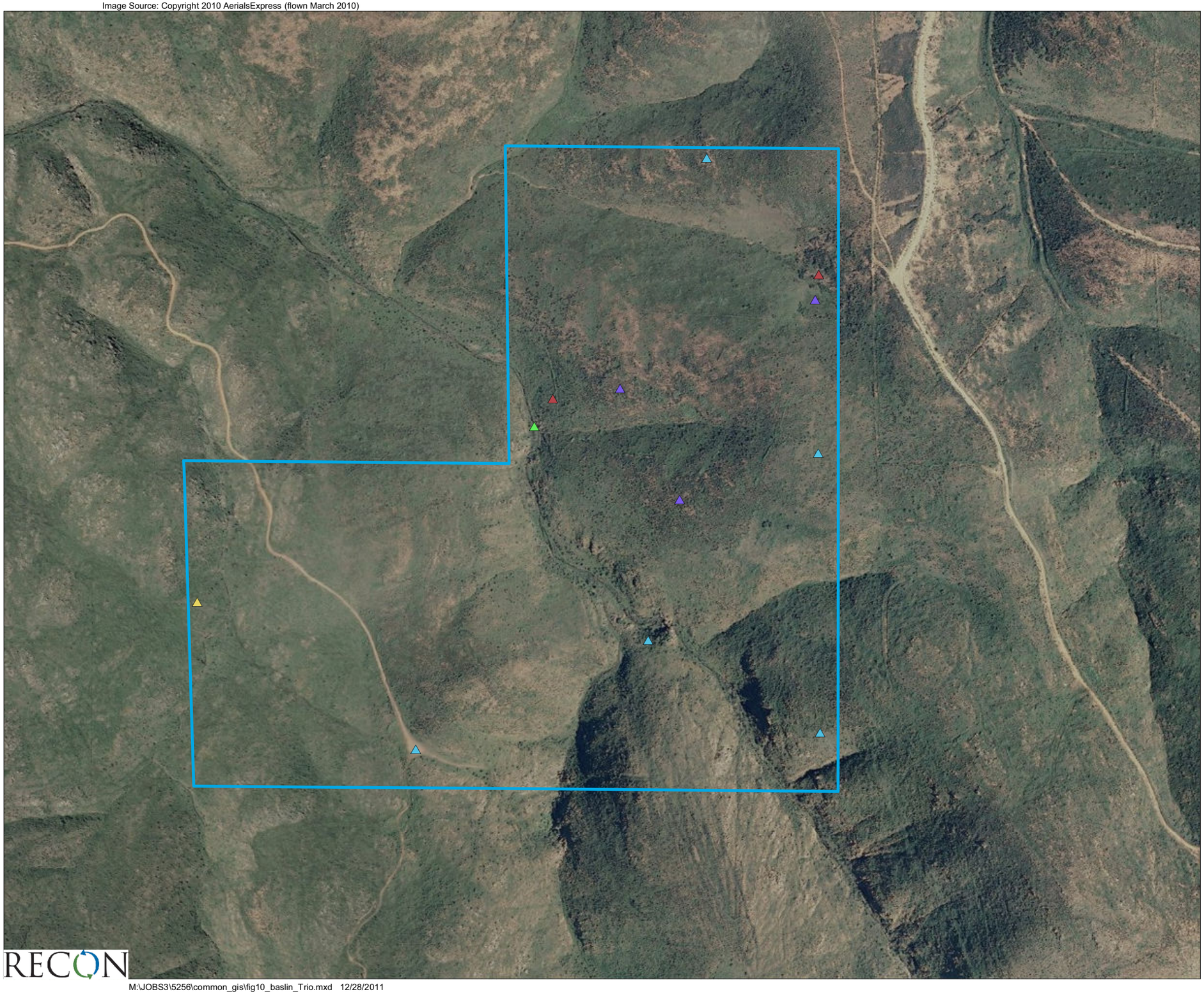
Orcutt's brodiaea (*Brodiaea orcuttii*) — a narrow endemic species covered under the MSCP. This perennial herb is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species was observed in southern riparian scrub.

Tecate cypress (*Hesperocyparis forbesii*) — an MSCP-covered species. This perennial shrub is an MSCP-covered species and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species was observed in southern riparian scrub.

San Diego barrel cactus (*Ferocactus viridescens*) — an MSCP-covered species. This perennial cactus is an MSCP-covered species and has a CNPS ranking of 2.1 (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California) (Photograph 7).

Otay Mountain lotus (*Hosackia crassifolius* var. *otayensis*). This perennial herb has a CNPS rating of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species was observed in Diegan coastal sage scrub (Photograph 8).

Image Source: Copyright 2010 AerialsExpress (flown March 2010)



Northern San Ysidro

Sensitive Wildlife Observations

- Coast Horned Lizard
- Coastal California Gnatcatcher
- San Diego Black-tailed Jackrabbit
- Southern California Rufous-crowned Sparrow
- Two-striped Gartersnake

0 Feet 400

RECON

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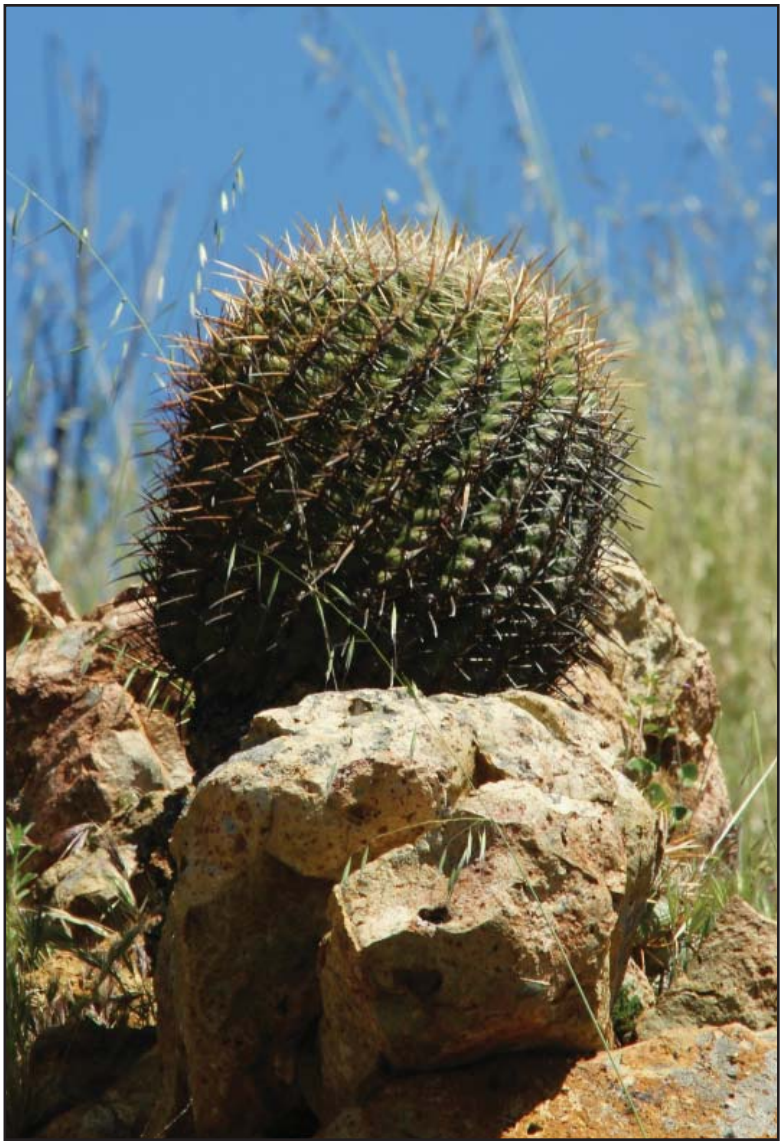
FIGURE 10

Northern San Ysidro Survey
Parcels Sensitive Wildlife Species



PHOTOGRAPH 7
Coast Barrel Cactus (*Ferocactus viridscens*) Growing at Northern San Ysidro

PHOTOGRAPH 8
Otay Mountain Lotus
(*Hosackia crassifolius* var. *otayensis*)

PHOTOGRAPH 9
San Diego Marsh-Elder (*Iva hayesiana*) Grows
in Seasonal Drainages at Northern San Ysidro

Jennifer's monardella (*Monardella stoneana*). This perennial herb has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species was observed in southern riparian scrub.

Purple stemodia (*Stemodia durantifolia*). This perennial herb has a CNPS ranking of 2.1 (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California). This species was observed in southern riparian scrub.

San Diego marsh-elder (*Iva hayesiana*). This perennial herb has a CNPS ranking of 2.2 (rare, threatened, or endangered in California, but more common elsewhere; fairly endangered in California). This species was observed in southern riparian scrub (Photograph 9).

Munz's sage (*Salvia munzii*). This perennial shrub has a CNPS ranking of 2.2 (rare, threatened, or endangered in California, but more common elsewhere; fairly endangered in California). This species was observed in chamise chaparral and Diegan coastal sage scrub.

Ashy spike moss (*Selaginella cinerascens*). This perennial herb has a CNPS ranking of 4.1 (uncommon in California; seriously endangered in California). This species was observed in chamise chaparral.

San Diego County needlegrass (*Achnatherum diegoensis*). This perennial grass has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in native grassland, chamise chaparral, and Diegan coastal sage scrub.

Spiny rush (*Juncus acutus* ssp. *leopoldii*). This perennial herb has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in southern riparian scrub.

b. Not Observed

San Diego ambrosia (*Ambrosia pumila*) — a narrow endemic species covered under the MSCP. This perennial herb is federally endangered, is considered to be a narrow endemic under the MSCP, and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a moderate potential for occurrence in the Northern San Ysidro parcel. Preferred habitat is coastal scrub, chaparral, and grassland habitats, all of which are present in the Northern San Ysidro parcel.

San Diego thornmint (*Acanthomintha ilicifolia*) — a narrow endemic species covered under the MSCP. This perennial herb is federally threatened, is state listed as endangered, is considered to be a narrow endemic under the MSCP, and has a

CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a moderate potential for occurrence in the Northern San Ysidro parcel. Preferred habitat is coastal scrub, chaparral, and grassland habitats, all of which are present in the Northern San Ysidro parcel.

Otay tarplant (*Deinandra conjugens*) — a narrow endemic species covered under the MSCP. This annual herb is federally threatened, state listed as endangered, has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California), and is considered a narrow endemic under the MSCP. This species has low potential to occur in the Northern San Ysidro parcel. Preferred habitat is clayey soils in coastal sage scrub openings and grassland (JFP 2011).

Snake cholla (*Cylindropuntia californica* var. *californica*) — a narrow endemic species covered under the MSCP. This perennial succulent is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a moderate potential for occurrence in the Northern San Ysidro parcel. Preferred habitat is coastal scrub and chaparral habitats, both of which are present in the Northern San Ysidro parcel.

Variegated dudleya (*Dudleya variegata*) — a narrow endemic species covered under the MSCP. This succulent perennial is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species has a moderate potential for occurrence in the Northern San Ysidro parcel. Preferred habitat includes chaparral, coastal scrub, and grassland, all of which occur in the Northern San Ysidro parcel.

Felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*) — a narrow endemic species covered under the MSCP. This perennial herb is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species has moderate potential to occur in the Northern San Ysidro parcel. Preferred habitat in the San Ysidro Mountains is the understory of chaparral in San Miguel Exchequer soils (Reiser 2001).

Gander's pitcher sage (*Lepechinia ganderi*) — a narrow endemic species covered under the MSCP. This perennial shrub is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.3 (rare, threatened, or endangered in California and elsewhere; not very endangered in California). This species has a low potential for occurrence in the Northern San Ysidro parcel. Preferred habitat is closed-cone coniferous forest, grassland, chaparral, and coastal scrub, all of which are present in the

Northern San Ysidro parcel; however, Gander's pitcher sage typically occurs above 1,000 feet, which is greater than the highest elevation at Northern San Ysidro.

Otay Mesa mint (*Pogogyne nudiuscula*) — an MSCP-covered species. This annual herb is federally endangered, state listed as endangered, has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California), and is covered under the MSCP. This species is not expected to occur in the Northern San Ysidro parcel. Preferred habitat is vernal pools, which do not occur in the Northern San Ysidro parcel.

San Diego button celery (*Eryngium aristulatum var parishii*) — an MSCP-covered species. This annual and perennial herb is federally endangered, state listed as endangered, has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California), and is covered under the MSCP. This species is not expected to occur in the Northern San Ysidro parcel. Preferred habitat is vernal pool and marshes on mesas, which are not present at the Northern San Ysidro parcel (JFP 2011).

Spreading navarretia (*Navarretia fossalis*) — an MSCP-covered species. This annual herb is federally threatened, is covered under the MSCP, and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a low potential for occurrence in the Northern San Ysidro parcel. Preferred habitat is chenopod scrub, vernal pools, swamps, marshes, and playas, which do not occur in the Northern San Ysidro parcel.

San Diego goldenstar (*Muilla clevelandii*) — an MSCP-covered species. This perennial herb is an MSCP-covered species and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a high potential for occurrence in the Northern San Ysidro parcel. Preferred habitat includes chaparral, coastal scrub, and grassland, all of which occur in the Northern San Ysidro parcel.

Orcutt's birdbeak (*Cordylanthus orcuttianus*) — an MSCP-covered species. This annual herb is an MSCP-covered species and has a CNPS ranking of 2.1 (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California). This species has a moderate potential for occurrence in the Northern San Ysidro parcel. Preferred habitat is coastal sage scrub, which occurs in the Northern San Ysidro parcel.

Mexican flannelbush (*Fremontodendron mexicanum*). This perennial shrub is federally endangered, state listed as rare, and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a moderate potential for occurrence in the Northern San

Ysidro parcel. Preferred habitat is closed-cone coniferous forest and chaparral, both of which occur in the Northern San Ysidro parcel.

Summer holly (*Comarostaphylis diversifolia*). This perennial shrub has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species has a moderate potential for occurrence in the Northern San Ysidro parcel. Preferred habitat is chaparral, which occurs in the Northern San Ysidro parcel.

Singlewhorl burrobrush (*Ambrosia monogyra*). This perennial shrub has a CNPS ranking of 2.2 (rare, threatened, or endangered in California, but more common elsewhere; fairly endangered in California). This species has a moderate potential for occurrence in the Northern San Ysidro parcel. Preferred habitat includes chaparral, which occurs in the Northern San Ysidro parcel.

Golden-spined cereus (*Bergerocactus emoryi*). This perennial succulent has a CNPS ranking of 2.2 (rare, threatened, or endangered in California, but more common elsewhere; fairly endangered in California). This species is not expected to occur in the Northern San Ysidro parcel. Preferred habitat is sandy open hills only along the coast and less than 350 feet in elevation (JFP 2011). These habitat characteristics are not present at the Northern San Ysidro parcel.

Little mousetail (*Myosurus minimus* ssp. *apus*). This annual herb has a CNPS ranking of 3.1 (needs review; seriously endangered in California). This species is not expected to occur in the Northern San Ysidro parcel. Preferred habitat is vernal pools, which are not present in the Northern San Ysidro parcel (Reiser 2001).

3.2.4.2 Sensitive Invertebrates

One sensitive invertebrate species was identified in the Northern San Ysidro parcel. Two other sensitive invertebrate species have the potential to occur. These species are discussed below.

a. Observed

Harbison's dun skipper (*Euphyes vestris harbisoni*). This species is on the CDFG Special Animals List.

b. Not Observed

Quino checkerspot butterfly (*Euphydryas editha quino*) — an MSCP-covered species. This species is federally listed as endangered and is an MSCP-covered species. This species has a high potential for occurrence in the Northern San Ysidro parcel. Preferred habitat includes chaparral and grassland (City of Chula Vista 2003), which occur in the Northern San Ysidro parcel within the Quino checkerspot butterfly's known range.

San Diego fairy shrimp (*Branchinecta sandiegonensis*) — an MSCP-covered species. This species is an MSCP-covered species and is federally endangered. This species is not expected to occur in the Northern San Ysidro parcel. Preferred habitat is vernal pools, which do not occur in the Northern San Ysidro parcel.

3.2.4.3 Sensitive Reptiles

Two sensitive reptile species were identified in the Northern San Ysidro parcel. These species are discussed below.

a. Observed

Coast horned lizard (*Phrynosoma blainvillii*) — an MSCP-covered species. This species is a CDFG species of special concern and is an MSCP-covered species. This species was observed in Diegan coastal sage scrub (Photograph 10).

Two-striped gartersnake (*Thamnophis hammondii*). This species is a CDFG species of special concern. This species was observed in southern riparian scrub.

Belding's orange-throated whiptail (*Aspidoscelis hyperthyra beldingi*) — an MSCP-covered species. This species is a CDFG species of special concern and is an MSCP-covered species. This species was observed within the Northern San Ysidro parcel.

3.2.4.4 Sensitive Birds

Seven sensitive bird species were identified in the Northern San Ysidro parcel. One other sensitive bird species has the potential to occur. These species are discussed below.

PHOTOGRAPH 10
Coast Horned Lizard (*Phrynosoma blainvilli*) Found in Coastal Sage Scrub

PHOTOGRAPH 11
Coastal California Gnatcatcher (*Polioptila californica californica*) Observed in Chamise Chaparral

a. Observed

Coastal California gnatcatcher (*Polioptila californica californica*) — an MSCP-covered species. The coastal California gnatcatcher is a federally listed threatened species, a CDFG species of special concern, and an MSCP-covered species. This species was observed in chamise chaparral (Photograph 11)

Cooper's hawk (*Accipiter cooperii*) — an MSCP-covered species. This species is a CDFG species of special concern and an MSCP-covered species. This species was observed in southern riparian scrub.

Northern harrier (*Circus cyaneus hudsonius*) — an MSCP-covered species. This species is a CDFG species of special concern and an MSCP-covered species. This species was observed in chamise chaparral.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) — an MSCP-covered species. This species is a CDFG species of special concern and is an MSCP-covered species. This species was observed in Diegan coastal sage scrub, chamise chaparral, and southern mixed chaparral.

California horned lark (*Eremophila alpestris*). This species is on the CDFG watch list. This species was observed in Diegan coastal sage scrub, southern mixed chaparral, and on roadbeds.

Bell's sage sparrow (*Amphispiza belli belli*). This species is a CDFG species of special concern. This species was observed in southern mixed chaparral, Diegan coastal sage scrub, chamise chaparral, and non-native grassland.

Yellow-breasted chat (*Icteria virens auricollis*). This species is a CDFG species of special concern. This species was observed in Diegan coastal sage scrub and southern riparian scrub.

b. Not Observed

Least bell's vireo (*Vireo bellii pusillus*) — an MSCP-covered species. This species is federally endangered, state listed as endangered, and is covered under the MSCP. Least bell's vireo has a low potential for occurrence in the Northern San Ysidro parcel. Preferred habitat is riparian woodland and adjacent upland scrub.

3.2.4.5 Sensitive Mammals

Two sensitive mammal species were identified in the Northern San Ysidro parcel. Five sensitive species have the potential to occur. These species are discussed below.

a. Observed

Southern mule deer (*Odocoileus hemionus*) — an MSCP-covered species. This species is an MSCP-covered species. Signs of this species were observed in chamise chaparral.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). This species is a CDFG species of special concern. This species was observed in Diegan coastal sage scrub, southern mixed chaparral, chamise chaparral, and coastal sage-chaparral transition.

b. Not Observed

Western mastiff bat (*Eumops perotis californicus*). This species is a CDFG species of special concern and is considered sensitive by the Bureau of Land Management (BLM). This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the Northern San Ysidro parcel. Preferred habitat includes chaparral and grassland for foraging (Navo 2005). These habitats are present in the Northern San Ysidro parcel within the western mastiff bat's known range.

Western red bat (*Lasiurus blossevillii*). This species is a CDFG species of special concern and is considered sensitive by the U.S. Forest Service. This species was not surveyed for during baseline surveys. This species has a high potential for occurrence in the Northern San Ysidro parcel. Preferred habitat includes riparian habitats (Navo 2005). This habitat is present in the Northern San Ysidro parcel within the western red bat's known range.

Western small-footed myotis (*Myotis ciliolabrum*). This species is considered sensitive by the BLM. This species has a high potential for occurrence in the Northern San Ysidro parcel. Preferred habitat includes rocky outcrops, chaparral, coniferous forest, and riparian habitats for foraging (Navo 2005). These habitats are present in the Northern San Ysidro parcel within the western small-footed myotis' known range.

Yuma myotis (*Myotis yumanensis*). This species is considered sensitive by the BLM. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the Northern San Ysidro parcel. Preferred habitat includes scrublands, forests, and riparian habitats (Navo 2005). These habitats are present in the Northern San Ysidro parcel within the yuma myotis' known range.

Pocketed free tail bat (*Nyctinomops femorosaccus*). This species is a CDFG species of special concern. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the Northern San Ysidro parcel. Preferred habitat includes rocky outcrops, slopes, and shrublands (Navo 2005). These habitats are present in the Northern San Ysidro parcel within the pocketed free tail bat's known range.

3.2.5 Invasive Exotic Plant Species

Thirty-six non-native plants were documented in the Northern San Ysidro parcel. Under the California Invasive Plant Inventory Database established by the California Invasive Plant Council (Cal-IPC), non-native weed species are ranked according to ecological impacts, invasive potential, and distribution (Cal-IPC 2006).

Non-native weed species ranked as 'high' have severe ecological impacts, moderate to high rates of dispersal and establishment, and are widely distributed. Four plant species documented in the Northern San Ysidro parcel are ranked as 'high' under the California Invasive Plant Inventory Database: red brome (*Bromus madritensis* ssp. *rubens*), fennel (*Foeniculum vulgare)*, pampas grass (*Cortaderia selloana*), and saltcedar.

- Red brome is an exotic annual grass that is spreading into coastal scrub, desert shrubland, three-needle pine woodlands, and pinyon pine-juniper communities. Increased fire frequency favors red brome establishment by reducing competition from native species and converting these communities to annual grasslands (DiTomaso, et al. 2007). Red brome was identified in chamise-chaparral and non-native grassland.

- Fennel is a perennial herb that forms dense stands in grasslands, wetlands, riparian, and coastal scrub communities that can exclude native vegetation (DiTomaso, et al, 2007). Fennel was identified in southern riparian scrub.

- Pampas grass is a perennial grass that is spreading into coastal scrub, riparian areas, and grasslands. Wind-dispersed seeds facilitate rapid expansion of this species. Large stands of pampas grass have been found to decrease foraging and nesting sites for native animals (DiTomaso, et al, 2007). Pampas grass was identified in the southern riparian scrub.

- Saltcedar is a small tree or shrub that can be found along streams, lake shores, and desert springs. Saltcedar reduces groundwater and surface water availability and increases salinity in soils, flooding, and fire frequency (DiTomaso, et al. 2007). Saltcedar was identified in southern riparian scrub.

Non-native weed species ranked as 'moderate' have substantial, but generally not severe, ecological impacts, moderate to high rates of dispersal and establishment, and limited to widespread distribution. In general, successful establishment of weed species ranked as 'moderate' is dependent upon ecological disturbance. Seven plant species documented in the Northern San Ysidro parcel are ranked as 'moderate' under the California Invasive Plant Inventory Database: slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), black mustard (*Brassica nigra*), ripgut grass (*Bromus diandrus*), short-pod mustard (*Hirschfeldia incana*), Italian ryegrass (*Lolium multiflorum*), and rattail fescue (*Vulpia myuros* var. *myuros*)

Non-native weed species ranked as 'limited' have minor ecological impacts, moderate to low rates of dispersal and establishment, and generally limited distribution. However, these species are still considered invasive and can be both persistent and problematic. Seven plant species documented in the Northern San Ysidro parcel are ranked as 'limited' under the California Invasive Plant Inventory Database: soft chess (*Bromus hordaceous*), Italian thistle (*Carduus pycnocephalus*), red-stemmed filaree (*Erodium cicutarium*), grass poly (*Lythrum hyssopifolia*), California bur clover (*Medicago polymorpha*), curly dock (*Rumex crispus*), and Russian thistle (*Salsola tragus*).

Non-native weed species categorized as 'evaluated but not listed' either do not presently have significant impacts or information is not sufficient enough to assign a rating. Three plant species documented in the Northern San Ysidro parcel were categorized as 'evaluated but not listed': bindweed (*Convolvulus arvensis*), longbeak filaree (*Erodium botrys*), and prickly sow thistle (*Sonchus asper*). One species was categorized as 'nominated but not reviewed': sour clover (*Melilotus indicus*). Ten species documented in the Northern San Ysidro parcel have not been evaluated or listed by Cal-IPC: poverty brome (*Bromus sterilis*), tocalote, nit grass (*Gastridium ventricosum*), crete weed (*Hedypnois cretica*), smooth cat's-ear (*Hypochaeris glabra*), goldentop (*Lamarckia aurea*), narrow-leaf herba impia (*Logfia gallica*), cheese weed (*Malva parviflora*), windmill pink (*Silene gallica*), and common chickweed (*Stellaria media*). Rocket (*Sisymbrium* sp.) was also identified in the Northern San Ysidro parcel. More information is needed to know the ranking of this species.

3.2.6 Other Survey Results

3.2.6.1 Drainages

The Northern San Ysidro parcel is located in the Otay River watershed and contains three drainages. The drainages travel northwest before merging and entering the Lower Otay reservoir. The Otay River flows from the Lower Otay reservoir and eventually discharges into the San Diego Bay (County of San Diego 2006).

3.2.6.2 Wildlife Movement

Barriers to wildlife movement surrounding the Northern San Ysidro parcels include Otay Lakes Road to the north, Highway 94 to the east, and the U.S.-Mexico Border Fence to the south. No barriers to wildlife movement occur within the Northern San Ysidro parcels, allowing wildlife to move freely throughout.

3.2.6.3 Dumping, Trespassing, and Vagrant Encampments

Small quantities of trash and debris were observed scattered within the Northern San Ysidro parcel. Trespassing from illegal off-road vehicles was observed through tread marks. No vagrant encampments were observed.

4.0 McMillin

4.1 Survey Methods

Survey methods at the McMillin parcels follow those described in Section 3.1 for the Northern San Ysidro parcel.

4.1.1 Literature and Database Review

A literature and database review was conducted prior to surveying. A list of reviewed sources is detailed in Section 3.1.1 of this report.

4.1.2 Botanical Resources

RECON personnel conducted baseline surveys for botanical resources by mapping vegetation communities and compiling an inventory of the flora within the McMillin parcels. Survey dates and personnel for the botanical resources baseline surveys are presented in Table 5. The results of these surveys are discussed separately in Section 4.2, Resources and Survey Results.

TABLE 5
DETAILS FOR MCMILLIN PARCELS OF BASELINE VEGETATION SURVEYS

Survey Date	Task	Personnel Present
03/11/2011	Pre-Baseline Survey (Checked access at multiple locations)	Anna Bennett, Mark Dodero
04/11/2011	Baseline Survey	Mark Dodero, Gerry Scheid
04/14/2011	Baseline Survey	Mark Dodero, Gerry Scheid
06/13/2011	Baseline Survey	Megan Lahti, JR Sundberg
06/17/2011	Baseline Survey	Megan Lahti, JR Sundberg

4.1.2.1 Vegetation Communities

Survey methods used for determining vegetation communities within the McMillin parcels follow the same methods used for the Northern San Ysidro parcel described in Section 3.1.2.1, Vegetation Communities.

4.1.2.2 General Plant Surveys

Survey methods used for identifying plant species within the McMillin parcels follow the same methods used for the Northern San Ysidro parcel described in Section 3.1.2.2, General Plant Surveys. Assessments for the potential occurrence of sensitive plant species are based upon species occurrence records from the CNDDB within a two-mile radius of the McMillin parcels (Figure 11).

4.1.3 Wildlife

RECON personnel conducted baseline wildlife surveys to (1) identify species assemblages associated with various post-burn vegetation communities, and (2) identify any indicator species that may correspond with particular floristic and/or structural habitat characteristics. Survey dates and personnel for the baseline surveys are presented in Table 6. The results of these surveys are discussed separately in Section 4.2, Resources and Survey Results.

4.1.3.1 General Wildlife Surveys

Survey methods used for identifying wildlife species within the McMillin parcels follow the same methods used for the Northern San Ysidro parcel described in Section 3.1.2.1, Vegetation Communities. Assessments for the potential occurrence of sensitive wildlife species are based upon species occurrence records from the CNDDB within a two-mile radius of the McMillin parcels (see Figure 11).

quino checkerspot butterfly
hoary bat
western small-footed myotis
OTAY LAKES RD
pocketed free-tailed bat
Townsend's big-eared bat
San Diego marsh-elder
western mastiff bat
Yuma myotis
quino checkerspot butterfly
San Diego barrel cactus
variegated dudleya
Munz's sage
San Diego Mesa Claypan Vernal Pool
variegated dudleya
little mousetail
San Diego goldenstar
San Diego marsh-elder
variegated dudleya
least Bell's vireo
San Diego fairy shrimp
summer holly
little mousetail
Munz's sage
San Diego ambrosia
San Diego goldenstar
quino checkerspot butterfly
San Diego goldenstar
least Bell's vireo
coastal California gnatcatcher
San Diego barrel cactus
San Diego marsh-elder
Mexican flannelbush
coastal California gnatcatcher
two-striped garter snake
San Diego thorn-mint
spreading navarretia
Orcutt's bird's-beak
coast horned lizard
San Diego thorn-mint
variegated dudleya
Munz's sage
San Diego button-celery
San Diego Mesa Claypan Vernal Pool
quino checkerspot butterfly
variegated dudleya
Dunn's mariposa-lily
Orcutt's brodiaea
San Diego barrel cactus
quino checkerspot butterfly
summer holly
Jennifer's monardella
Munz's sage
Gander's pitcher sage
two-striped garter snake
Otay manzanita
Orcutt's brodiaea
coast horned lizard
San Diego marsh-elder
Gander's pitcher sage
San Diego black-tailed jackrabbit
coast horned lizard
San Diego barrel cactus
purple stemodia
Jennifer's monardella
Munz's sage
coastal California gnatcatcher
Jennifer's monardella
Gander's pitcher sage
San Diego barrel cactus
Orcutt's brodiaea
Jennifer's monardella
San Diego barrel cactus
summer holly
San Diego marsh-elder
western mastiff bat
San Diego barrel cactus
Gander's pitcher sage
Mexican flannelbush
Robinson's pepper-grass
coastal California gnatcatcher
ACCESS RD
ALTA RD
OTAY MTN TT
OTAY MTN TT

0 Feet 2,500

McMillin
2 mile Buffer

CNDDB Observations

Species Previously Observed in Project Parcels
Species Previously Observed Within 2 Miles of Project Parcels

FIGURE 11

McMillin Survey Parcels California
National Diversity Database Species

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TABLE 6
DETAILS FOR MCMILLIN PARCELS BASELINE WILDLIFE SURVEYS

Date	Observers	Specific Areas	Field Hours	Total Hours	Weather
03/31/2011	John Lovio	NE SW, NW SE, & SE NW sec. 9, T18S, R1E	0830-1330	9.00	62 to 89ºF Wind 0 to 3 mph Clear
04/04/2011	John Lovio	SE SW & SW SE sec. 9, T18S, R1E	0815-1400	8.5	52 to 76ºF Wind 0 to 5 mph Clear
04/26/2011	John Lovio	SE SW NW, SE NW, SW NE, NW SE, and N ½ NE SW sec. 9, T 18S, R1E	0745-1245	8.75	61 to 70ºF Winds 0 to 5-10 mph Variable, heavy overcast to 20 to 50% cloud cover
06/20/2011	John Lovio	E ½ of SW & W ½ of SE sec. 9, T18S, R1E	1015-1530	8.5	73 to 78ºF Winds 3 to 5 mph Clear
07/20/2011	Anna Bennett, Mark Dodero	Quino checkerspot butterfly (*Euphydryas editha quino*) & California gnatcatcher (*Polioptila californica californica*) habitat assessment	-	-	-
07/25/2011	Anna Bennett, Mark Dodero	Quino checkerspot butterfly (*Euphydryas editha quino*) & California gnatcatcher (*Polioptila californica californica*) habitat assessment	-	-	-

4.1.4 Wildlife Movement

Survey methods used for identifying wildlife movement within the McMillin parcels follow the same methods used for the Northern San Ysidro parcel described in Section 3.1.4, Wildlife Movement.

4.1.5 Drainages

Survey methods used for identifying drainages within the McMillin parcels follow the same methods used for the Northern San Ysidro parcel described in Section 3.1.5, Drainages.

4.1.6 Dumping, Trespassing, and Vagrant Encampments

Survey methods used for identifying illegal dumping, trespassing, and vagrant encampments within the McMillin parcels follow the same methods used for the Northern San Ysidro parcel described in Section 3.1.6, Dumping, Trespassing, and Vagrant Encampments.

4.2 Resources and Survey Results

4.2.1 Site Description

The following sections describe the topography and soils within the McMillin parcels.

4.2.1.1 Topography

The McMillin parcels are located in the San Ysidro Mountains south of Jamul Valley. The McMillin parcels consist of gently sloping to steep slopes, ranging between 0 and 45 degrees. Elevations range from 680 and 1,260 feet (see Figures 2 and 3). The topography of the McMillin parcels is shown in Figure 12.

4.2.1.2 Soils

One soil series occurs in the McMillin parcels: San Miguel-Exchequer rocky silt loam (Figure 13). The San Miguel-Exchequer series consists of shallow to moderately deep silt loams with clay subsoil derived from metavolcanic rock. This soil occurs on mountainous uplands at elevations between 680 to 1,260 feet. Rock outcrop covers 10 percent of the surface (USDA, et al. 1973).

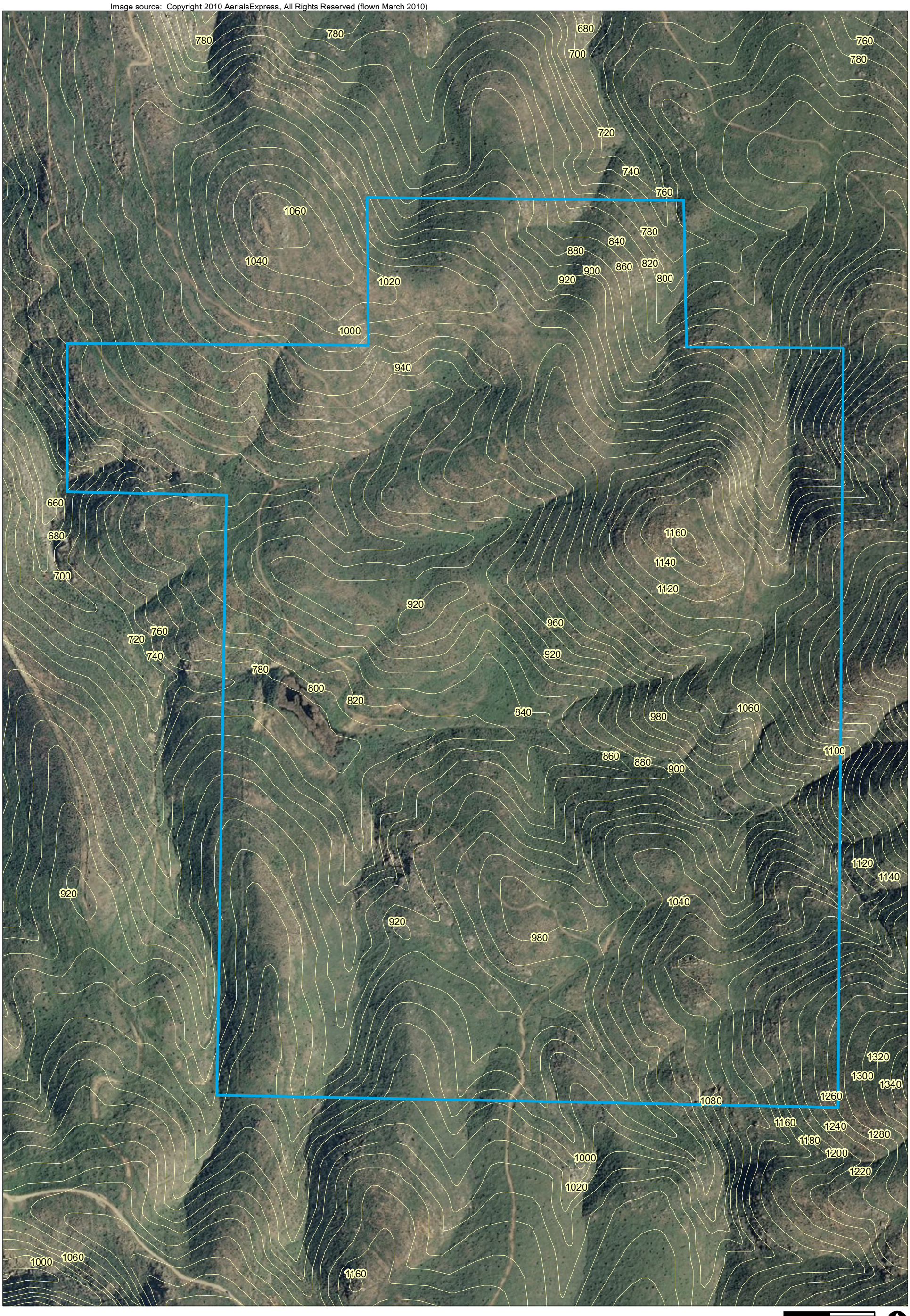

FIGURE 12

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McMillin Survey Parcels Topography

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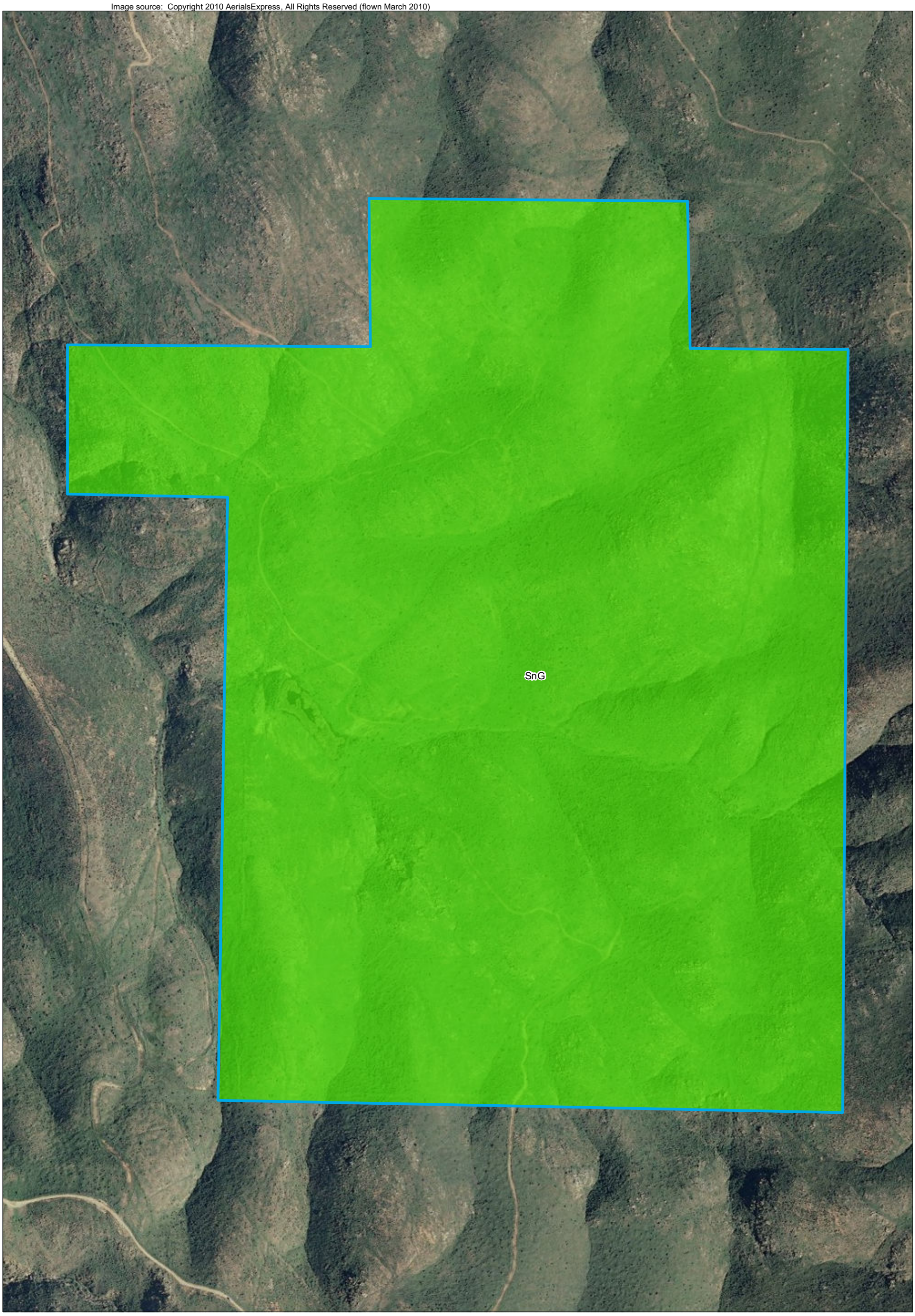
Image source: Copyright 2010 AerialsExpress, All Rights Reserved (flown March 2010)



0 Feet 400

McMillin

Soil Classification

SnG - San Miguel-Exchequer rocky silt loams, 9 to 70 percent slopes

FIGURE 13

McMillin Survey Parcels Soils

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4.2.2 Botanical Resources

4.2.2.1 Common Plant Species

Attachment 6 provides a complete list of all plant species observed in the McMillin parcels. 160 plant species were observed in the McMillin parcels. Of these species, 129 are native and 31 are non-native. The vegetation communities these plant species occur in are discussed below.

4.2.2.2 Vegetation Communities

There were five vegetation communities and land cover types present in the McMillin parcels: Diegan coastal sage scrub, southern mixed chaparral, chamise chaparral, coastal and valley freshwater marsh, and southern riparian scrub. The acreages of these vegetation communities within the McMillin parcels are shown in Table 7. Vegetation communities mapped on-site are shown on Figure 14. The following text provides general descriptions of the vegetation communities based on the Vegetation Communities of San Diego County (Oberbauer, et al. 2008). More detailed description specific to the McMillin parcels follow the general descriptions.

TABLE 7
MCMILLIN PARCELS:
VEGETATION TYPES WITH ACREAGES

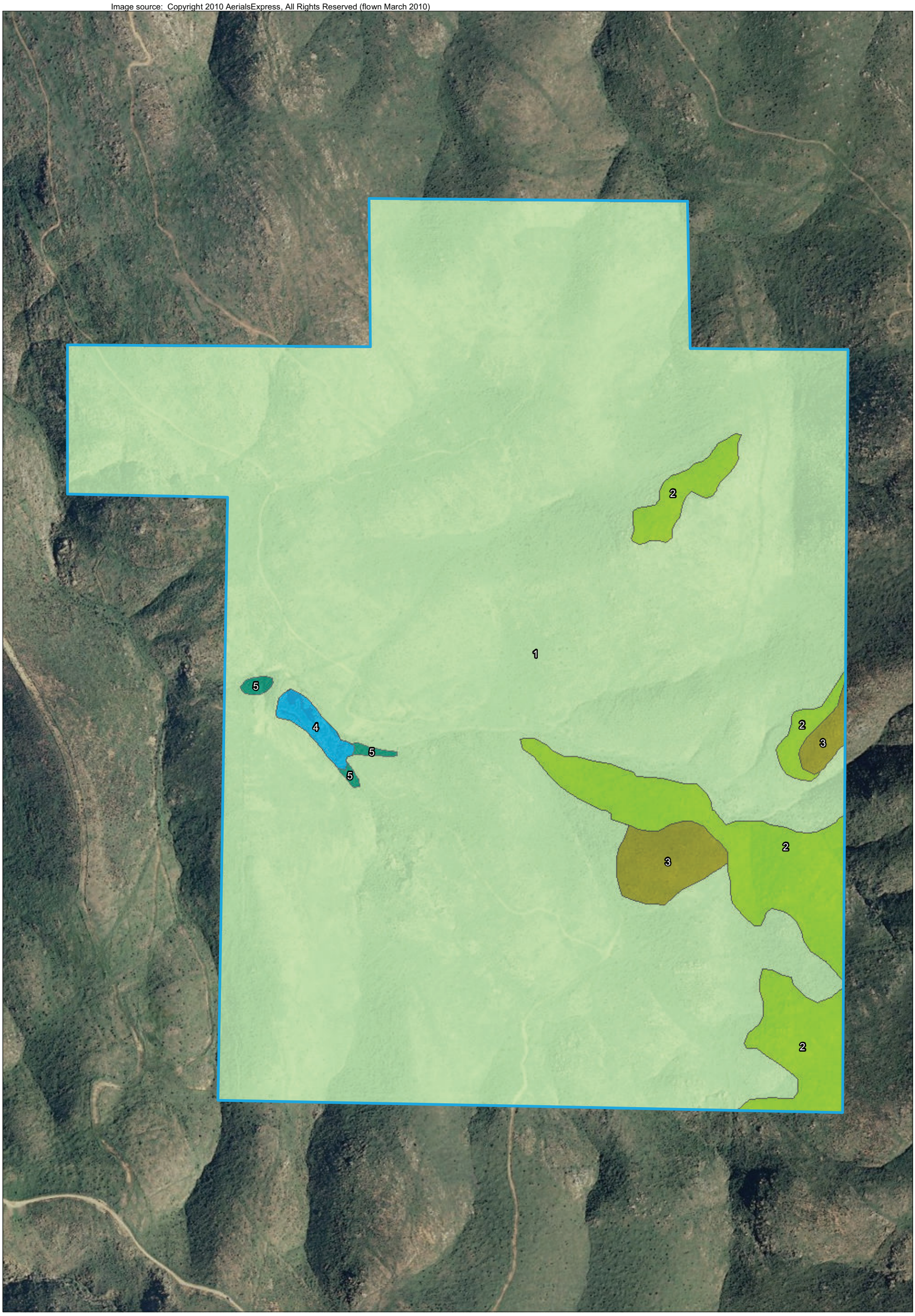
Vegetation Types	Acres	Percent	Tier
Diegan Coastal Sage Scrub	209	91%	II
Southern Mixed Chaparral	16	7%	III
Chamise Chaparral	4	2%	III
Coastal and Valley Freshwater Marsh	1	<1%	N/A
Southern Riparian Scrub	<1	<1%	N/A

a. Diegan Coastal Sage Scrub (Holland 32500)

Diegan coastal sage scrub is a vegetation community considered sensitive by federal and state resource agencies, and Tier II (uncommon upland) by the MSCP (City of Chula Vista 2003). The general characteristics of Diegan coastal sage scrub are described in detail in Section 3.2.2.2.a, Diegan Coastal Sage Scrub.

This association was mapped in the McMillin parcels when shrub cover was greater than 5 percent and any of the following species were dominant: California sagebrush, California buckwheat, white sage, and black sage (Photograph 12). Vegetation communities were also mapped as this association if shrub cover was greater than 5 percent, the species present were not clearly another vegetation community, and the following species were lacking for the site: chamise, California-lilac, manzanita, mission

Image source: Copyright 2010 AerialsExpress, All Rights Reserved (flown March 2010)



McMillin

Vegetation Classification

1 - Diegan Coastal Sage Scrub
2 - Southern Mixed Chaparral
3 - Chamise Chaparral
4 - Coastal and Valley Freshwater Marsh
5 - Southern Riparian Scrub

FIGURE 14

McMillin Survey Parcels Vegetation Communities and Land Cover

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PHOTOGRAPH 12
Coastal Sage Scrub at the McMillin Parcels

PHOTOGRAPH 13
Southern Mixed Chaparral at the McMillin Parcels

manzanita, and scrub oak. Therefore, some Diegan coastal sage scrub areas were dominated by deerweed, golden-yarrow, and chaparral bush-mallow.

Diegan coastal sage scrub occurred on 209 acres, representing 91 percent of the McMillin parcels.

b. Southern Mixed Chaparral (Holland 37120)

Southern mixed chaparral is considered Tier III (common upland) by the MSCP (City of Chula Vista 2003). The general characteristics of southern mixed chaparral are described in detail in Section 3.2.2.2.d, Southern Mixed Chaparral (Photograph 13).

Southern mixed chaparral occurred on 16 acres, representing 7 percent of the McMillin parcels.

c. Chamise Chaparral (Holland 37200)

Chamise chaparral is considered a Tier III (common upland) by the MSCP (City of Chula Vista 2003). The general characteristics of chamise chaparral are described in detail in Section 3.2.2.2.b, Chamise Chaparral.

Chamise chaparral occurred on four acres, representing 2 percent of the McMillin parcels (Photograph 14).

d. Coastal and Valley Freshwater Marsh (Holland 52410)

Freshwater marsh communities are composed of perennial emergent monocots typically forming a closed canopy. This habitat occurs in open bodies of fresh water with little current flow, such as ponds, and to a lesser extent around seeps and springs. Freshwater marshes occur in areas of permanent inundation by freshwater without active stream flow. Freshwater marsh communities, as with all wetland habitats, have been greatly reduced throughout their entire range and continue to decline as a result of urbanization. They are considered sensitive by state and federal resource agencies.

Freshwater marsh at the McMillin parcels were dominated by emergent California bulrush (*Schoenoplectus californicus*) and Pacific mosquito fern (*Azolla filiculoides*) floating on the water's surface with longstem spike-rush (*Eleocharis macrostachya*) around the edges (Photograph 15). Upstream and downstream the freshwater marsh transitioned into southern riparian scrub.

Coastal and valley freshwater marsh occurred on one acre, representing less than 1 percent of the McMillin parcels.

PHOTOGRAPH 14
Chamise Chaparral at the McMillin Parcels

PHOTOGRAPH 15
Valley Fresh Water Marsh Found in an Old Farm Pond

e. Southern Riparian Scrub (Holland 63300)

The general characteristics of southern riparian scrub are described in detail in Section 5.2.2.2.e. This association was mapped in the McMillin parcels when shrubby patches in canyon bottoms were not dominated by willows or mule fat, did not clearly fit other riparian vegetation communities, and when shrub cover was sparse. If very few common southern riparian scrub associates were present, the canyon bottom was incorporated into the adjacent communities.

Southern riparian scrub was often represented in the McMillin parcels by a narrow strip of shrubby vegetation in canyon bottoms. Frequent southern riparian scrub species in the McMillin parcels included mule fat, willows, San Diego sedge, California fuschia, cattail, spike-rush, and coyote brush (*Baccharis pilularis*).

Southern riparian scrub occurred on less than one acre, representing less than 1 percent of the McMillin parcels.

4.2.3 Zoological Resources

Attachment 7 provides a complete list of all wildlife species observed in the McMillin parcels. Wildlife observed includes 18 species of invertebrates, 3 species of amphibians, 7 species of reptiles, 45 species of birds, and 5 species of mammals.

4.2.3.1 Invertebrates

A total of 19 butterfly species were observed. Eighteen species are not considered sensitive and one species is considered sensitive (see Section 4.2.4.2, Sensitive Invertebrates). Some of the common butterfly species observed include: including coastal green hairstreak (*Callophrys dumetorum*), common buckeye (*Junonia coenia*), western tiger swallowtail, and painted lady (*Vanessa cardui*).

4.2.3.2 Amphibians

A total of three amphibian species were observed. Two species are not considered sensitive and one species is considered sensitive (see Section 4.2.4.3, Sensitive Amphibians). The two common amphibian species observed were: Pacific treefrog and American bullfrog (*Rana catesbeiana*).

4.2.3.3 Reptiles

A total of seven common amphibian species were observed. Six species are not considered sensitive and one species is considered sensitive (see Section 4.2.4.4, Sensitive Reptiles). The six common amphibian species observed were: western fence lizard, granite spiny lizard (*Sceloporus orcutti*), common side-blotched lizard (*Uta stansburiana*), California striped racer coastal whiptail, and southern Pacific rattlesnake (*Crotalus viridis helleri*).

4.2.3.4 Birds

A total of 45 common bird species were observed. Forty species are not considered sensitive and five species are considered sensitive (see Section 4.2.4.5, Sensitive Birds). Some common bird species observed were: California quail (*Callipepia californica californica*), red-tailed hawk (*Buteo jamaicensis*), American coot (*FUllica americana americana*), wrentit (*Chamaea fasciata henshawi*), and red-winged blackbird (*Agelaius phoeniceus*).

4.2.3.5 Mammals

A total of five mammal species were observed. Three species are not considered sensitive and two species are considered sensitive (see Section 4.2.4.6, Sensitive Mammals). The three common mammal species observed were: coyote (*Canis latrans*), California ground squirrel, and desert cottontail.

4.2.4 Sensitive Species

The criteria for determination of species as sensitive are described in Section 3.2.4, Sensitive Species. Attachment 8 provides a complete list of all sensitive plant species observed in the McMillin parcels. Sensitive plant species in the McMillin parcels are shown on Figure 15. Attachment 8 provides a complete list of all sensitive wildlife species observed in the McMillin parcels. Sensitive wildlife species in the McMillin parcels are shown on Figure 16.

4.2.4.1 Sensitive Plant Species

Twelve sensitive plant species were identified in the McMillin parcels. Fifteen other sensitive plant species have the potential to occur. These species are discussed below.

Image Source: Copyright 2010 AerialsExpress (flown Feb 2010)

McMillin

Sensitive Plant Observations

- Menzies' Goldenbush
- San Diego Barrel Cactus
- Variegated Dudleya
- Western Dichondra
- Golden-rayed Pentachaeta
- Otay Mountain Lotus
- San Diego County Needle Grass
- Ashy Spike Moss
- San Diego Marsh-elder

0 Feet 550

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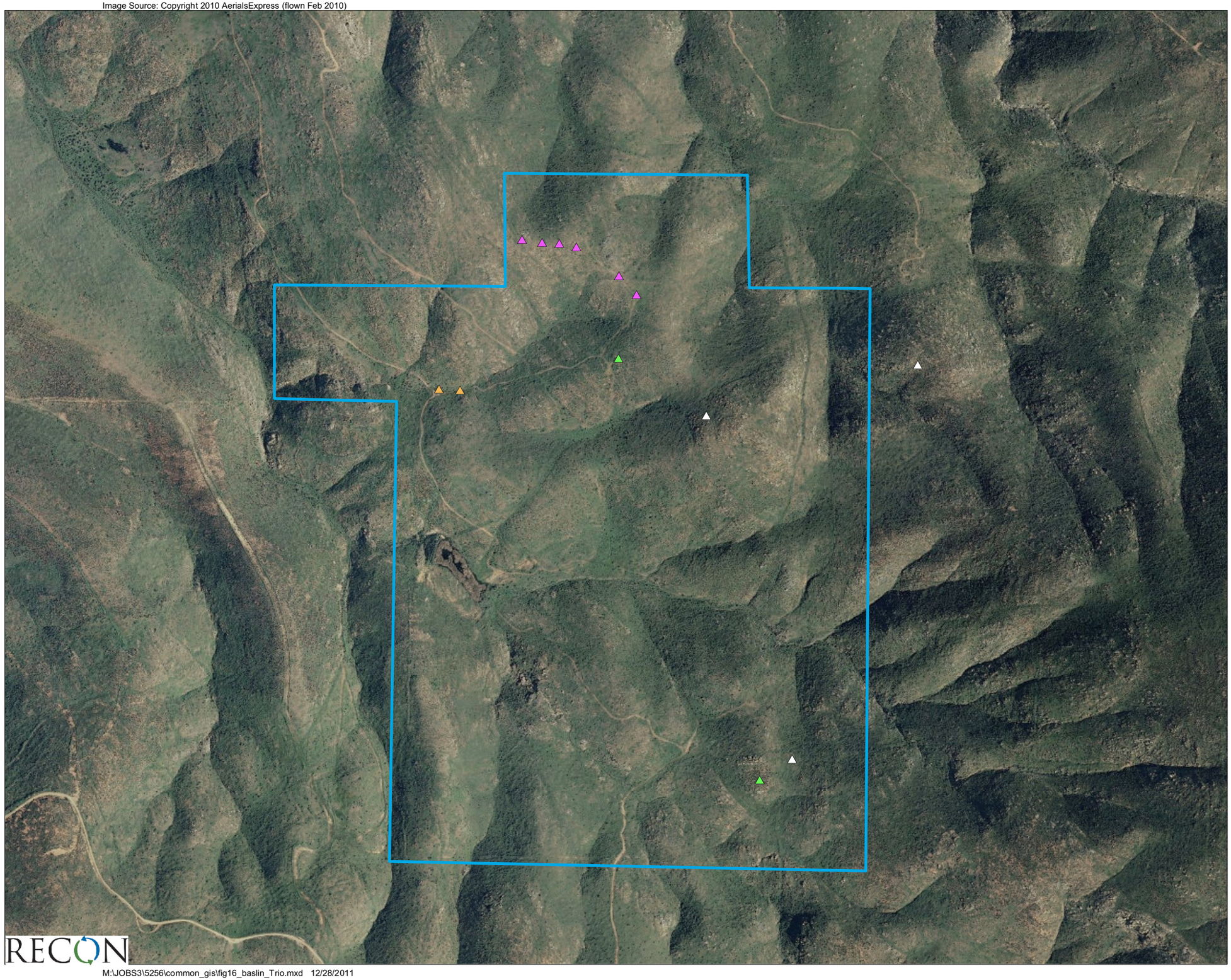
FIGURE 15
McMillin Survey Parcels
Sensitive Plant Species

Image Source: Copyright 2010 AerialsExpress (flown Feb 2010)



McMillin

Sensitive Plant Observations

- Golden Eagle
- Quino Checkerspot Butterfly
- San Diego Black-tailed Jackrabbit
- Two-striped Gartersnake

0 Feet 550

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FIGURE 16
McMillin Survey Parcels
Sensitive Wildlife Species

a. Observed

Tecate cypress (*Hesperocyparis forbesii*) — an MSCP-covered species. This perennial shrub is an MSCP-covered species and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species was observed in the eastern most edge of the parcel.

San Diego barrel cactus — an MSCP-covered species. This perennial cactus is an MSCP-covered species and has a CNPS ranking of 2.1 (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California). This species was observed in Diegan coastal sage scrub and southern mixed chaparral (Photograph 16).

Otay Mountain lotus. This perennial herb has a CNPS rating of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species was observed in Diegan coastal sage scrub

Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*). This perennial shrub has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species was observed in Diegan coastal sage scrub and bordering the pond.

San Diego marsh-elder. This perennial herb has a CNPS ranking of 2.2 (rare, threatened, or endangered in California, but more common elsewhere; fairly endangered in California). This species was observed bordering the pond and within drainages in Diegan coastal sage scrub (Photograph 17).

Ashy spike moss. This perennial herb has a CNPS ranking of 4.1 (uncommon in California; seriously endangered in California). This species was observed in Diegan coastal sage scrub.

San Diego County needlegrass. This perennial grass has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in Diegan coastal sage scrub and chamise chaparral.

Western dichondra. This perennial herb has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in Diegan coastal sage scrub.

Spiny rush. This perennial herb has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed bordering the pond (Photograph 18).

PHOTOGRAPH 16
Coast Barrel Cactus (*Ferocactus viridscens*) Growing at the McMillin Parcels

PHOTOGRAPH 17
San Diego Marsh-Elder (*Iva hayesiana*) Grows
in Seasonal Drainages at the McMillin Parcels

PHOTOGRAPH 18
Spiny Rush (*Juncus acutus* var. *leopoldii*)
Grows in Seasonal Drainages and Riparian Scrub

Small-flowered microseris (*Microseris douglasii* var. *platycarpha*). This annual herb has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in Diegan coastal sage scrub.

Golden-rayed pentachaeta (*Pentachaeta aurea*). This annual herb has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in Diegan coastal sage scrub (Photograph 19).

San Diego County viguiera (*Viguiera lacinata*). This perennial shrub has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in the Diegan coastal sage scrub.

b. Not Observed

San Diego ambrosia — a narrow endemic species covered under the MSCP. This perennial herb is federally endangered, is considered to be a narrow endemic under the MSCP, and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a moderate potential for occurrence in the McMillin parcels. Preferred habitat includes chaparral, which occurs in the McMillin parcels.

Dunn's mariposa lily (*Calochortus dunnii*) — a narrow endemic species covered under the MSCP. This perennial herb is state listed as rare, is considered to be a narrow endemic under the MSCP, and has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species has a high potential for occurrence within the McMillin parcels. Preferred habitat is chaparral and closed-cone coniferous forests with rocky, metavolcanic soils. In the McMillin parcels, these habitats occur on the San Miguel-Exchequer soil series, which is a rocky soil with metavolcanic subsoil.

Orcutt's brodiaea — a narrow endemic species covered under the MSCP. This perennial herb has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California) and is considered to be a narrow endemic under the MSCP. This species has a moderate potential for occurrence within the McMillin parcels. Preferred habitat includes chaparral and closed cone coniferous forests at elevations between 100 and 5,550 feet. In the McMillin parcels, these habitats occur between 660 and 1,500 feet.

PHOTOGRAPH 19
Golden-rayed pentachaeta (*Pentachaeta aurea*) Grows in Openings of CSS

Variegated dudleya — a narrow endemic species covered under the MSCP. This succulent perennial is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species has a high potential for occurrence in the McMillin parcels. Preferred habitat is chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools on clay soils. Coastal sage scrub, cismontane woodland, and chaparral occur on-site.

Gander's pitcher sage — a narrow endemic species covered under the MSCP. This perennial shrub is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.3 (rare, threatened, or endangered in California and elsewhere, not very endangered in California). This species has a high potential for occurrence within the McMillin parcels. Preferred habitat is chaparral, coastal scrub, and closed-cone coniferous forests with metavolcanic soils. In the McMillin parcels, these habitats occur on the San Miguel-Exchequer soil series, which has metavolcanic subsoil.

San Diego button celery — an MSCP-covered species. This annual and perennial herb is federally endangered, state listed as endangered, has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California), and is covered under the MSCP. This species is not expected to occur in the McMillin parcels. Preferred habitat is vernal pool and marshes on mesas, which are not present at the McMillin parcels (JFP 2011).

San Diego goldenstar — an MSCP-covered species. This perennial herb is an MSCP-covered species and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a high potential for occurrence within the McMillin parcels. Preferred habitat includes chaparral and coastal scrub, both of which occur in the McMillin parcels.

Otay manzanita — an MSCP-covered species. This perennial shrub is an MSCP-covered species and has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species has a high potential for occurrence within the McMillin parcels. Preferred habitat is chaparral with metavolcanic soils. In the McMillin parcels, this habitat occurs on the San Miguel-Exchequer soil series, which has metavolcanic subsoil.

Orcutt's birdbeak — an MSCP-covered species. This annual herb is an MSCP-covered species and has a CNPS ranking of 2.1 (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California). This species has a moderate potential for occurrence in the McMillin parcels. Preferred habitat is coastal sage scrub which occurs in the McMillin parcels.

Mexican flannelbush. This perennial shrub is federally endangered, state listed as rare, and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a moderate potential for occurrence within the McMillin parcels. Preferred habitat is chaparral and closed-cone coniferous forests with metavolcanic soils. In the McMillin parcels, these habitats occur on the San Miguel-Exchequer soil series, which has metavolcanic subsoil.

Jennifer's monardella. This perennial herb has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species is not expected to occur in the McMillin parcels. Preferred habitat is rocky streambeds and banks of intermittent streams which do not occur in the McMillin parcels (JFP 2011).

Summer holly. This perennial shrub has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species has a high potential for occurrence in the McMillin parcels. Preferred habitat is chaparral which occurs in the McMillin parcels.

Robinson's peppergrass (*Lepidium virginicum* L. var. *robinsonii*). This perennial herb has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species has a high potential for occurrence in the McMillin parcels. Preferred habitat is chaparral and coastal scrub, both of which occur in the McMillin parcels.

Munz's sage. This perennial shrub has a CNPS ranking of 2.2 (rare, threatened, or endangered in California, but more common elsewhere; fairly endangered in California). This species has a high potential for occurrence in the McMillin parcels. Preferred habitat is chaparral and coastal scrub, both of which occur in the McMillin parcels.

Little mousetail. This annual herb has a CNPS ranking of 3.1 (needs review; seriously endangered in California). This species is not expected to occur in the McMillin parcels. Preferred habitat is vernal pools, which are not present in the McMillin parcels (Reiser 2001).

4.2.4.2 Sensitive Invertebrates

One sensitive invertebrate species was identified in the McMillin parcels. Two other sensitive invertebrate species have the potential to occur. These species are discussed below.

a. Observed

Quino checkerspot butterfly — an MSCP-covered species. This species is federally listed as endangered and is an MSCP-covered species. This species was observed in Diegan coastal sage scrub (Photograph 20).

b. Not Observed

San Diego fairy shrimp — an MSCP-covered species. This species is an MSCP-covered species and is federally endangered. This species has a low potential for occurrence in the McMillin parcels. Preferred habitat is vernal pools which do not occur in the McMillin parcels.

Thorne's hairstreak butterfly (*Mitoura thornei*) — an MSCP-covered species. This species is an MSCP-covered species. This species was not surveyed for during the baseline surveys. This species has a moderate potential to occur in the McMillin parcels due to the presence of Tecate cypress, its host plant.

4.4.4.3 Sensitive Amphibians

One sensitive amphibian species was identified in the McMillin parcels. This species is discussed below.

a. Observed

Western spadefoot (*Spea hammondii*). This species is a CDFG species of special concern. This species was not visually observed but was heard calling at the McMillin parcels.

4.2.4.4 Sensitive Reptiles

One sensitive reptile species was identified in the McMillin parcels. These species are discussed below.

a. Observed

Two-striped gartersnake. This species is a CDFG species of special concern. This species was observed in Diegan coastal sage scrub (Photograph 21).

4.2.4.5 Sensitive Birds

Five sensitive bird species were identified in the McMillin parcels. Two other sensitive bird species have the potential to occur. These species are discussed below.

PHOTOGRAPH 20
Quino Checkerspot (*Euphydryas editha quino*) Incidentally
Observed in the Northern Portion of the McMillin Parcels

PHOTOGRAPH 21
Two-striped Gartersnake (*Thamnophis hammondii*)
Found in Seasonal Drainages at the McMillin Parcels

a. Observed

Golden eagle (*Aquila chrysaetos canadensi*) — an MSCP-covered species. This species is an MSCP-covered species, CDFG fully protected species, and protected under the Bald Eagle Protection Act. This species was observed in chaparral and Diegan coastal sage scrub.

Cooper's hawk — an MSCP-covered species. This species is a CDFG species of special concern and an MSCP-covered species. This species was observed flying overhead of the McMillin parcels.

Southern California rufous-crowned sparrow — an MSCP-covered species. This species is a CDFG species of special concern and an MSCP-covered species. This species was observed in Diegan coastal sage scrub and rock outcrops.

Northern harrier — an MSCP-covered species. This species is a CDFG species of special concern and an MSCP-covered species. This species was observed in Diegan coastal sage scrub.

California horned lark. This species is on the CDFG watch list. This species was observed in rock outcrops, roadbeds, and Diegan coastal sage scrub.

b. Not Observed

Least bell's vireo — an MSCP-covered species. This species is federally endangered, state listed as endangered, and is covered under the MSCP. Least bell's vireo has a low potential for occurrence in the McMillin parcels. Preferred habitat is riparian woodland and adjacent upland scrub, which are present at the McMillin parcels, but recovering from the 2003 and 2007 fires.

Coastal California gnatcatcher — an MSCP-covered species. The coastal California gnatcatcher is a federally listed threatened species, a CDFG species of special concern, and an MSCP-covered species. Coastal California gnatcatcher has a high potential for occurrence in the McMillin parcels. Preferred habitat is coastal sage scrub communities dominated by California sagebrush. This habitat occurs in the McMillin parcels within the coastal California gnatcatcher's known range.

4.2.4.6 Sensitive Mammals

Two sensitive mammal species were identified in the McMillin parcels. Six other sensitive mammal species have the potential to occur. These species are discussed below.

a. Observed

Southern mule deer — an MSCP-covered species. This species is an MSCP-covered species. This species was observed in Diegan coastal sage scrub.

San Diego black-tailed jackrabbit. This species is a CDFG species of special concern. This species was observed in Diegan coastal sage scrub.

b. Not Observed

Townsend's big-eared bat (*Corynorhinus townsendii*). This species is a CDFG species of special concern and considered sensitive by the BLM and the U.S. Forest Service. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the McMillin parcels. Preferred habitat includes coniferous forests, riparian communities, and coastal habitats (Navo 2005). These habitats are present in the McMillin parcels within Townsend's big-eared bat's known range.

Western mastiff bat. This species is a CDFG species of special concern and is considered sensitive by the BLM. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the McMillin parcels. Preferred habitat includes chaparral for foraging (Navo 2005). This habitat is present in the McMillin parcels within the western mastiff bat's known range.

Pocketed free tail bat. This species is a CDFG species of special concern. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the McMillin parcels. Preferred habitat includes rocky outcrops, slopes, and shrublands (Navo 2005). These habitats are present in the McMillin parcels within the pocketed free tail bat's known range.

Western small-footed myotis. This species is considered sensitive by the BLM. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the McMillin parcels. Preferred habitat includes rocky outcrops, chaparral, coniferous forest, and riparian habitats for foraging (Navo 2005). These habitats are present in the McMillin parcels within the western small-footed myotis' known range.

Yuma myotis. This species is considered sensitive by the BLM. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the McMillin parcels. Preferred habitat includes scrublands, forests, and riparian habitats (Navo 2005). These habitats are present in the McMillin parcels within the yuma myotis' known range.

Hoary bat (*Lasiurus cinereus*). This species is considered to have a medium priority by the Western Bat Working Group. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the McMillin parcels. Preferred habitat includes coniferous forests (Navo 2005). Southern interior cypress forest is a coniferous forest that is present in the McMillin parcels within the hoary bat's known range.

4.2.5 Invasive Exotic Plant Species

Thirty-five non-native plants were documented in the McMillin parcels. For more details regarding (1) the criteria for California Invasive Plant Inventory Database ranking or (2) general characteristics of red brome and saltcedar, refer to Section 3.2.5, Invasive Exotic Plant Species.

Two plant species documented in the McMillin parcels are ranked as 'high' under the California Invasive Plant Inventory Database: red brome and saltcedar.

- Red brome was identified in Diegan coastal sage scrub.
- Saltcedar was identified bordering the pond.

Thirteen plant species documented in the McMillin parcels are ranked as 'moderate' under the California Invasive Plant Inventory Database: bull thistle (*Cirsium vulgare*), artichoke thistle (*Cynara cardunculus*), Bermuda grass (*Cynodon dactylon*), fountain grass (*Pennisetum setaceum*), slender wild oat, wild oat, purple falsebrome (*Brachypodium distachyon*), black mustard, ripgut grass, stinkwort (*Dittrichia graveolens*), short-pod mustard, Italian ryegrass, and rattail fescue. Stinkwort has a red alert designation, indicating high potential for invasion into wildlands.

- Washington fan palm (*Washingtonia robusta*) is a common ornamental palm that is invading riparian and wetland areas throughout California. This species is often densest downstream from the source of invasion, usually landscaped areas, because the seeds are easily transported by rain down storm drains into nearby creeks and rivers (DiTomaso et al. 2007). Washington fan palm was identified in Diegan coastal sage scrub.

Seven plant species documented in the McMillin parcels are ranked as 'limited' under the California Invasive Plant Inventory Database: brass buttons (*Cotula coronopifolia*), annual beard grass (*Polypogon monspeliensis*), soft chess, Italian thistle, grass poly (*Lythrum hyssopifolia*), curly dock, and Russian thistle.

One species documented in the McMillin parcels was 'evaluated but not listed' by the Cal-IPC: prickly lettuce (*Lactuca serriola*). Eight species documented in the McMillin parcels have not been evaluated or listed by the Cal-IPC: scarlet pimpernel (*Anagallis*

arvensis), poverty brome, tocalote, nit grass, smooth cat's-ear, goldentop, narrow-leaf herba impia, and windmill pink. Wild oats, Oxalis (*Oxalis* sp.), plantain (*Plantago* sp.), and clover (*Trifolium* sp.) were also identified in the McMillin parcels. More information is needed to know the ranking of these four plants.

4.2.6 Other Survey Results

4.2.6.1 Drainages

The McMillin parcels are located in the Otay River watershed and contain three drainages. The two southernmost drainages travel northwest and merge before directly entering Lower Otay reservoir. The northernmost drainage travels northwest before draining into Jamul Creek which drains into the Lower Otay reservoir. The Otay River flows from the Lower Otay reservoir and eventually discharges into the San Diego Bay (Google 2011).

4.2.6.2 Wildlife Movement

Barriers to wildlife movement surrounding the McMillin parcels include Otay Lakes Road to the north, Highway 94 to the east, and the U.S.-Mexico Border Fence to the south. No barriers to wildlife movement occur within the McMillin parcels, allowing wildlife to move freely throughout.

4.2.6.3 Dumping, Trespassing, and Vagrant Encampments

Trash and debris from the U.S. Border Patrol was observed within the McMillin parcels. Trespassing from illegal off-roading vehicles was observed through tread marks. No vagrant encampments were observed.

5.0 Little Cedar Canyon

5.1 Survey Methods

Survey methods at the Little Cedar Canyon parcels follow those described in Section 3.1 for the Northern San Ysidro parcel.

5.1.1 Literature and Database Review

A literature and database review was conducted prior to surveying. A list of reviewed sources is detailed in Section 3.1.1 of this report.

5.1.2 Botanical Resources

RECON personnel conducted baseline surveys for botanical resources by mapping vegetation communities and compiling an inventory of the flora within the Little Cedar Canyon parcels. Survey dates and personnel for the botanical resources baseline surveys are presented in Table 8. The results of these surveys are discussed separately in Section 5.2, Resources and Survey Results.

TABLE 8
DETAILS FOR LITTLE CEDAR CANYON PARCELS OF BASELINE VEGETATION SURVEYS

Survey Date	Task	Personnel Present
03/11/2011	Pre-Baseline Survey (Checked access at multiple locations)	Anna Bennett, Mark Dodero
04/24/2011	Baseline Survey	Anna Bennett, Mark Dodero, JR Sundberg
04/29/2011	Baseline Survey	Anna Bennett, JR Sundberg

5.1.2.1 Vegetation Communities

Survey methods used for identifying vegetation communities within the Little Cedar Canyon parcels follow the same methods used for the Northern San Ysidro parcel described in Section 4.1.2.1, Vegetation Communities.

5.1.2.2 General Plant Surveys

Survey methods used for identifying plant species within the Little Cedar Canyon parcels follow the same methods used for the Northern San Ysidro parcel described in Section 3.1.2.2, General Plant Surveys. Assessments for the potential occurrence of sensitive plant species are based upon species occurrence records from the CNDDB within a two-mile radius of the Little Cedar Canyon parcels (Figure 17).

5.1.3 Wildlife

RECON personnel conducted baseline wildlife surveys to (1) identify species assemblages associated with various post-burn vegetation communities and (2) identify any indicator species that may correspond with particular floristic and/or structural habitat characteristics. Survey dates and personnel for the baseline surveys are presented in Table 9. The results of these surveys are discussed separately in Section 5.2, Resources and Survey Results.

Image source: Copyright 2010 AerialsExpress, All Rights Reserved (flown March 2010)

San Diego marsh-elder
Yuma myotis
western small-footed myotis
pocketed free-tailed bat
hoary bat
western mastiff bat
Munz's sage
Townsend's big-eared bat
quino checkerspot butterfly
Nuttall's scrub oak
San Diego goldenstar
variegated dudleya
little mousetail
Dunn's mariposa-lily
least Bell's vireo
San Diego ambrosia
OTAY LAKES RD
San Diego marsh-elder
San Diego goldenstar
coastal California gnatcatcher
least Bell's vireo
San Diego marsh-elder
Mexican flannelbush
coastal California gnatcatcher
two-striped garter snake
Orcutt's bird's-beak
coast horned lizard
variegated dudleya
quino checkerspot butterfly
quino checkerspot butterfly
two-striped garter snake
coast horned lizard
Gander's pitcher sage
Gander's pitcher sage
Jennifer's monardella
Jennifer's monardella
Mexican flannelbush
Robinson's pepper-grass
Yuma myotis
quino checkerspot butterfly
western mastiff bat
pocketed free-tailed bat
western small-footed myotis
Yuma myotis
San Diego goldenstar
purple stemodia
variegated dudleya
summer holly
San Diego goldenstar
Gander's pitcher sage
Mexican flannelbush
San Diego marsh-elder
Otay manzanita
Munz's sage
Dunn's mariposa-lily
summer holly
variegated dudleya
Otay manzanita
Gander's pitcher sage
Otay manzanita
Gander's pitcher sage
Otay Mountain lotus
Otay Mountain ceanothus
Dunn's mariposa-lily
Otay Mountain lotus
Gander's pitcher sage
OTAY MTN TT
decumbent goldenbush
San Miguel savory
Otay manzanita
Munz's sage
Southern Interior Cypress Forest
Tecate cypress
felt-leaved monardella

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Little Cedar Canyon
2 mile Buffer

CNDDB Observations

Species Previously Observed in Project Parcels
Species Previously Observed Within 2 Miles of Project Parcels

0 Feet 2,500

FIGURE 17

Little Cedar Canyon Survey Parcels
California National Diversity Database Species

TABLE 9
DETAILS FOR LITTLE CEDAR CANYON PARCELS BASELINE WILDLIFE SURVEYS

Date	Observers	Specific Areas	Field Hours	Total Hours	Weather
04/22/2011	John Lovio	SW NE sec. 10, T18S, R1E	1030-1230	8.5	60 to 66ºF Wind Cloud cover 10 to 90%
04/29/2011	John Lovio	SE NE and NE SE sec. 10, T18S, R1E	0900-1500	9.00	60-67ºF Wind 3 mph to gusty 5 to 10 mph Clear
05/31/2011	John Lovio	SE NE and NE SE sec. 10 and NW NW SW sec. 11, T18S, R1E	0845-1615	11.00	59 to 76ºF Wind 0 to 8 mph Clear, shifting to ~30% high haze
07/20/2011	Anna Bennett, Mark Dodero	Quino checkerspot butterfly (*Euphydryas editha quino*) & California gnatcatcher (*Polioptila californica californica*) habitat assessment	-	-	-
07/25/2011	Anna Bennett, Mark Dodero	Quino checkerspot butterfly (*Euphydryas editha quino*) & California gnatcatcher (*Polioptila californica californica*) habitat assessment	-	-	-

5.1.3.1 General Wildlife Surveys

Survey methods used for identifying wildlife species within the Little Cedar Canyon parcels follow the same methods used for the Northern San Ysidro parcel described in Section 3.1.3.2, General Wildlife Surveys. Assessments for the potential occurrence of sensitive wildlife species are based upon species occurrence records from the CNDDB within a two-mile radius of the Northern San Ysidro parcel (see Figure 17).

5.1.4 Wildlife Movement

Survey methods used for identifying wildlife movement within the Little Cedar Canyon parcels follow the same methods used for the Northern San Ysidro parcel described in Section 4.1.4, Wildlife Movement.

5.1.5 Drainages

Survey methods used for identifying drainages within the Little Cedar Canyon parcels follow the same methods used for the Northern San Ysidro parcel described in Section 4.1.5, Drainages.

5.1.6 Dumping, Trespassing, and Vagrant Encampments

Survey methods used for identifying illegal dumping, trespassing, and vagrant encampments within the Little Cedar Canyon parcels follow the same methods used for the Northern San Ysidro parcel described in 4.1.6 Dumping, Trespassing, and Vagrant Encampments.

5.2 Resources and Survey Results

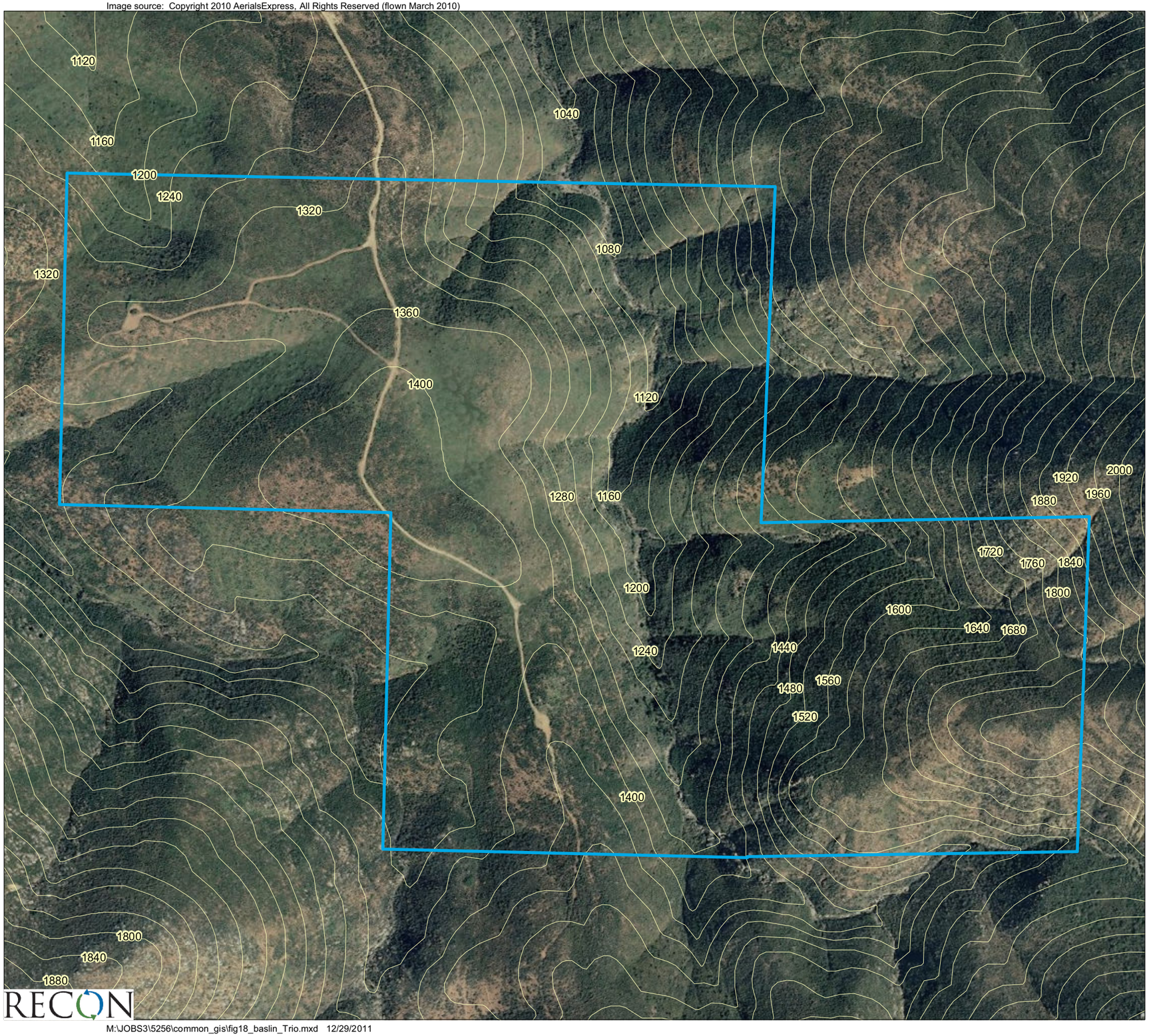
5.2.1 Site Description

The following sections describe the topography and soils within the Little Cedar Canyon parcels.

5.2.1.1 Topography

The Little Cedar Canyon parcels are located in the San Ysidro Mountains. The Little Cedar Canyon parcels consist of gently sloping to steep slopes, ranging between 0 and 45 degrees. Elevations range from 1,080 to 1,920 feet. Little Cedar Canyon transects the Little Cedar Canyon parcels (see Figures 2 and 3). The topography of the Little Cedar Canyon parcels is shown in Figure 18.

Image source: Copyright 2010 AerialsExpress, All Rights Reserved (flown March 2010)



Little Cedar Canyon

20ft Contour

0 Feet 400

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FIGURE 18

Little Cedar Canyon Survey Parcels Topography

5.2.1.2 Soils

Two soil series and one association occur in the Little Cedar Canyon parcels: Olivenhain cobbly loam, San Miguel-Exchequer rocky silt loam, and metamorphic rock land (Figure 19). The acreages of these are listed in Table 10.

- The Olivenhain series consists of moderately deep to deep cobbly loams with very cobbly clay subsoil. This soil occurs at elevations between 1,200 and 1,400 feet.

- The San Miguel-Exchequer series consists of shallow to moderately deep silt loams with clay subsoil derived from metavolcanic rock. This soil occurs on mountainous uplands at elevations between 1,080 to 1,920 feet. Rock outcrop covers 10 percent of the surface.

- The Metamorphic Rock Land association consists of shallow soil over hard rock covered by 50 to 90 percent exposed rock. This association occurs on hilly to mountainous areas at elevations between 1,280 and 1,360 feet.

TABLE 10
ACREAGES OF SOIL SERIES AND ASSOCIATIONS FOUND IN THE LITTLE CEDAR CANYON PARCELS

Soil Series/Association	Acreage
Olivenhain cobbly loam, 9 to 20% slopes	27 acres
Olivenhain cobbly loam, 30 to 50% slopes	19 acres
San Miguel-Exchequer rocky silt loams, 9 to 70% slopes	111 acres
Metamorphic Rock Land	3 acres

5.2.2 Botanical Resources

5.2.2.1 Common Plant Species

Attachment 11 provides a complete list of all plant species observed in the Little Cedar Canyon parcels. 126 plant species were observed in the Little Cedar Canyon parcels. Of these species, 116 species are not considered sensitive. The vegetation communities these plant species occur in are discussed below.

5.2.2.2 Vegetation Communities

There were six vegetation communities and land cover types present in the Little Cedar Canyon parcels: southern interior cypress forest, southern mixed chaparral, Diegan coastal sage scrub, coastal sage-chaparral transition, open coast live oak woodland, and southern riparian scrub. The acreages of these vegetation communities within the Little

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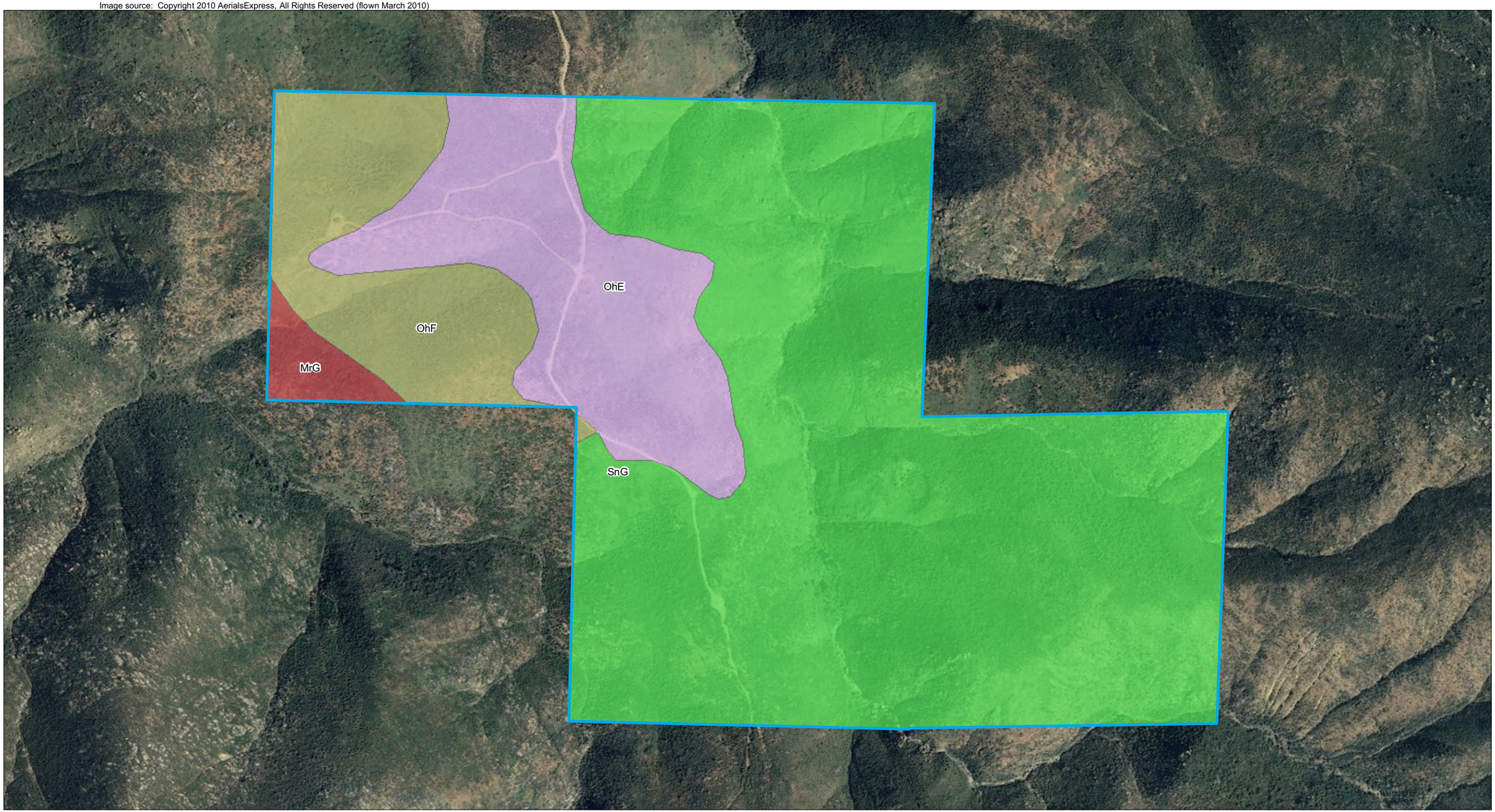

Little Cedar Canyon

Soil Classification

- MrG - Metamorphic rock land
- OhE - Olivenhain cobbly loam, 9 to 30 percent slopes
- OhF - Olivenhain cobbly loam, 30 to 50 percent slopes
- SnG - San Miguel-Exchequer rocky silt loams, 9 to 70 percent slopes

0 Feet 400

FIGURE 19

Little Cedar Canyon Survey Parcels Soils

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Cedar Canyon parcels are shown in Table 11. Vegetation communities mapped on-site are shown on Figure 20. The following text provides general descriptions of the vegetation communities based on the Vegetation Communities of San Diego County (Oberbauer, et al. 2008). More detailed description specific to the Little Cedar Canyon parcels follow the general descriptions.

TABLE 11
LITTLE CEDAR CANYON PARCELS:
VEGETATION TYPES WITH ACREAGES

Vegetation Types	Acres	Percent	Tier
Southern Interior Cypress Forest	63	39%	N/A
Southern Mixed Chaparral	52	33%	III
Diegan Coastal Sage Scrub	31	19%	II
Coastal-Sage Chaparral Transition	12	8%	II
Open Coast Live Oak Woodland	1	<1%	I
Southern Riparian Scrub	1	<1%	N/A

a. Southern Interior Cypress Forest (Holland 83230)

The general characteristics of southern interior cypress forest are described in detail in Section 3.2.2.2.f, Southern Interior Cypress Forest. This association was mapped in the Little Cedar Canyon parcels by the County of San Diego prior to the 2007 Harris fire, when Tecate cypress was present (Photograph 22). Tecate cypress was often found by dead trunks remaining from the 2003 Otay/Mine fire and/or 2007 Harris fire. Dead trunks were carefully inspected for new recruits. If there were no living recruits found, the association was mapped as the dominant vegetation, usually southern mixed chaparral or chaparral. When it was unclear whether units were southern interior cypress forest or another association, the original mapping compiled by the County of San Diego Department of Land Use between 1995 and 2010 was conserved.

Southern interior cypress forest occurred on 63 acres, representing 39 percent of the Little Cedar Canyon parcels.

b. Southern Mixed Chaparral (Holland 37120)

Southern mixed chaparral is considered Tier III (common upland) by the MSCP (City of Chula Vista 2003). The general characteristics of southern mixed chaparral are described in detail in Section 3.2.2.2.d, Southern Mixed Chaparral.

Southern mixed chaparral occurred on 52 acres, representing 33 percent of the Little Cedar Canyon parcels (Photograph 23)

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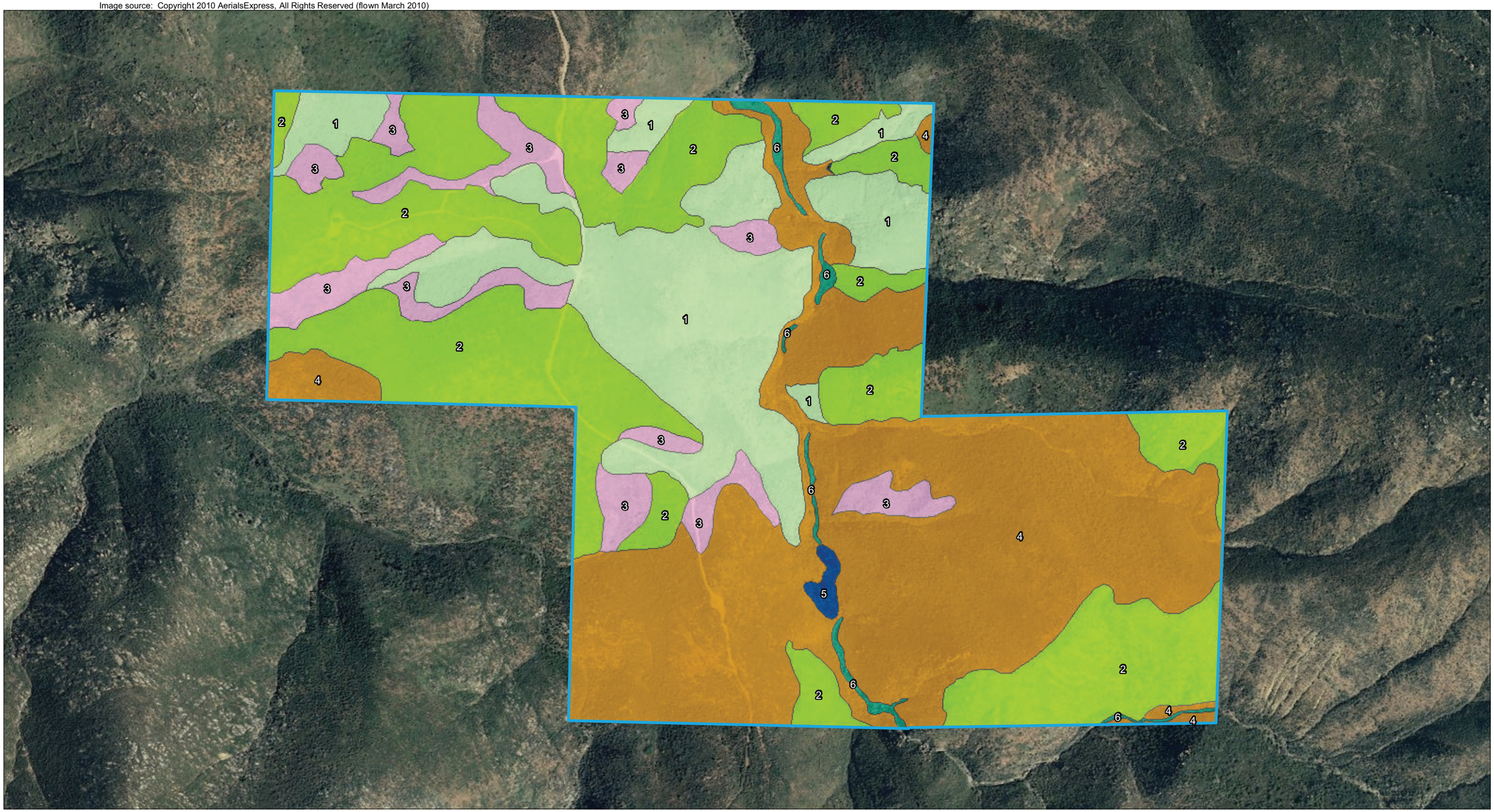

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FIGURE 20

Little Cedar Canyon Survey Parcels
Vegetation Communities and Land Cover

PHOTOGRAPH 22
Post-fire Interior Cypress Forest at the Little Cedar Parcels

PHOTOGRAPH 23
Southern Mixed Chaparral at the Little Cedar Parcels

c. Diegan Coastal Sage Scrub (Holland 32500)

Diegan coastal sage scrub is a vegetation community considered sensitive by federal and state resource agencies, and Tier II (uncommon upland) by the MSCP (City of Chula Vista 2003). The general characteristics of Diegan coastal sage scrub are described in detail in Section 3.2.2.2.a, Diegan Coastal Sage Scrub.

This association was mapped in the Little Cedar Canyon parcels when shrub cover was greater than 5 percent and any of the following species were dominant: California sagebrush, California buckwheat, white sage, or black sage (Photograph 24). Vegetation communities were also mapped as this association if shrub cover was greater than 5 percent, the species present were not clearly another vegetation community, and the following species were lacking for the site: chamise, California-lilac, manzanita, mission manzanita, and scrub oak. Therefore, some Diegan coastal sage scrub areas were dominated by deerweed, golden-yarrow, and chaparral bush-mallow.

Diegan coastal sage scrub occurred on 31 acres, representing 19 percent of the Little Cedar Canyon parcels.

d. Coastal Sage-Chaparral Transition (Holland 37G00)

Coastal sage–chaparral transition is considered Tier II (uncommon upland) by the MSCP (City of Chula Vista 2003). The general characteristics of coastal sage-chaparral transition are described in detail in Section 3.2.2.2.c, Coastal Sage Chaparral Transition.

Coastal sage-chaparral transition occurred on 12 acres, representing 8 percent of the Little Cedar Canyon parcels.

e. Coast Live Oak Woodland (Holland 71160)

Coast live oak woodland is considered a Tier I (rare upland) by the MSCP (City of Chula Vista 2003). Coast live oak woodland is a vegetation community defined as having one primary tree, coast live oak (*Quercus agrifolia*), as the dominant species of the community. Coast live oak woodlands are present in the coastal slopes of southern California and are typically found on north-facing slopes and shaded ravines in the south and more exposed sites in the north. This plant community occurs in the outer South Coast Ranges and on coastal slopes of Transverse and Peninsular ranges, usually below 4,000 feet (Oberbauer, et al. 2008).

This association occurred along drainages on one acre, representing less than 1 percent of the Little Cedar Canyon parcels (Photograph 25).

PHOTOGRAPH 24
Diegan Coastal Sage Scrub Contains
High Proportion of Non-native Grasses

PHOTOGRAPH 25
Small Patches of Coast Live Oak
Woodland Occur at the Little Cedar Parcels

f. Southern Riparian Scrub (Holland 63300)

The general characteristics of southern riparian scrub are described in detail in Section 3.2.2.2.e, Southern Riparian Scrub. This association was mapped in the Little Cedar Canyon parcels when shrubby patches in canyon bottoms were not dominated by willows or mule fat, did not clearly fit other riparian vegetation communities, and when shrub cover was sparse. If very few common southern riparian scrub associates were present, the canyon bottom was incorporated into the adjacent communities.

Southern riparian scrub was often represented in the Little Cedar Canyon parcels by a narrow strip of shrubby vegetation in canyon bottoms (Photograph 26). Frequent southern riparian scrub species in the Little Cedar Canyon parcels included mule fat, willows, San Diego sedge, cattail, spike-rush, poison oak, California fuschia, and coyote brush.

Southern riparian scrub occurred on 1 acre, representing less than 1 percent of the Little Cedar Canyon parcels.

5.2.3 Zoological Resources

Attachment 12 provides a complete list of all wildlife species observed in the Little Cedar Canyon parcels. Wildlife observed includes 20 species of invertebrates, 1 species of amphibian, 4 species of reptiles, 36 species of birds, and 3 species of mammals.

5.2.3.1 Invertebrates

A total of 20 butterfly species were observed, including fiery skipper (*Hylephila phyleus*), echo blue (*Celastrina ladon echo*), Lorquin's admiral (*Limenitis lorquini lorquini*), and Comstock's fritillary (*Speyeria callippe comstocki*). No butterfly species observed are considered sensitive.

5.2.3.2 Amphibians

A total of one amphibian species was observed: California treefrog (*Pseudacris cadaverina*). No amphibian species observed are considered sensitive.

5.2.3.3 Reptiles

A total of four reptile species were observed. Three species are not considered sensitive and one species is considered sensitive (see Section 5.2.4.3, Sensitive Reptiles). The three common reptile species observed were: San Diego gophersnake (*Pituophis catenifer annectens*), western fence lizard, and common side-blotched lizard.

PHOTOGRAPH 26
Southern Riparian Scrub at the Little Cedar Parcels

5.2.3.4 Birds

A total of 36 bird species were observed. Thirty-four are not considered sensitive and two species are considered sensitive (see Section 5.2.4.4, Sensitive Birds). Some common bird species observed include greater roadrunner (*Geococcyx californianus*), common raven (*Corvus corax clarionensis*), Wilson's warbler (*Wilsonia pusilla*), and spotted towhee (*Pipilo maculatus*).

5.2.3.5 Mammals

A total of three mammal species were observed: coyote, California ground squirrel, and Botta's pocket gopher. No sensitive mammal species observed are considered sensitive.

5.2.4 Sensitive Species

The criteria for the determination of species as sensitive are described in Section 3.2.4, Sensitive Species. Attachment 13 provides a complete list of all sensitive plant species observed in the Little Cedar Canyon parcels. Sensitive plant species in the Little Cedar Canyon parcels are shown on Figure 21. Attachment 14 provides a complete list of all sensitive wildlife species observed in the Little Cedar Canyon parcels. Sensitive wildlife species in the Little Cedar Canyon parcels are shown on Figure 22.

5.2.4.1 Sensitive Plant Species

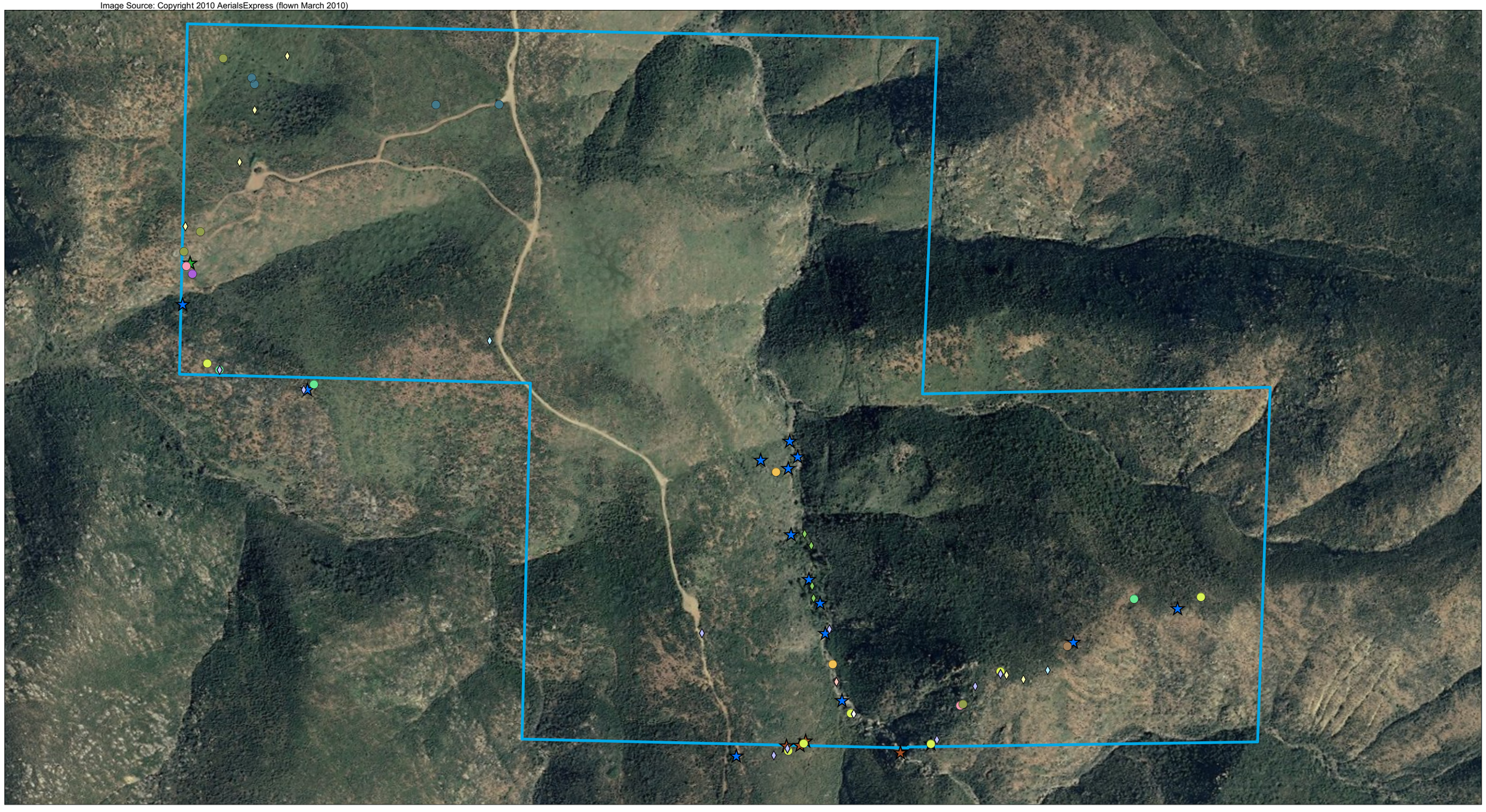
Eleven sensitive plant species were identified in the Little Cedar Canyon parcels. Ten other sensitive plant species have the potential to occur. These species are discussed below.

a. Observed

Dunn's mariposa lily — a narrow endemic species covered under the MSCP. This perennial herb is state listed as rare, is considered to be a narrow endemic under the MSCP, and has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species was observed in chamise chaparral, coastal sage-chaparral transition, and southern interior cypress forest.

Felt-leaved monardella — a narrow endemic species covered under the MSCP. This perennial herb is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species was observed in southern riparian scrub.

Image Source: Copyright 2010 AerialsExpress (flown March 2010)



Little Cedar Canyon

Sensitive Plant Observations

- Ashy Spike Moss
- Cleveland's Bush Monkeyflower
- Dunn's Mariposa Lily
- Feltleaf Monardella
- Gander's Pitcher Sage
- Humboldt's lily
- Mexican flannelbush
- Munz's Sage
- Otay Manzanita
- Otay-lilac
- San Diego County Needle Grass
- San Diego County Viguiera
- San Diego Goldenstar
- Southern Mountain Misery
- Summer Holly
- Tecate Cypress
- Western Dichondra

0 Feet 350

RECON

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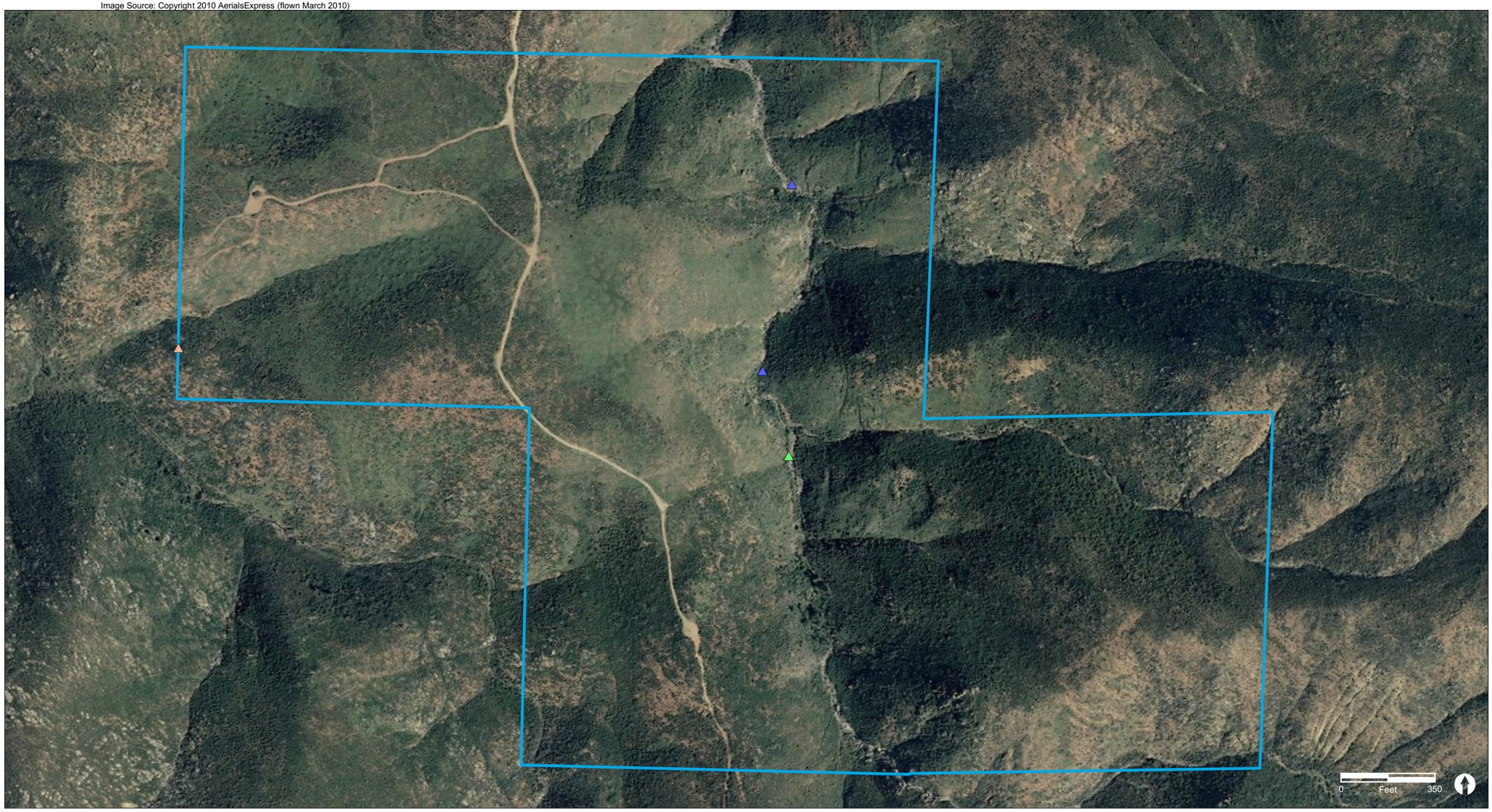
FIGURE 21

Little Cedar Canyon Survey Parcels Sensitive Plant Species

Image Source: Copyright 2010 AerialsExpress (flown March 2010)



Little Cedar Canyon

Sensitive Plant Observations

- Coast Horned Lizard
- Harbison's Dun Skipper
- Red Diamond Rattlesnake

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FIGURE 22

Little Cedar Canyon Survey Parcels Sensitive Wildlife Species

Gander's pitcher sage — a narrow endemic species covered under the MSCP. This perennial shrub is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.3 (rare, threatened, or endangered in California and elsewhere; not very endangered in California). This species was observed in southern interior cypress forest, southern mixed chaparral, and southern riparian scrub (Photograph 28).

Tecate cypress — an MSCP-covered species. This perennial tree is an MSCP-covered species and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species was observed in southern mixed chaparral, southern interior cypress forest, southern riparian scrub, and chamise chaparral.

San Diego goldenstar — an MSCP-covered species. This perennial herb is an MSCP-covered species and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species was observed in chamise chaparral, southern mixed chaparral, and coastal sage-chaparral transition (Photograph 29).

Otay manzanita — an MSCP-covered species. This perennial shrub is an MSCP-covered species and has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species was observed in southern riparian scrub, southern mixed chaparral, and southern interior cypress forest.

Mexican flannelbush. This perennial shrub is federally endangered, state listed as rare, and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species was observed in southern riparian scrub (Photograph 30).

Otay Mountain ceanothus (*Ceanothus otayensis*). This perennial shrub has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). Only four occurrences are recorded in CNDDB for this species. This species was observed in southern interior cypress forest.

Summer holly. This perennial shrub has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species was observed in southern interior cypress forest and southern mixed chaparral.

Munz's sage. This perennial shrub has a CNPS ranking of 2.2 (rare, threatened, or endangered in California, but more common elsewhere; fairly endangered in California). This species was observed in coastal sage-chaparral transition (Photograph 31).

Ashy spike-moss. This perennial herb has a CNPS ranking of 4.1 (uncommon in California; seriously endangered in California). This species was observed in chamise and southern interior cypress forest.

PHOTOGRAPH 27
Felt-Leaved Monardella (*Monardella hypoleuca* var. *lanata*)
Observed in Southern Riparian Scrub Habitat

PHOTOGRAPH 28
Ganders Pitcher Sage (*Lepechinia ganderi*), a MSCP Narrow
Endemic, Found in Interior Cypress and Chaparral Communities

PHOTOGRAPH 29
San Diego Goldenstar (*Muilla clevelandii*) Found in Chaparral and Coastal Sage Scrub Transition Habitat

PHOTOGRAPH 30
Mexican Flannelbush (*Fremontodenron mexicanum*) Occurs in Little Cedar Canyon

PHOTOGRAPH 31
Munz's Sage (*Salvia munzii*) Occurs in the
CSS-Chaparral Transition at the Little Cedar Parcels

San Diego County needlegrass. This perennial grass has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in chamise chaparral, southern mixed chaparral, and Diegan coastal sage scrub.

Southern mountain misery (*Chamaebatia australis*). This perennial shrub has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in southern mixed chaparral, chamise chaparral, and southern interior cypress forest.

San Diego County viguiera (*Viguiera lacinata*). This perennial shrub has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in coastal sage-chaparral transition and southern mixed chaparral.

Western dichondra (*Dichondra occidentalis*). This perennial herb has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). The species was observed in coastal sage-chaparral transition.

Cleveland's bush monkeyflower (*Mimulus clevelandii*). This perennial herb has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in southern riparian scrub.

Humboldt's lily (*Lilium humboldtii*). This perennial herb has a CNPS ranking of 4.2 (uncommon in California; fairly endangered in California). This species was observed in southern riparian scrub (Photograph 32).

Woolly chaparral pea (*Pickeringia montana* var. *tomentosa*). This evergreen shrub has a CNPS ranking of 4.3 (uncommon in California; not very endangered in California). This species was observed in the southern interior cypress forest.

b. Not Observed

San Diego ambrosia — a narrow endemic species covered under the MSCP. This perennial herb is federally endangered, is considered to be a narrow endemic under the MSCP, and has a CNPS ranking of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a moderate potential for occurrence within the Little Cedar Canyon parcels. Preferred habitat includes chaparral and coastal scrub, both of which occur in the Little Cedar Canyon parcels.

Variegated dudleya — a narrow endemic species covered under the MSCP. This succulent perennial is considered to be a narrow endemic under the MSCP and has a CNPS ranking of 1B.2 (rare, threatened, or endangered in California and elsewhere; fairly endangered in California). This species has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat includes coastal scrub, chaparral, and grassland, all of which occur in the Little Cedar Canyon parcels.

PHOTOGRAPH 32
Humboldt's Lily (*Lilium humboldtii*) Observed in
Riparian Scrub at Little Cedar Canyon

Orcutt's birdbeak — an MSCP-covered species. This annual herb is an MSCP-covered species and has a CNPS ranking of 2.1 (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California). This species has a moderate potential for occurrence on the Little Cedar Canyon parcels. Preferred habitat includes coastal scrub, which occurs in the Little Cedar Canyon parcels.

Otay Mountain lotus. This perennial herb has a CNPS rating of 1B.1 (rare, threatened, or endangered in California and elsewhere; seriously endangered in California). This species has a high potential for occurrence on the Little Cedar Canyon parcels. Preferred habitat is chaparral, which occurs in the Little Cedar Canyon parcels. This species is very rare; there are only three element occurrences of this species known, two of which occur on Otay Mountain.

Purple stemodia. This perennial herb has a CNPS rating of 2.1 (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California). This species has a high potential for occurrence on the Little Cedar Canyon parcels. Preferred habitat is riparian wet sand or rocks and drying streambeds, which are present in the Little Cedar Canyon parcels.

San Diego marsh-elder. This perennial herb has a CNPS ranking of 2.2 (rare, threatened, or endangered in California, but more common elsewhere; fairly endangered in California). This species has a moderate potential for occurrence on the Little Cedar Canyon parcels. Preferred habitat is alkali flats, depressions, and streambanks (JFP 2011). Depressions and streambanks occur in the Little Cedar Canyon parcels.

Little mousetail. This annual herb has a CNPS ranking of 3.1 (needs review; seriously endangered in California). This species is not expected to occur on the Little Cedar Canyon parcels. Preferred habitat is vernal pool, and valley and foothill grassland, which do not occur in the Little Cedar Canyon parcels.

5.2.4.2 Sensitive Invertebrates

One sensitive invertebrate species was identified in the Little Cedar Canyon parcels. Two other sensitive invertebrate species have the potential to occur. These species are discussed below.

a. Observed

Harbison's dun skipper. This species is on the CDFG Special Animals List. This species was observed in southern interior cypress forest (Photograph 33).

PHOTOGRAPH 33
Harbison's Dun Skipper (*Euphyes vestris harbisoni*)
Observed at Little Cedar Canyon

b. Not Observed

Quino checkerspot butterfly — an MSCP-covered species. This species is federally listed as endangered and is an MSCP-covered species. This species has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat includes chaparral (MSCP 2003), which occurs in the Little Cedar Canyon parcels within the Quino checkerspot butterfly's known range.

Thorne's hairstreak butterfly — an MSCP-covered species. This species is an MSCP-covered species. This species was not surveyed for during the baseline surveys. This species has a high potential to occur in the Little Cedar Canyon parcels due to the presence of its host plant, Tecate cypress.

5.2.4.3 Sensitive Reptiles

One sensitive reptile species was identified in the Little Cedar Canyon parcels. One other sensitive reptile species has the potential to occur. These species are discussed below.

a. Observed

Coast horned lizard (*Phrynosoma blainvillii*) — an MSCP-covered species. This species is a CDFG species of special concern and an MSCP-covered species. This species was observed in chamise chaparral.

Red diamond rattlesnake (*Crotalus ruber*). This species is a CDFG species of special concern. This species was observed in southern riparian scrub.

b. Not Observed

Two-striped gartersnake. This species is a CDFG species of special concern. This species has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat is chaparral, oak woodland, coniferous forest, and rocky outcrops. These habitats occur in the Little Cedar Canyon parcels within the known range of the two-striped gartersnake.

5.2.4.4 Sensitive Birds

Two sensitive bird species were identified in the Little Cedar Canyon parcels. Two other sensitive bird species have the potential to occur. These species are discussed below.

a. Observed

Southern California rufous-crowned sparrow — an MSCP-covered species. This species is a CDFG species of special concern and an MSCP-covered species. This species was observed in Diegan coastal sage scrub and chaparral.

Grasshopper sparrow (*Ammodramus savannarum perpallidus*). This species is a CDFG species of special concern. This species was observed in chaparral and an unvegetated roadbed.

b. Not Observed

Least bell's vireo — an MSCP-covered species. This species is federally endangered, state listed as endangered, and is covered under the MSCP. Least bell's vireo has a moderate potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat is riparian woodland and adjacent upland scrub. As the southern riparian scrub recovers from the 2003 and 2007 fires, suitable habitat may return for least bell's vireo.

Coastal California gnatcatcher — an MSCP-covered species. The coastal California gnatcatcher is a federally listed threatened species, a CDFG species of special concern, and an MSCP-covered species. Coastal California gnatcatcher has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat is coastal sage scrub communities dominated by California sagebrush. This habitat occurs in the Little Cedar Canyon parcels within the coastal California gnatcatcher's known range.

5.2.4.5 Sensitive Mammals

No sensitive mammal species were identified in the Little Cedar Canyon parcels. Six other sensitive mammal species have the potential to occur. These species are discussed below.

a. Not Observed

Townsend's big-eared bat. This species is a CDFG species of special concern and considered sensitive by the BLM and the U.S. Forest Service. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat includes coniferous forests, riparian communities, and coastal habitats (Navo 2005). These habitats are present in the Little Cedar Canyon parcels within Townsend's big-eared bat's known range.

Western mastiff bat. This species is a CDFG species of special concern and is considered sensitive by the BLM. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat includes chaparral and oak woodlands (Navo 2005). These habitats are present in the Little Cedar Canyon parcels within the western mastiff bat's known range.

Pocketed free tail bat. This species is a CDFG species of special concern. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat includes rocky outcrops, slopes, and shrublands (Navo 2005). These habitats are present in the Little Cedar Canyon parcels within the pocketed free tail bat's known range.

Western small-footed myotis. This species is considered sensitive by the BLM. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat includes rocky outcrops, chaparral, coniferous forest, and riparian habitats for foraging (Navo 2005). These habitats are present in the Little Cedar Canyon parcels within the western small-footed myotis' known range.

Yuma myotis. This species is considered sensitive by the BLM. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat includes scrublands, forests, and riparian habitats (Navo 2005). These habitats are present in the Little Cedar Canyon parcels within the yuma myotis' known range.

Hoary bat. This species is considered to have a medium priority by the Western Bat Working Group. This species was not surveyed for during the baseline surveys. This species has a high potential for occurrence in the Little Cedar Canyon parcels. Preferred habitat includes coniferous and deciduous forests (Navo 2005). These habitats are present in the Little Cedar Canyon parcels within the hoary bat's known range.

5.2.5 Invasive Exotic Plant Species

Twenty-five non-native plants were documented in the Little Cedar Canyon parcels. For more details regarding (1) the criteria California Invasive Plant Inventory Database ranking or (2) general characteristics of red brome and saltcedar, refer to Section 3.2.5, Invasive Exotic Plant Species.

Two plant species documented in the Little Cedar Canyon parcels are ranked as 'high' under the California Invasive Plant Inventory Database: red brome and saltcedar.

- Red brome was identified in southern riparian scrub and chaparral.
- Saltcedar was identified in southern riparian scrub.

Eight plant species documented in the Little Cedar Canyon parcels are ranked as 'moderate' under the California Invasive Plant Inventory Database: Washington fan palm, stinkwort, slender wild oat, wild oat, purple falsebrome, black mustard, short-pod mustard, and Italian ryegrass. Stinkwort has a red alert designation, indicating high potential for invasion into wildlands.

- Stinkwort is an annual herb that favors disturbance and can be found in riparian woodlands, washes, and tidal marshes. Stinkwort appears to be expanding its range in California rapidly (DiTomaso, et al, 2007). Stinkwort was identified in chaparral.

Three plant species documented in the Little Cedar Canyon parcels are ranked as 'limited' under the California Invasive Plant Inventory Database: soft chess, Italian thistle, and Russian thistle.

One species documented in the Little Cedar Canyon parcels was 'evaluated but not listed' by Cal-IPC: prickly lettuce. Twelve species documented in the Little Cedar Canyon parcels have not been evaluated or listed by Cal-IPC: everlasting (*Gnaphalium luteoalbum*), natal grass (*Rhynchelytrum repens*), common beggar ticks (*Bidens pilosa* var. *pilosa*), crete weed, common sow thistle (*Sonchus oleraceus*), scarlet pimpernel, poverty brome, nit grass, smooth cat's-ear, goldentop, narrow-leaf herba impia, and windmill pink.

5.2.6 Other Survey Results

5.2.6.1 Drainages

The Little Cedar Canyon parcels are located in the Otay River watershed and contain a drainage located in Little Cedar Canyon. The drainage travels northwest before entering Jamul Creek. Jamul Creek drains into the Lower Otay reservoir. The Otay River flows from the Lower Otay reservoir and eventually discharges into the San Diego Bay (see Figures 2 and 3).

5.2.6.2 Wildlife Movement

Barriers to wildlife movement surrounding the Little Cedar Canyon parcels include Otay Lakes Road to the north, Highway 94 to the east, and the U.S.-Mexico Border Fence to the south. No barriers to wildlife movement occur within the Little Cedar Canyon parcels, allowing wildlife to move freely throughout.

5.2.6.3 Dumping, Trespassing, and Vagrant Encampments

Trash and debris from the U.S. Border Patrol was observed within the Little Cedar Canyon parcels. Trespassing from illegal off-roading vehicles was observed through tread marks. No vagrant encampments were observed.

6.0 Discussion

The flora and fauna found at the Northern San Ysidro, McMillin, and Little Cedar Canyon parcels are typical for the vegetation communities that occur. As focused surveys are conducted, additional species that were not detected during the baseline surveys will be recorded and the species lists shall be updated.

6.1 Post-burn

The Northern San Ysidro, McMillin, and Little Cedar Canyon parcels burned in both the 2003 Otay/Mine fire and 2007 Harris fire. The vegetation communities are expected to develop into more mature stands if fire does not affect the site again in the coming decade. As the vegetation communities mature, wildlife species that were not detected during these baseline surveys may return to the parcel sets. An example of this is coastal California gnatcatcher. Currently, the Diegan coastal sage scrub present at all parcel sets is open with many non-native grasses present in the understory. As time passes, it is expected that shrub cover will increase, creating more favorable nesting habitat for coastal California gnatcatcher. The southern riparian scrub present at all parcel sets is also expected to increase in cover and may ultimately be better defined as southern willow riparian scrub, which may provide suitable nesting habitat for least Bell's vireo.

It was noted during the vegetation mapping that the total acreage of southern interior cypress woodland has decreased since 2004/2005 County vegetation mapping. Much of the area that had been previously mapped as southern interior cypress woodland had burned Tecate cypress tree stumps, but saplings were not observed. Many vegetation communities in San Diego County are adapted to fire; however, an unnatural increase in fire frequency due to anthropogenic causes (e.g., camp fires, non-native plants

introduced by humans that serve as flash fuels, etc.) may not allow adequate time to regenerate following burns. Increased fire frequency may ultimately lead to type conversion of native vegetation communities to non-native grasslands. Tecate cypress is especially vulnerable to population decline due to increased fire frequency. This species has serotinous cones that open and disperse seeds after exposure to fire. It takes several years for Tecate cypress to mature to a cone-bearing age; therefore, due to the increased fire frequency, many saplings that emerged after the previous fire were not able to reach full maturity and were lost to fire before reproducing.

6.2. Recommended Focused Surveys

The following focused surveys were recommended in the FY 2011-12 work plan.

6.2.1 Quino Checkerspot Butterfly Surveys

During preliminary site visits in March 2011 to check access for the baseline surveys, Quino checkerspot butterfly was incidentally observed at the McMillin and Dulzura parcels in the Otay Ranch Preserve. Based on the observation of suitable habitat during the baseline surveys, the PSB recommends that focused Quino checkerspot butterfly surveys be conducted in spring 2012 to determine the extent of occupied habitat within the Northern San Ysidro, McMillin, and Little Cedar Canyon parcels. The Quino checkerspot butterfly flight season does not consist of a set range of dates, but is determined by the growth and condition of the host plants used by Quino checkerspot butterfly. Therefore, the date for initiating and completing surveys cannot be predetermined. A post-survey report detailing the results of the Quino checkerspot butterfly surveys will be submitted to the POM prior to June 30, 2012.

6.2.2 Photo Point Monitoring

The PSB recommends establishing permanent photo monitoring points so that changes in native vegetation and weed cover can be detected over time. Photo monitoring points will be established at the Northern San Ysidro, McMillin, and Little Cedar Canyon parcels in spring 2012 and shall be completed by May 15, 2012. Photo points represent the first phase of long-term vegetation monitoring within the Preserve. The photo point monitoring locations will be determined in the field and recorded using a hand held Trimble® GPS unit. The photo monitoring points will be repeated a minimum of every three years.

The photo monitoring point locations will be chosen so that they provide a broad view of representative vegetation communities in the Preserve. The GPS accuracy and direction of the photos will be recorded. Prominent features will be mindfully placed in each photo to make relocating the exact location easier in future years. The prominent features will

be chosen so that changes to the landscape (i.e., fire or weed encroachment) will minimize change to the visibility of the feature. Photo points may also be established along habitat ecotones to monitor habitat shifts in elevation. Additional photo monitoring point locations may be added in the future.

Focused long-term vegetation sampling will be conducted using more rigorous methods once California gnatcatcher study areas are established per the Otay Ranch Phase 2 Resource Management Plan. The PSB may utilize San Diego State University vegetation monitoring methods to detect changes in vegetation over time at the Preserve. The San Diego State University vegetation methods will be incorporated into the consistency analysis for the RMP, as appropriate.

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ATTACHMENTS

ATTACHMENT 1

ATTACHMENT 1
PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS

Scientific Name	Common Name	Origin
LYCOPODS		
SELAGINELLACEAE	**SPIKE-MOSS FAMILY**	
Selaginella bigelovii L. Underw.	Bigelow spike-moss	N
Selaginella cinerascens A.A. Eaton	ashy spike-moss	N
FERNS		
POLYPODIACEAE	**POLYPODY FAMILY**	
Polypodium californicum Kaulf.	California polypody	N
PTERIDACEAE	**BRAKE FAMILY**	
Adiantum sp.	maidenhair	N
Cheilanthes sp.	lip fern	N
Pellaea andromedifolia (Kaulf.) Fee	coffee fern	N
Pellaea mucronata (D. C. Eaton) D. C. Eaton var. *mucronata*	bird's-foot fern	N
Pentagramma triangularis (Kaulf.) Yatsk., Windham & E. Wollenw.	goldback fern	N
GYMNOSPERMS		
CUPRESSACEAE	**CYPRESS FAMILY**	
Hesperocyparis forbesii (Jeps.) Bartel [=*Callitropsis forbesii*]	Tecate cypress	N
ANGIOSPERMS: MONOCOTS		
AGAVACEAE	**AGAVE FAMILY**	
Chlorogalum parviflorum S. Watson	smallflower soap plant	N
Yucca whipplei Torr.	our Lord's candle	N
Carex spissa L.H. Bailey	San Diego sedge	N
IRIDACEAE	**IRIS FAMILY**	
Sisyrinchium bellum S. Watson	blue-eyed-grass	N
JUNCACEAE	**RUSH FAMILY**	
Juncus acutus L. ssp. *leopoldii* (Parl.) Snogerup	spiny rush	N
Juncus bufonius L.	toad rush	N
Calochortus splendens Benth.	lilac mariposa	N
POACEAE (GRAMINEAE)	**GRASS FAMILY**	
Achnatherum coronatum (Thurb.) Barkworth	giant stipa	N
Achnatherum diegoensis (Swallen) Barkworth	San Diego County needlegrass	N
Agrostris pallens Trin.	seashore bent grass	N
Aristida purpurea	three-awn	N

ATTACHMENT 1
PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Origin
Avena barbata Link	slender wild oat	I
Avena fatua L.	wild oat	I
Bothriochloa barbinodis (Lag.) Herter	cane bluestem	N
Brachypodium distachyon (L.) P. Beauv.	purple falsebrome	I
Bromus diandrus Roth	ripgut grass	I
Bromus hordeaceus L.	soft chess	I
Bromus madritensis L. ssp. *rubens* (L.) Husnot	red brome	I
Bromus sterilis L.	barren brome, poverty brome	I
Cortaderia selloana.	pampas grass	I
Dactylis glamerata	orchard grass	I
Gastridium ventricosum (Gouan) Schinz & Thell.	nit grass	I
Lamarckia aurea (L.) Moench	goldentop	I
Lolium multiflorum Lam.	Italian ryegrass	I
Melica frutescens Scribn.	melic grass	N
Muhlenbergia microsperma (DC.) Kunth	littleseed muhly	N
Muhlenbergia rigens (Benth.) Hitchc.	deergrass	N
Nassella lepida (Hitchc.) Barkworth	foothill needlegrass	N
Nassella pulchra (Hitchc.) Barkworth	purple needlegrass	N
Schismus sp.	Mediterranean grass	I
Vulpia myuros (L.) C.C. Gmel var. *myuros*	rattail fescue	I
THEMIDACEAE	**BRODIAEA FAMILY**	
Brodiaea orcuttii (Greene) Baker	Orcutt's brodiaea	N
Dichelostemma capitatum (Benth.) A.W. Wood	blue dicks	N
Muilla clevelandii (S. Watson) Hoover	San Diego goldenstar	N
ANGIOSPERMS: DICOTS		
ANACARDIACEAE	**SUMAC OR CASHEW FAMILY**	
Malosma laurina Nutt. ex Abrams	laurel sumac	N
Rhus integrifolia (Nutt.) Benth. & Hook. f. ex Rothr.	lemonadeberry	N
Toxicodendron diversilobum (Torr. & A. Gray) Greene	western poison oak	N
APIACEAE (UMBELLIFERAE)	**CARROT FAMILY**	
Daucus pusillus Michx.	rattlesnake weed	N
Foeniculum vulgare Mill.	fennel	I
Lomatium dasycarpum (Torr. & A. Gray) J.M. Coult. & Rose ssp. *dasycarpum*	lace parsnip	N
Sanicula arguta J.M. Coult. & Rose	little-jim sanicle	N

ATTACHMENT 1
PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Origin
APOCYNACEAE	**DOGBANE FAMILY**	
Funastrum [=*Sarcostemma*] *cynanchoides* (Decne.) Schltr. var. *hartwegii* (Vail) Krings	climbing milkweed	N
ASTERACEAE	**SUNFLOWER FAMILY**	
Achillea millefolium L.	yarrow, milfoil	N
Acourtia microcephala DC.	purple-head, sacapellote	N
Ambrosia psilostachya DC.	western ragweed	N
Artemisia californica Less.	California sagebrush	N
Baccharis salicifolia (Ruiz & Pav.) Pers.	mule fat, seep-willow	N
Baccharis sarothroides A. Gray	broom baccharis	N
Bahiopsis [=*Viguiera*] *laciniata* (A. Gray) E.E. Schilling & Panero	San Diego County viguiera	N
*Carduus pycnocephalu*s L.	Italian thistle	I
Centaurea melitensis L.	tocalote, star-thistle	I
Corethrogyne filaginifolia [= all previously known *Lessingia filaginifolia* varieties in California] (Hook. & Arn.) Nutt.	California-aster	N
Deinandra [=*Hemizonia*] *fasciculata* (DC.) Greene	golden tarplant	N
Dittrichia graveolens (L.) Greuter	stinkwort	I
Eriophyllum confertiflorum (DC.) A. Gray var. *confertiflorum*	golden-yarrow	N
Gnaphalium californicum DC.	green everlasting	N
Gutierrezia californica (DC.) Torr. & A. Gray	California matchweed	N
Hazardia squarrosa (Hook. & Arn.) Greene	saw-toothed goldenbush	N
Hedypnois cretica (L.) Dum. Cours.	crete weed	I
Hypochaeris glabra L.	smooth cat's-ear	I
Iva hayesiana A. Gray	San Diego marsh-elder	N
Lasthenia californica DC. ex Lindl.	goldfields	N
Logfia [=*Filago*] *gallica* (L.) Cross. & Germ.	narrow-leaf herba impia	I
Osmadenia tenella Nutt.	osmadenia	N
Pseudognaphalium biolettii Anderb.	bicolor cudweed	N
Psilocarphus brevissimus Nutt. var. *brevissimus*	dwarf woollyheads	N
Sonchus asper (L.) Hill ssp. *asper*	prickly sow thistle	I
Sonchus oleraceus L.	common sow thistle	I
Stylocline gnaphaloides Nutt.	everlasting nest straw	N
Venegasia carpesioides DC.	Jesuit flower	N
BORAGINACEAE	**BORAGE FAMILY**	
Cryptantha sp.	cryptantha	N
Eriodictyon trichocalyx A. Heller	hairy yerba santa	N

ATTACHMENT 1
PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Origin
Phacelia cicutaria Greene var. *hispida* (A. Gray) J.T. Howell	caterpillar phacelia	N
Phacelia ramosissima Douglas ex Lehm.	shrubby phacelia	N
Pholistoma membranaceum (Benth.) Constance	white fiesta flower	N
Plagiobothrys sp.	popcornflower	N
BRASSICACEAE (CRUCIFERAE)	**MUSTARD FAMILY**	
Brassica nigra (L.) W.D.J. Koch	black mustard	I
Hirschfeldia incana (L.) Lagr.-Fossat	short-pod mustard	I
Lepidium sp.	peppergrass	N/I
Sisymbrium sp.	mustard	I
CACTACEAE	**CACTUS FAMILY**	
Ferocactus viridescens (Torr. & A. Gray) Britton & Rose	San Diego barrel cactus	N
CALLITRICHACEAE	**WATER-STARWORT FAMILY**	
Callitriche marginata Torr.	water-starwort	N
CAPRIFOLIACEAE	**HONEYSUCKLE FAMILY**	
Lonicera subspicata Hook. & Arn.	southern honeysuckle	N
CARYOPHYLLACEAE	**PINK FAMILY**	
Silene gallica L.	windmill pink	I
Stellaria media (L.) Vill.	common chickweed	I
CHENOPODIACEAE	**GOOSEFOOT FAMILY**	
Salsola tragus L.	Russian thistle, tumbleweed	I
CISTACEAE	**ROCK-ROSE FAMILY**	
Helianthemum scoparium Nutt.	peak rush-rose	N
CONVOLVULACEAE	**MORNING-GLORY FAMILY**	
Calystegia macrostegia	morning-glory	N
Convolvulus arvensis L.	bindweed, orchard morning-glory	I
Dichondra occidentalis House	western dichondra	N
CRASSULACEAE	**STONECROP FAMILY**	
Crassula connata (Ruiz & Pav.) A. Berger	pygmy-weed	N
Dudleya pulverulenta (Nutt.) Britton & Rose	chalk lettuce, chalk dudleya	N
CUCURBITACEAE	**GOURD FAMILY**	
Marah macrocarpus (Greene) Greene	wild cucumber	N
ERICACEAE	**HEATH FAMILY**	
Arctostaphylos glauca Lindl.	big berry manzanita	N
Arctostaphylos otayensis Weisl. & B. Schreib.	Otay manzanita	N
Xylococcus bicolor Nutt.	mission manzanita	N

ATTACHMENT 1
PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Origin
FABACEAE (LEGUMINOSAE)	**LEGUME FAMILY**	
Acmispon americanus (Nutt.) Rydb. var. *americanus* [=*Lotus purshianus* var. *purshianus*]	Spanish-clover	N
Acmispon glaber (Vogel) Brouillet [=*Lotus scoparius*]	deerweed	N
Acmispon strigosus (Nutt.) Brouillet [=*Lotus strigosus*]	bishop's/strigose lotus	N
Hosackia crassifolia Benth. var. *otayensis* (Moran ex Isely) Brouillet [=*Lotus crassifolia* var. *otayensis*]	Otay Mountain lotus	N
Lathyrus vestitus Nutt. var. *alefeldii* (T. G. White) Isely	wild sweet pea	N
Lupinus concinnus J. Agardh	bajada lupine	N
Medicago polymorpha L.	California bur clover	I
Melilotus indicus (L.) All.	sourclover	I
Pickeringia montana Nutt. var. *montana*	chaparral-pea	N
Pickeringia montana Nutt. var. *tomentosa* (Abrams) I.M. Johnst.	hairy chaparral-pea	N
FAGACEAE	**OAK FAMILY**	
Quercus berberidifolia Liebm.	scrub oak	N
GENTIANACEAE	**GENTIAN FAMILY**	
Zeltnera venusta	California centaury	N
GERANIACEAE	**GERANIUM FAMILY**	
Erodium botrys (Cav.) Bertol.	long-beak filaree	I
Erodium cicutarium (L.) L'Hér. ex Aiton	red stemmed filaree	I
GROSSULARIACEAE	**GOOSEBERRY FAMILY**	
Ribes malvaceum Sm. var. *viridifolium* Abrams	chaparral currant	N
Ribes speciosum Pursh	fuchsia-flowered gooseberry	N
LAMIACEAE	**MINT FAMILY**	
Lepechinia ganderi Epling	Gander's pitcher sage	N
Monardella stoneana Elvin & A. C.Sanders	Jennifer's monardella	N
Salvia apiana Jeps.	white sage	N
Salvia munzii Epling	Munz's sage	N
Stachys ajugoides Benth. var. *rigida* (Nutt. ex Benth.) Jeps. & Hoover	hedge nettle	N
LYTHRACEAE	**LOOSESTRIFE FAMILY**	
Lythrum hyssopifolia L.	grass poly, hyssop loosestrife	I
MALVACEAE	**MALLOW FAMILY**	
Malacothamnus fasciculatus (Nutt. ex Torr. & A. Gray) Greene	chaparral mallow	N
Malva parviflora L.	cheeseweed, little mallow	I
Sidalcea sparsifolia (C. L. Hitchc.) S. R. Hill	checker-bloom	N

ATTACHMENT 1
PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Origin
MONTIACEAE	**MONTIA FAMILY**	
Calandrinia ciliata (Ruiz & Pav.) DC.	red maids	N
Claytonia sp.	miner's lettuce	N
MYRSINACEAE		
Anagallis arvensis L.	scarlet pimpernel, poor-man's weatherglass	I
NYCTAGINACEAE	**FOUR O'CLOCK FAMILY**	
Mirabilis laevis [=*californica*] (Benth.) Curran var. *crassifolia* (Choisy) Spellenb.	wishbone bush	N
ONAGRACEAE	**EVENING-PRIMROSE FAMILY**	
Epilobium canum	California fuschia	N
OXALIDACEAE	**OXALIS FAMILY**	
Oxalis californica (Abrams) R. Knuth [=*Oxalis albicans* ssp. *californica*]	California oxalis	N
PAPAVERACEAE	**POPPY FAMILY**	
Romneya trichocalyx Eastw.	hairy matilija poppy	N
PHRYMACEAE [=SCROPHULARIACEAE]	**HOPSEED FAMILY**	
Mimulus aurantiacus Curtis	bush monkey-flower	N
Mimulus guttatus DC.	common monkey-flower	N
PLANTAGINACEAE	**PLANTAIN FAMILY**	
Antirrhinum nuttallianum Benth. ex A. DC.	Nuttall snapdragon	N
Penstemon spectabilis Thurb. ex A. Gray	violet beard-tongue	N
Plantago erecta E. Morris	dot-seed plantain	N
Stemodia durantifolia (L.) Sw.	purple stemodia	N
PLATANACEAE	**PLANE TREE OR SYCAMORE FAMILY**	
Platanus racemosa Nutt.	western sycamore	N
POLEMONIACEAE	**PHLOX FAMILY**	
Gilia angelensis V.E. Grant	grassland gilia	N
Linanthus diananthaflorus	farinose ground pink	N
Navarretia hamata Greene	hooked navarretia	N
POLYGONACEAE	**BUCKWHEAT FAMILY**	
Chorizanthe fimbriata Nutt.	fringed spineflower	N
Eriogonum fasciculatum Benth. var. *fasciculatum*	coast California buckwheat	N
Pterostegia drymarioides Fisch. & C.A. Mey.	California thread-stem	N
Rumex crispus L.	curly dock	I
Rumex salicifolius Weinm.	willow dock	N

ATTACHMENT 1
PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Origin
PRIMULACEAE	**PRIMROSE FAMILY**	
Dodecatheon clevelandii Greene ssp. *clevelandii*	shooting star, wild cyclamen	N
RANUNCULACEAE	**BUTTERCUP FAMILY**	
Clematis sp.	virgin's bower	N
Delphinium cardinale Hook.	scarlet larkspur, cardinal larkspur	N
Thalictrum fendleri Engelm. ex A. Gray	Fendler's meadow-rue	N
RHAMNACEAE	**BUCKTHORN FAMILY**	
Ceanothus tomentosus Parry	coast blue lilac	N
Rhamnus crocea Nutt.	spiny redberry	N
ROSACEAE	**ROSE FAMILY**	
Adenostoma fasciculatum Hook. & Arn.	chamise	N
Drymocallis [=*Potentilla*] *glandulosa (Lindl.) Rydb.*	sticky cinquefoil	N
Heteromeles arbutifolia (Lindl.) M. Roem.	toyon, Christmas berry	N
Prunus ilicifolia (Nutt. ex Hook. & Arn.) Walp. ssp. *ilicifolia*	holly-leafed cherry, islay	N
RUBIACEAE	**MADDER OR COFFEE FAMILY**	
Galium angustifolium A. Gray ssp. *angustifolium*	narrow-leaf bedstraw	N
Galium aparine L.	goose grass, stickywilly	N
SALICACEAE	**WILLOW FAMILY**	
Salix gooddingii C.R. Ball.	Goodding's black willow	N
SAXIFRAGACEAE	**SAXIFRAGE FAMILY**	
Jepsonia parryi (Torr.) Small	mesa saxifrage	N
SCROPHULARIACEAE	**FIGWORT FAMILY**	
Castilleja densiflora (Benth.) T.I. Chuang & Heckard ssp. *gracilis* (Benth.) Chuang & Heckard	owl's clover	N
Castilleja exserta (A.A. Heller) T.I. Chuang & Heckard	purple owl's clover	N
Castilleja foliolosa Hook. & Arn.	woolly Indian paintbrush	N
Scrophularia californica Cham. & Schltdl.	California figwort	N
SOLANACEAE	**NIGHTSHADE FAMILY**	
Solanum parishii A. Heller	Parish's nightshade	N
TAMARICACEAE	**TAMARISK FAMILY**	
Tamarix ramosissima Ledeb.	saltcedar	I
VIOLACEAE	**VIOLET FAMILY**	
Viola pedunculata Torr. & A. Gray	johnny-jump-up	N

ATTACHMENT 1
PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

SOURCES: Jepson Online Interchange <http://ucjeps.berkeley.edu/interchange.html> (2009); K. N. Brenzel (editor), *Sunset Western Garden Book* (Sunset Publishing, Menlo Park, CA, 2001); John P. Rebman and Michael G. Simpson, *Checklist of the Vascular Plants of San Diego County,* 4th ed. (San Diego Natural History Museum, San Diego, CA, 2006); USDA Plants Database <http://plants.usda.gov/> (2008).

ORIGIN
N = Native to locality
I = Introduced species from outside locality

ATTACHMENT 2

ATTACHMENT 2
WILDLIFE SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
INVERTEBRATES (Nomenclature from Milne and Milne 1980; Mattoni 1990; and Opler and Wright 1999)			
ARTIIDAE	**MOTHS**		
Pyrrharctia isabella	banded wooly bear		
HESPERIIDAE	**SKIPPERS**		
Euphyes vestris harbisoni	Harbison's dun skipper		
Heliopetes ericetorum	northern white skipper		
Pyrgus communis	common checkered skipper		
PAPILIONIDAE	**PARNASSIANS & SWALLOWTAILS**		
Papilio eurymedon	pale swallowtail		
Papilio rutulus	western tiger swallowtail		
PIERIDAE	**WHITES & SULPHURS**		
Anthocharis sara	Sara or Pacific orangetip	CC, SMC	
Pontia protodice	common or checkered white		
Pieris rapae	cabbage white		
LYCAENIDAE	**BLUES, COPPERS, & HAIRSTREAKS**		
Callophrys dumetorum	bramble or coastal green hairstreak	CSS, CC, SMC	
Glaucopsyche lygdamus australis	southern or silvery blue	CC, SMC	
Icaricia acmon acmon	Acmon blue		
Leptotes marina	marine blue		
Strymon melinus pudica	common or gray hairstreak		
RIODINIDAE	**METALMARKS**		
Apodemia virgulti	Behr's metalmark		
NYMPHALIDAE	**BRUSH-FOOTED BUTTERFLIES**		
Coenonympha tullia california	California or common ringlet	CSS, SICF	
Chlosyne gabbii	Gabb's checkerspot	CC, SMC, SICF	
	unknown frittillary	CC, SMC	
Junonia coenia	common buckeye	CC, SMC	
Nymphalis antiopa antiopa	mourning cloak		
Speyeria callippe comstocki	Comstock's fritillary		
Vanessa sp.	unknown lady butterfly		

ATTACHMENT 2
WILDLIFE SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
AMPHIBIANS (Nomenclature from Crother 2001 and Crother et al. 2003)			
HYLIDAE	**TREE FROGS**		
Pseudacris regilla	Pacific treefrog	SRS	
REPTILES			
IGUANIDAE	**IGUANID LIZARDS**		
Phrynosoma blainvilli [=*Phrynosoma coronatum* blainvillii]	coast horned lizard		
Sceloporus occidentalis	western fence lizard		
Sceloporus orcutti	granite spiny lizard		
TEIIDAE	**WHIPTAIL LIZARDS**		
Aspidoscelis hyperythra beldingi	Belding's orange-throated whiptail		
Aspidoscelis tigris stejnegeri	coastal whiptail		
COLUBRIDAE	**COLUBRID SNAKES**		
Masticophis lateralis lateralis	California striped racer		
Thamnophis hammondii	two-striped gartersnake		
CROTALIDAE	**RATTLESNAKES**		
Crotalus ruber	red diamond rattlesnake		
Crotalus mitchellii pyrrhus	southwestern speckled rattlesnake		
BIRDS (Nomenclature from American Ornithologists' Union 1998 and Unitt 2004)			
ODONTOPHORIDAE	**NEW WORLD QUAIL**		
Callipepla californica californica	California quail	CSS, CC, SMC	Y
ACCIPITRIDAE	**HAWKS, KITES, & EAGLES**		
Accipiter cooperii	Cooper's hawk	FO	Y
Buteo jamaicensis	red-tailed hawk	CC, SMC, FO, NNG	Y
Circus cyaneus hudsonius	northern harrier	FO	Y
COLUMBIDAE	**PIGEONS & DOVES**		
Zenaida macroura marginella	mourning dove	CSS, SRS, CC, SMC	Y
CUCULIDAE	**CUCKOOS & ROADRUNNERS**		
Geococcyx californianus	greater roadrunner	SICF	Y

ATTACHMENT 2
WILDLIFE SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
CAPRIMULGIDAE	**GOATSUCKERS**		
Chordeiles acutipennis texensis	lesser nighthawk	CC, SMC	S
TROCHILIDAE	**HUMMINGBIRDS**		
Calypte anna	Anna's hummingbird	CSS, CC, SMC	Y
Calypte costae	Costa's hummingbird	CSS, CC, SMC, SRS, SICF	S
PICIDAE	**WOODPECKERS & SAPSUCKERS**		
Colaptes auratus	northern flicker	CC, SMC	Y
TYRANNIDAE	**TYRANT FLYCATCHERS**		
Empidonax difficilis	Pacific slope flycatcher	SRS	S
Sayornis nigricans semiatra	black phoebe	CSS, SRS	Y
LANIIDAE	**SHRIKES**		
Lanius ludovicianus	loggerhead shrike	CSS, CC, SMC	Y
VIREONIDAE	**VIREOS**		
Vireo gilvus	warbling vireo	NNG	S
CORVIDAE	**CROWS, JAYS, & MAGPIES**		
Corvus brachyrhynchos hesperis	American crow	CC, SMC, FO	Y
Corvus corax clarionensis	common raven	CC, SMC, FO	Y
ALAUDIDAE	**LARKS**		
Eremophila alpestris actia	California horned lark	CSS, CC, SMC	Y
HIRUNDINIDAE	**SWALLOWS**		
Petrochelidon pyrrhonota tachina	cliff swallow	FO	S
Tachycineta bicolor	tree swallow	CC, SMC	S
AEGITHALIDAE	**BUSHTIT**		
Psaltriparus minimus minimus	bushtit	CSS, CC, SMC	Y
TROGLODYTIDAE	**WRENS**		
Catherpes mexicanus conspersus	canyon wren	CSS	Y
Salpinctes obsoletus obsoletus	rock wren	CSS, CC, SMC, NNG	Y
Thryomanes bewickii	Bewick's wren	CSS	Y
Troglodytes aedon parkmanii	house wren	CSS, SRS	Y

ATTACHMENT 2
WILDLIFE SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
SYLVIIDAE	**GNATCATCHERS**		
Polioptila californica californica	coastal California gnatcatcher	CC, SMC	Y
TIMALIIDAE	**BABBLERS**		
Chamaea fasciata henshawi	wrentit	CSS, CC, SMC	Y
MIMIDAE	**MOCKINGBIRDS & THRASHERS**		
Mimus polyglottos polyglottos	northern mockingbird	CSS, CC, SMC	Y
PARULIDAE	**WOOD WARBLERS**		
Dendroica coronata	yellow-rumped warbler	CSS, CC, SMC, SRS	W
Geothlypis trichas	common yellowthroat	CC, SMC, SRS, SICF	Y
Icteria virens auricollis	yellow-breasted chat	SRS	Y
Vermivora celata	orange-crowned warbler	CC, SMC	Y
Wilsonia pusilla	Wilson's warbler	NNG	M
EMBERIZIDAE	**EMBERIZIDS**		
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	CSS, CC, SMC, SRS	Y
Amphispiza belli belli	Bell's sage sparrow	CSS, CC, SMC, NNG	Y
Chondestes grammacus strigatus	lark sparrow	CC, SMC	Y
Passerculus sandwichensis nevadensis	savannah sparrow	NG	Y
Pipilo crissalis	California towhee	CSS, CC, SMC, SRS	Y
Pipilo maculatus	spotted towhee	CSS, SRS	Y
Zonotrichia leucophrys	white-crowned sparrow	CSS, CC, SMC	W
CARDINALIDAE	**CARDINALS & GROSBEAKS**		
Pheucticus melanocephalus maculatus	black-headed grosbeak	CSS, SRS	S
ICTERIDAE	**BLACKBIRDS & NEW WORLD ORIOLES**		
Icterus cucullatus nelsoni	hooded oriole	CSS, SRS	S
Sturnella neglecta	western meadowlark	CSS, CC, SMC, NG	Y
FRINGILLIDAE	**FINCHES**		
Carduelis psaltria hesperophilus	lesser goldfinch	CSS, , CC, SMC, SRS	Y
Carpodacus mexicanus frontalis	house finch	CSS, SRS	Y
MAMMALS (Nomenclature from Baker et al. 2003)			
LEPORIDAE	**RABBITS & HARES**		
Lepus californicus bennettii	San Diego black-tailed jackrabbit	CC, SMC	

ATTACHMENT 2
WILDLIFE SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
Sylvilagus audubonii	desert cottontail	CSS, CC, SMC	
SCIURIDAE	**SQUIRRELS & CHIPMUNKS**		
Spermophilus beecheyi	California ground squirrel	SICF, CSS	
GEOMYIDAE	**POCKET GOPHERS**		
Thomomys bottae	Botta's pocket gopher	SRS	
MURIDAE	**OLD WORLD MICE & RATS (I)**		
Neotoma sp.	woodrat	CC, SMC	
Peromyscus sp.	mouse		
CERVIDAE	**DEER**		
Odocoileus hemionus	southern mule deer	CC, SMC	

(I) = Introduced species

HABITATS
CC = Chamise Chaparral
CSS = Diegan Coastal sage scrub
CS-CT= Coastal Sage-Chaparral Transition
NG = Native Grassland
SICF = Southern Interior Cypress Forest
SMC = Southern Mixed Chaparral
SRS = Southern Riparian Scrub
WF = Wildflower Field
FO = Flying Overhead

SEASONALITY (birds only)
A = Accidental; species not known to occur under normal conditions; may be an off-course migrant
M = Migrant; uses site for brief periods of time, primarily during spring and fall months
S = Spring/summer resident; probable breeder on-site or in vicinity
T = Transient; uses site regularly but unlikely to breed on-site
V = Rare vagrant
W = Winter visitor; does not breed locally
Y = Year-round resident; probable breeder on-site or in vicinity

ATTACHMENT 3

ATTACHMENT 3
SENSITIVE PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS

Species	State/Federal Status	CNPS List	City of Chula Vista	Habitat/Blooming Period
LYCOPODS				
SELAGINELLACEAE SPIKE-MOSS FAMILY				
Selaginella cinerascens Ashy spike-moss	–/–	4.1	–	Perennial herb (rhizomatous); chaparral, coastal-scrub; elevation 60-2,100 feet.
GYMNOSPERMS				
CUPRESSACEAE CYPRESS FAMILY				
Hesperocyparis forbesii Tecate cypress	–/–	1B.1	MSCP	Evergreen tree; closed-cone coniferous forest, chaparral; Otay Mountain; elevation 700–5,000 feet.
ANGIOSPERMS: MONOCOTS				
JUNCACEAE RUSH FAMILY				
Juncus acutus ssp. *leopoldii* spiny rush	–/–	4.2	–	Perennial herb; coastal dunes, meadows and seeps, coastal salt marsh, riparian; blooms May–June; elevation less than 3,000 feet.
POACEAE GRASS FAMILY				
Achnatherum diegoensis San Diego County needlegrass	–/–	4.1	–	Perennial herb; rocky soils, chaparral, coastal sage scrub, often near streams; blooms Feb.–June; elevation less than 2,300 feet.
THEMIDACEAE				
Brodiaea orcuttii Orcutt's brodiaea	–/–	1B.1	NE, MSCP	Perennial herb (bulbiferous); closed cone coniferous forest, chaparral, meadows and seeps, valley and foothill grassland, vernal pools, mesic, clay soil; blooms May–July; elevation less than 5,300 feet.

ATTACHMENT 3
SENSITIVE PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Species	State/Federal Status	CNPS List	City of Chula Vista	Habitat/Blooming Period
ANGIOSPERMS: DICOTS				
ASTERACEAE **SUNFLOWER FAMILY**				
Iva hayesiana San Diego marsh-elder	–/–	2.2	–	Perennial herb; marshes and swamps, playas, riparian areas; blooms April–Sept.; elevation below 1,700 feet.
CACTACEAE **CACTUS FAMILY**				
Ferocactus viridescens San Diego barrel cactus	–/–	2.1	MSCP	Succulent; chaparral, coastal sage scrub, valley and foothill grassland, vernal pools; blooms May–June; elevation less than 1,500 feet.
FABACEAE **LEGUME FAMILY**				
Hosackia crassifolia var. *otayensis* [=*Lotus crassifolius* var. *otayensis*] Otay Mountain lotus	–/–	1B.1	–	Perennial herb; chaparral, metavolcanic substrate, often in disturbed areas; blooms May–Aug.; elevation 3,000–3,300 feet. Known only from Otay Mountain and one occurrence in Baja California.
LAMIACEAE **MINT FAMILY**				
Monardella stoneana Jennifer's monardella	–/–	1B.2	–	Perennial herb; closed-cone coniferous forest, chaparral, coastal scrub, riparian scrub, usually in rocky intermittent streambeds; blooms June-September; elevation 30-2,600 feet.
Salvia munzii Munz's sage	–/–	2.2	–	Evergreen shrub; chaparral, coastal sage scrub, blooms Feb.–April; elevation less than 3,500 feet.
ROSACEAE **ROSE FAMILY**				
Stemodia durantifolia purple stemodia	–/–	2.1	–	Perennial herb; Riparian habitats, on wet sand or rocks, drying streambeds; blooms Jan. – Dec.; elevation 600–1,000 feet.

ATTACHMENT 3
SENSITIVE PLANT SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

FEDERAL CANDIDATES AND LISTED PLANTS

FE = Federally listed endangered
FT = Federally listed threatened
FC = Federal candidate for listing as endangered or threatened

STATE LISTED PLANTS

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

CALIFORNIA NATIVE PLANT SOCIETY Rare Plant Rankings

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 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.
.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
.2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
.3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

CITY OF CHULA VISTA

NE = Narrow endemic
MSCP = Multiple Species Conservation Program covered species

ATTACHMENT 4

ATTACHMENT 4
SENSITIVE WILDLIFE SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS

Species	Status	Habitat
INVERTEBRATES (Nomenclature from Mattoni 1990; and Opler and Wright 1999)		
HESPERIIDAE SKIPPERS		
Harbison's dun skipper *Euphyes vestris harbisoni*	*	Woodland meadows, bogs, grasslands. Host plant *Carex spissa.* Adult emergence late May–early July.
REPTILES (Nomenclature from Crother 2008)		
IGUANIDAE IGUANID LIZARDS		
Coast horned lizard *Phrynosoma blainvillii*	CSC, MSCP, *	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage.
TEIIDAE WHIPTAIL LIZARDS		
Belding's orange-throated whiptail *Aspidoscelis hyperythra beldingi*	CSC, MSCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.
COLUBRIDAE COLUBRID SNAKES		
Two-striped gartersnake *Thamnophis hammondii*	CSC, *	Permanent freshwater streams with rocky bottoms. Mesic areas.
BIRDS (Nomenclature from American Ornithologists' Union 1998 and Unitt 1984, 2004)		
ACCIPITRIDAE HAWKS, KITES, & EAGLES		
Cooper's hawk (nesting) *Accipiter cooperii*	CSC, MSCP	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas. Migrant and winter visitor.
Northern harrier (nesting) *Circus cyaneus hudsonius*	CSC, MSCP	Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident.

ATTACHMENT 4
SENSITIVE WILDLIFE SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

Species	Status	Habitat
ALAUDIDAE LARKS		
California horned lark *Eremophila alpestris actia*	*	Sandy shores, mesas, disturbed areas, grasslands, agricultural lands, sparse creosote bush scrub.
SYLVIIDAE GNATCATCHERS		
Coastal California gnatcatcher *Polioptila californica californica*	FT, CSC, MSCP	Coastal sage scrub, maritime succulent scrub. Resident.
PARULIDAE WOOD WARBLERS		
Yellow-breasted chat (nesting) *Icteria virens auricollis*	CSC	Dense riparian woodland. Localized summer resident.
EMBERIZIDAE EMBERIZIDS		
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	CSC, MSCP	Coastal sage scrub, chaparral, grassland. Resident.
Bell's sage sparrow *Amphispiza belli belli*	CSC	Chaparral, coastal sage scrub. Localized resident.
MAMMALS (Nomenclature from Baker et al. 2003, Jones et al. 1997, and Hall 1981)		
LEPORIDAE RABBITS & HARES		
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	CSC	Open areas of scrub, grasslands, agricultural fields.
CERVIDAE DEER		
Southern mule deer *Odocoileus hemionus*	MSCP	Many habitats.

ATTACHMENT 4
SENSITIVE WILDLIFE SPECIES OBSERVED - NORTHERN SAN YSIDRO PARCELS
(continued)

STATUS CODES

Listed/Proposed
FE = Listed as endangered by the federal government
FPE = Federally proposed endangered
FPT = Federally proposed threatened
FT = Listed as threatened by the federal government
SE = Listed as endangered by the state of California
ST = Listed as threatened 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)
MSCP = Multiple Species Conservation Program covered species
PSE = Proposed as endangered by the state of California
* = 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
- 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)

ATTACHMENT 5

ATTACHMENT 5
PLANT SPECIES OBSERVED - MCMILLIN PARCELS

Scientific Name	Common Name	Origin
LYCOPODS		
SELAGINELLACEAE	**SPIKE-MOSS FAMILY**	
Selaginella bigelovii L. Underw.	Bigelow spike-moss	N
Selaginella cinerascens A.A. Eaton	ashy spike-moss	N
FERNS		
AZOLLACEAE	**MOSQUITO FERN FAMILY**	
Azolla filiculoides Lam.	Pacific mosquito fern	N
PTERIDACEAE	**BRAKE FAMILY**	
Adiantum jordanii Mull. Hal.	California maiden-hair	N
Aspidotis californica (Hook.) Copel.	California lace fern	N
Cheilanthes sp.	lip fern	N
Pellaea mucronata (D. C. Eaton) D. C. Eaton var. *mucronata*	bird's-foot fern	N
Pentagramma triangularis (Kaulf.) Yatsk. Windham & E. Wollenw. ssp. *viscosa* (D.C. Eaton) Yatsk., Windham & E. Wollenw.	silverback fern	N
GYMNOSPERMS		
CUPRESSACEAE	**CYPRESS FAMILY**	
Hesperocyparis forbesii (Jeps.) Bartel [=*Callitropsis forbesii*]	Tecate cypress	N
ANGIOSPERMS: MONOCOTS		
AGAVACEAE	**AGAVE FAMILY**	
Chlorogalum parviflorum S. Watson	smallflower soap plant	N
Yucca whipplei Torr.	our Lord's candle	N
ALLIACEAE	**ONION FAMILY**	
Allium praecox Brandegee	common wild onion	N
ARECACEAE	**PALM FAMILY**	
Washingtonia robusta H. Wendl.	Washington fan palm	I
CYPERACEAE	**SEDGE FAMILY**	
Cyperus eragrostis Lam.	tall flatsedge	N
Eleocharis macrostachya Britton	pale spike-rush	N
Schoenoplectus [=*Scirpus*] *americanus* (Pers.) Volkart ex Schinz & R. Keller	three-square	N
Schoenoplectus [=*Scirpus*] *californicus* (C.A. Mey.) Soják	California bulrush	N
Scirpus microcarpus J. Presl & C. Presl	small-fruited bulrush	N

ATTACHMENT 5
PLANT SPECIES OBSERVED - MCMILLIN PARCELS
(continued)

Scientific Name	Common Name	Origin
IRIDACEAE	**IRIS FAMILY**	
Sisyrinchium bellum S. Watson	blue-eyed-grass	N
JUNCACEAE	**RUSH FAMILY**	
Juncus acutus L. ssp. *leopoldii* (Parl.) Snogerup	spiny rush	N
LILIACEAE	**LILY FAMILY**	
Calochortus splendens Benth.	lilac mariposa	N
Calochortus weedii A.W. Wood var. *weedii*	weed mariposa	N
POACEAE (GRAMINEAE)	**GRASS FAMILY**	
Achnatherum coronatum (Thurb.) Barkworth	giant stipa	N
Achnatherum diegoensis (Swallen) Barkworth	San Diego County needlegrass	N
Avena barbata Link	slender wild oat	I
Avena fatua L.	wild oat	I
Bothriochloa barbinodis (Lag.) Herter	cane bluestem	N
Brachypodium distachyon (L.) P. Beauv.	purple falsebrome	I
Bromus diandrus Roth	ripgut grass	I
Bromus hordeaceus L.	soft chess	I
Bromus madritensis L. ssp. *rubens* (L.) Husnot	red brome	I
Bromus sterilis L.	barren brome, poverty brome	I
Cynodon dactylon (L.) Pers.	Bermuda grass	I
Gastridium ventricosum (Gouan) Schinz & Thell.	nit grass	I
Lamarckia aurea (L.) Moench	goldentop	I
Lolium multiflorum Lam.	Italian ryegrass	I
Melica frutescens Scribn.	melic grass	N
Melica imperfecta Trin.	California melic	N
Muhlenbergia microsperma (DC.) Kunth	littleseed muhly	N
Nassella pulchra (Hitchc.) Barkworth	purple needlegrass	N
Pennisetum setaceum (Forssk.) Chiov.	fountain grass	I
Polypogon monspeliensis (L.) Desf.	annual beard grass	I
Vulpia myuros (L.) C.C. Gmel	rattail fescue	I
THEMIDACEAE	**BRODIAEA FAMILY**	
Dichelostemma capitatum (Benth.) A.W. Wood	blue dicks	N
TYPHACEAE	**CATTAIL FAMILY**	
Typha sp.	cattail	N

ATTACHMENT 5
PLANT SPECIES OBSERVED - MCMILLIN PARCELS
(continued)

Scientific Name	Common Name	Origin
	ANGIOSPERMS: DICOTS	
ANACARDIACEAE	**SUMAC OR CASHEW FAMILY**	
Malosma laurina Nutt. ex Abrams	laurel sumac	N
Toxicodendron diversilobum (Torr. & A. Gray) Greene	western poison oak	N
APIACEAE (UMBELLIFERAE)	**CARROT FAMILY**	
Daucus pusillus Michx.	rattlesnake weed	N
Sanicula arguta J.M. Coult. & Rose	little-jim sanicle	N
ASTERACEAE	**SUNFLOWER FAMILY**	
Acourtia microcephala DC.	purple-head, sacapellote	N
Ambrosia psilostachya DC.	western ragweed	N
Artemisia californica Less.	California sagebrush	N
Baccharis salicifolia (Ruiz & Pav.) Pers.	mule fat, seep-willow	N
Baccharis sarothroides A. Gray	broom baccharis	N
Bahiopsis [=*Viguiera*] *laciniata* (A. Gray) E.E. Schilling & Panero	San Diego County viguiera	N
Brickellia californica (Torr. & A. Gray) A. Gray	California brickellbush	N
Carduus pycnocephalus L.	Italian thistle	I
Centaurea melitensis L.	tocalote, star-thistle	I
Cirsium vulgare (Savi) Ten.	bull thistle	I
Corethrogyne filaginifolia [= all previously known *Lessingia filaginifolia* varieties in California] (Hook. & Arn.) Nutt.	California-aster	N
Cotula coronopifolia L.	brass-buttons	I
Cynara cardunculus L.	cardoon, artichoke thistle	I
Deinandra [=*Hemizonia*] *fasciculata* (DC.) Greene	golden tarplant	N
Eriophyllum confertiflorum (DC.) A. Gray var. *confertiflorum*	golden-yarrow	N
Gnaphalium californicum DC.	green everlasting	N
Gutierrezia californica (DC.) Torr. & A. Gray	California matchweed	N
Hazardia squarrosa (Hook. & Arn.) Greene	saw-toothed goldenbush	N
Heterotheca grandiflora Nutt.	telegraph weed	N
Hypochaeris glabra L.	smooth cat's-ear	I
Isocoma menziesii (Hook. & Arn.) G. L. Nesom var. *decumbens* (Greene) G. L. Nesom	decumbent goldenbush	N
Iva hayesiana A. Gray	San Diego marsh-elder	N
Lactuca serriola L.	prickly lettuce	I
Lasthenia gracilis DC. (Greene).	goldfields	N
Logfia [=*Filago*] *arizonica* (A. Gray) Holub	Arizona herba impia	N
Logfia [=*Filago*] *gallica* (L.) Cross. & Germ.	narrow-leaf herba impia	I

ATTACHMENT 5
PLANT SPECIES OBSERVED - MCMILLIN PARCELS
(continued)

Scientific Name	Common Name	Origin
Microseris douglasii (DC.) Sch. Bip. var. *platycarpha* (A. Gray) B. L. Turner	small-flowered microseris	N
Osmadenia tenella Nutt.	osmadenia	N
Pentachaeta aurea Nutt.	golden-rayed pentachaeta	N
Porophyllum gracile Benth.	odora	N
Psilocarphus tenellus Nutt.	slender woolly marbles	N
Stylocline gnaphaloides Nutt.	everlasting nest straw	N
BORAGINACEAE	**BORAGE FAMILY**	
Cryptantha sp.	cryptantha	N
Phacelia cicutaria Greene var. *hispida* (A. Gray) J.T. Howell	caterpillar phacelia	N
Plagiobothrys sp.	popcornflower	N
BRASSICACEAE (CRUCIFERAE)	**MUSTARD FAMILY**	
Brassica nigra (L.) W.D.J. Koch	black mustard	I
Hirschfeldia incana (L.) Lagr.-Fossat	short-pod mustard	I
Lepidium sp.	peppergrass	N/I
CACTACEAE	**CACTUS FAMILY**	
Ferocactus viridescens (Torr. & A. Gray) Britton & Rose	San Diego barrel cactus	N
CALLITRICHACEAE	**WATER-STARWORT FAMILY**	
Callitriche marginata Torr.	water-starwort	N
CAPRIFOLIACEAE	**HONEYSUCKLE FAMILY**	
Lonicera subspicata Hook. & Arn.	southern honeysuckle	N
CARYOPHYLLACEAE	**PINK FAMILY**	
Silene gallica L.	windmill pink	I
CHENOPODIACEAE	**GOOSEFOOT FAMILY**	
Salsola tragus L.	Russian thistle, tumbleweed	I
CISTACEAE	**ROCK-ROSE FAMILY**	
Helianthemum scoparium Nutt.	peak rush-rose	N
CONVOLVULACEAE	**MORNING-GLORY FAMILY**	
Calystegia macrostegia (Greene) Brummitt	chaparral morning-glory	N
Cuscuta californica Hook. & Arn.	chaparral dodder	N
Dichondra occidentalis House	western dichondra	N
CRASSULACEAE	**STONECROP FAMILY**	
Crassula connata (Ruiz & Pav.) A. Berger	pygmy-weed	N
Dudleya edulis (Nutt.) Moran	lady fingers	N
Dudleya pulverulenta (Nutt.) Britton & Rose	chalk lettuce, chalk dudleya	N
Dudleya variegata (S. Watson) Moran	variegated dudleya	N

ATTACHMENT 5
PLANT SPECIES OBSERVED - MCMILLIN PARCELS
(continued)

Scientific Name	Common Name	Origin
CUCURBITACEAE	**GOURD FAMILY**	
Marah macrocarpus (Greene) Greene	wild cucumber	N
ERICACEAE	**HEATH FAMILY**	
Arctostaphylos glandulosa Eastw.	Eastwood manzanita	N
Xylococcus bicolor Nutt.	mission manzanita	N
EUPHORBIACEAE	**SPURGE FAMILY**	
Croton [=*Eremocarpus*] *setigerus* Hook.	dove weed	N
FABACEAE (LEGUMINOSAE)	**LEGUME FAMILY**	
Acmispon americanus (Nutt.) Rydb. var. *americanus* [=*Lotus purshianus* var. *purshianus*]	Spanish-clover	N
Acmispon glaber (Vogel) Brouillet [=*Lotus scoparius*]	deerweed	N
Acmispon micranthus (Torr. & A. Gray) Brouillet [=*Lotus hamatus*]	grab lotus	N
Hosackia crassifolia Benth. var. *otayensis* (Moran ex Isely) Brouillet [=*Lotus crassifolia* var. *otayensis*]	Otay Mountain lotus	N
Lathyrus vestitus Nutt. var. *alefeldii* (T. G. White) Isely	wild sweet pea	N
Lupinus bicolor Lindl.	miniature lupine	N
FAGACEAE	**OAK FAMILY**	
Quercus berberidifolia Liebm.	scrub oak	N
GENTIANACEAE	**GENTIAN FAMILY**	
Zeltnera [=*Centaurium*] *venusta* (A. Gray) G. Mans.	California centaury	N
GERANIACEAE	**GERANIUM FAMILY**	
Erodium texanum A. Gray	Texas filaree	N
GROSSULARIACEAE	**GOOSEBERRY FAMILY**	
Ribes indecorum Eastw.	white flowering currant	N
LAMIACEAE	**MINT FAMILY**	
Salvia apiana Jeps.	white sage	N
LYTHRACEAE	**LOOSESTRIFE FAMILY**	
Lythrum californicum Torr. & A. Gray	California loose-strife	N
Lythrum hyssopifolia L.	grass poly, hyssop loosestrife	I
MALVACEAE	**MALLOW FAMILY**	
Malacothamnus fasciculatus (Nutt. ex Torr. & A. Gray) Greene	chaparral mallow	N
Sidalcea sparsifolia (C. L. Hitchc.) S. R. Hill	checker-bloom	N
MONTIACEAE	**MONTIA FAMILY**	
Claytonia parviflora Hook. ssp. *parviflora*	Utah miner's-lettuce	N

ATTACHMENT 5
PLANT SPECIES OBSERVED - MCMILLIN PARCELS
(continued)

Scientific Name	Common Name	Origin
MYRSINACEAE		
Anagallis arvensis L.	scarlet pimpernel, poor-man's weatherglass	I
NYCTAGINACEAE	**FOUR O'CLOCK FAMILY**	
Mirabilis laevis [=*californica*] (Benth.) Curran var. *crassifolia* (Choisy) Spellenb.	wishbone bush	N
ONAGRACEAE	**EVENING-PRIMROSE FAMILY**	
Epilobium canum (Greene) P.H. Raven ssp. *canum*	California fuchsia, zauschneria	N
OXALIDACEAE	**OXALIS FAMILY**	
Oxalis corniculata L. ssp. *pilosa* (Nutt.) Lourteig [=*Oxalis albicans* ssp. *pilosa*]	hairy oxalis	N
PAPAVERACEAE	**POPPY FAMILY**	
Romneya trichocalyx Eastw.	hairy matilija poppy	N
PHRYMACEAE [=SCROPHULARIACEAE]	**HOPSEED FAMILY**	
Mimulus aurantiacus Curtis	bush monkey-flower	N
Mimulus guttatus DC.	common monkey-flower	N
PLANTAGINACEAE	**PLANTAIN FAMILY**	
Antirrhinum kelloggii Greene	climbing snapdragon	N
Penstemon spectabilis Thurb. ex A. Gray	violet beard-tongue	N
Plantago erecta E. Morris	dot-seed plantain	N
POLEMONIACEAE	**PHLOX FAMILY**	
Gilia sp.	gilia	N
Linanthus dianthiflorus (Benth.) Greene	farinose ground pink	N
Navarretia hamata Greene	hooked navarretia	N
POLYGONACEAE	**BUCKWHEAT FAMILY**	
Chorizanthe fimbriata Nutt.	fringed spineflower	N
Eriogonum fasciculatum Benth. var. *foliolosum* (Nutt.) S. Stokes ex Abrams	inland California buckwheat	N
Pterostegia drymarioides Fisch. & C.A. Mey.	California thread-stem	N
Rumex crispus L.	curly dock	I
PRIMULACEAE	**PRIMROSE FAMILY**	
Dodecatheon clevelandii Greene ssp. *clevelandii*	shooting star, wild cyclamen	N
RANUNCULACEAE	**BUTTERCUP FAMILY**	
Delphinium cardinale Hook.	scarlet larkspur, cardinal larkspur	N
Thalictrum fendleri Engelm. ex A. Gray	Fendler's meadow-rue	N

ATTACHMENT 5
PLANT SPECIES OBSERVED - MCMILLIN PARCELS
(continued)

Scientific Name	Common Name	Origin
Ceanothus oliganthus Nutt.	hairy ceanothus	N
Ceanothus tomentosus Parry	coast blue lilac	N
Rhamnus crocea Nutt.	spiny redberry	N
ROSACEAE	**ROSE FAMILY**	
Adenostoma fasciculatum Hook. & Arn.	chamise	N
Heteromeles arbutifolia (Lindl.) M. Roem.	toyon, Christmas berry	N
Prunus ilicifolia (Nutt. ex Hook. & Arn.) Walp. ssp. *ilicifolia*	holly-leafed cherry, islay	N
RUBIACEAE	**MADDER OR COFFEE FAMILY**	
Galium angustifolium A. Gray ssp. *angustifolium*	narrow-leaf bedstraw	N
Galium aparine L.	goose grass, stickywilly	N
SALICACEAE	**WILLOW FAMILY**	
Salix exigua Nutt.	narrow-leaved willow	N
Salix gooddingii C.R. Ball.	Goodding's black willow	N
Salix lasiolepis Benth.	arroyo willow	N
SAXIFRAGACEAE	**SAXIFRAGE FAMILY**	
Jepsonia parryi (Torr.) Small	mesa saxifrage	N
SCROPHULARIACEAE	**FIGWORT FAMILY**	
Castilleja affinis Hook. & Arn. ssp. *affinis*	coast paintbrush	N
Castilleja exserta (A.A. Heller) T.I. Chuang & Heckard	purple owl's clover	N
Scrophularia californica Cham. & Schltdl.	California figwort	N
SOLANACEAE	**NIGHTSHADE FAMILY**	
Solanum parishii A. Heller	Parish's nightshade	N
Solanum xanti [=*tenuilobatum*] A. Gray	chaparral nightshade	N
TAMARICACEAE	**TAMARISK FAMILY**	
Tamarix ramosissima Ledeb.	saltcedar	I
VERBENACEAE	**VERVAIN FAMILY**	
Verbena lasiostachys Link	western vervain	N
VIOLACEAE	**VIOLET FAMILY**	
Viola pedunculata Torr. & A. Gray	johnny-jump-up	N

SOURCES: Jepson Online Interchange <http://ucjeps.berkeley.edu/interchange.html> (2009); K. N. Brenzel (editor), *Sunset Western Garden Book* (Sunset Publishing, Menlo Park, CA, 2001); John P. Rebman and Michael G. Simpson, *Checklist of the Vascular Plants of San Diego County,* 4th ed. (San Diego Natural History Museum, San Diego, CA, 2006); USDA Plants Database <http://plants.usda.gov/> (2008).

ORIGIN
N = Native to locality
I = Introduced species from outside locality

ATTACHMENT 6

ATTACHMENT 6
WILDLIFE SPECIES OBSERVED - McMILLIN PARCELS

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
INVERTEBRATES (Nomenclature from Milne and Milne 1980; Mattoni 1990; and Opler and Wright 1999)			
HESPERIIDAE	**SKIPPERS**		
Erynnis funeralis	funereal duskywing		
Pyrgus communis	common checkered skipper		
PAPILIONIDAE	**PARNASSIANS & SWALLOWTAILS**		
Papilio eurymedon	pale swallowtail		
Papilio rutulus	western tiger swallowtail		
PIERIDAE	**WHITES & SULPHURS**		
Anthocharis sara	Sara or Pacific orangetip		
Colias eurytheme	alfalfa or orange sulphur		
Pontia protodice	common or checkered white		
Pieris rapae	cabbage white		
LYCAENIDAE	**BLUES, COPPERS, & HAIRSTREAKS**		
Callophrys dumetorum	bramble or coastal green hairstreak		
Glaucopsyche lygdamus australis	southern or silvery blue		
RIODINIDAE	**METALMARKS**		
Apodemia virgulti	Behr's metalmark		
NYMPHALIDAE	**BRUSH-FOOTED BUTTERFLIES**		
Chlosine gabbii	Gabb's checkerspot		
Coenonympha tullia california	California or common ringlet		
Euphydryas editha quino	Quino checkerspot		
Junonia coenia	common buckeye		
Speyeria callippe comstocki	Comstock's fritillary		
Vanessa annabella	west coast lady		
Vanessa cardui	painted lady		

ATTACHMENT 6
WILDLIFE SPECIES OBSERVED - McMILLIN PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
AMPHIBIANS (Nomenclature from Crother 2001 and Crother et al. 2003)			
PELOBATIDAE	**SPADEFOOT TOADS**		
Spea hammondii	western spadefoot		
HYLIDAE	**TREE FROGS**		
Pseudacris regilla	Pacific treefrog	CVFM	
RANIDAE	**TRUE FROGS**		
Rana catesbeiana	American bullfrog	CVFM	
REPTILES (Nomenclature from Crother 2001 and Crother et al. 2003)			
IGUANIDAE	**IGUANID LIZARDS**		
Sceloporus occidentalis	western fence lizard		
Sceloporus orcutti	granite spiny lizard		
Uta stansburiana	common side-blotched lizard		
TEIIDAE	**WHIPTAIL LIZARDS**		
Aspidoscelis tigris stejnegeri	coastal whiptail		
COLUBRIDAE	**COLUBRID SNAKES**		
Masticophis lateralis lateralis	California striped racer		
Thamnophis hammondii	two-striped gartersnake	CVFM, SRS	
CROTALIDAE	**RATTLESNAKES**		
Crotalus viridis helleri	southern Pacific rattlesnake	CVFM, CSS	
BIRDS (Nomenclature from American Ornithologists' Union 1998 and Unitt 2004)			
ODONTOPHORIDAE	**NEW WORLD QUAIL**		
Callipepla californica californica	California quail	CSS, CC	/ Y
ACCIPITRIDAE	**HAWKS, KITES, & EAGLES**		
Accipiter cooperii	Cooper's hawk	FO	/ Y
Aquila chrysaetos canadensis	golden eagle	FO	/ Y
Buteo jamaicensis	red-tailed hawk	FO, SRS	/ Y
Circus cyaneus hudsonius	northern harrier	CSS, FO	/ Y

ATTACHMENT 6
WILDLIFE SPECIES OBSERVED - McMILLIN PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
RALLIDAE	**RAILS, GALLINULES, & COOTS**		
Fulica americana americana	American coot	CVFM	/ W
Porzana carolina	sora	CVFM	/ W
Rallus limicola limicola	Virginia rail	CVFM	/ Y
COLUMBIDAE	**PIGEONS & DOVES**		
Zenaida macroura marginella	mourning dove	CSS, CC, CVFM, SRS, FO	/ Y
APODIDAE	**SWIFTS**		
Aeronautes saxatalis	white-throated swift	FO	/ Y
TROCHILIDAE	**HUMMINGBIRDS**		
Calypte anna	Anna's hummingbird	CSS, CC, SRS	/ Y
Calypte costae	Costa's hummingbird	CSS, CC, CVFM	/ S
Selasphorus sp.	hummingbird	SRS	/ M
TYRANNIDAE	**TYRANT FLYCATCHERS**		
Myiarchus cinerascens cinerascens	ash-throated flycatcher	CSS	/ S
Sayornis nigricans semiatra	black phoebe	CVFM, SRS	/ Y
Tyrannus verticalis	western kingbird	CSS, SRS	/ S
Tyrannus vociferans vociferans	Cassin's kingbird	CSS	/ Y
CORVIDAE	**CROWS, JAYS, & MAGPIES**		
Corvus corax clarionensis	common raven	FO, SRS	/ Y
ALAUDIDAE	**LARKS**		
Eremophila alpestris actia	California horned lark	CSS, CC	/ Y
HIRUNDINIDAE	**SWALLOWS**		
Stelgidopteryx serripennis	northern rough-winged swallow	FO	/ S
AEGITHALIDAE	**BUSHTIT**		
Psaltriparus minimus minimus	bushtit	CSS, CC, SRS	/ Y
TROGLODYTIDAE	**WRENS**		
Salpinctes obsoletus obsoletus	rock wren	CSS, CC,	/ Y
Thryomanes bewickii	Bewick's wren	CC	/ Y
Troglodytes aedon parkmanii	house wren		/ Y
TIMALIIDAE	**BABBLERS**		
Chamaea fasciata henshawi	wrentit	CC	/ Y

ATTACHMENT 6
WILDLIFE SPECIES OBSERVED - McMILLIN PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
MIMIDAE	**MOCKINGBIRDS & THRASHERS**		
Mimus polyglottos polyglottos	northern mockingbird	CSS, CC	/ Y
Toxostoma redivivum redivivum	California thrasher	CC	/ Y
PTILOGONATIDAE	**SILKY FLYCATCHERS**		
Phainopepla nitens lepida	phainopepla	CSS	/ Y
PARULIDAE	**WOOD WARBLERS**		
Dendroica coronata	yellow-rumped warbler	CSS, CC, SRS	/ W
Geothlypis trichas	common yellowthroat	CSS, CC, CVFM, SRS	/ Y
Vermivora celata	orange-crowned warbler	CSS, CC	/ Y
EMBERIZIDAE	**EMBERIZIDS**		
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	CSS, CC	/ Y
Chondestes grammacus strigatus	lark sparrow	CSS, CC	/ Y
Melospiza melodia	song sparrow	CSS, CC, CVFM, SRS	/ Y
Pipilo crissalis	California towhee	CSS, CC	/ Y
Pipilo maculatus	spotted towhee	CSS, CC, SRS	/ Y
Spizella passerina	chipping sparrow	CSS, CC	/ M
Zonotrichia leucophrys	white-crowned sparrow	CSS, CC	/ W
CARDINALIDAE	**CARDINALS & GROSBEAKS**		
Passerina caerulea salicaria	blue grosbeak	CSS, CC, SRS	/ S
Passerina amoena	lazuli bunting	CSS, CC	/ C
ICTERIDAE	**BLACKBIRDS & NEW WORLD ORIOLES**		
Agelaius phoeniceus	red-winged blackbird	CSS, CC, CVFM	/ Y
Icterus cucullatus nelsoni	hooded oriole	SRS	/ S
Sturnella neglecta	western meadowlark	CSS, CC	/ Y
FRINGILLIDAE	**FINCHES**		
Carduelis psaltria hesperophilus	lesser goldfinch	CSS, CC, CVFM, SRS	/ Y
Carpodacus mexicanus frontalis	house finch	CSS, CC, SRS	/ Y

MAMMALS (Nomenclature from Baker et al. 2003)

LEPORIDAE	**RABBITS & HARES**
Lepus californicus bennettii	San Diego black-tailed jackrabbit
Sylvilagus audubonii	desert cottontail

ATTACHMENT 6
WILDLIFE SPECIES OBSERVED - McMILLIN PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
SCIURIDAE	**SQUIRRELS & CHIPMUNKS**		
Spermophilus beecheyi	California ground squirrel		
CANIDAE	**CANIDS**		
Canis latrans	coyote		
CERVIDAE	**DEER**		
Odocoileus hemionus	southern mule deer		

(I) = Introduced species

HABITATS
CC = Chamise Chaparral
CSS = Diegan Coastal sage scrub
CVFM = Coastal and valley freshwater marsh
SICF = Southern interior cypress forest
SMC = Southern Mixed Chaparral
SRS = Southern Riparian Scrub
FO = Flying Overhead

SEASONALITY (birds only)
A = Accidental; species not known to occur under normal conditions; may be an off-course migrant
M = Migrant; uses site for brief periods of time, primarily during spring and fall months
S = Spring/summer resident; probable breeder on-site or in vicinity
T = Transient; uses site regularly but unlikely to breed on-site
V = Rare vagrant
W = Winter visitor; does not breed locally
Y = Year-round resident; probable breeder on-site or in vicinity

ATTACHMENT 7

ATTACHMENT 7
SENSITIVE PLANT SPECIES OBSERVED - MCMILLIN PARCELS

Species	State/Federal Status	CNPS List	City of Chula Vista	Habitat/Blooming Period
LYCOPODS				
SELAGINELLACEAE SPIKE-MOSS FAMILY				
Selaginella cinerascens Ashy spike-moss	-/-	4.1	-	Perennial herb (rhizomatous); chaparral, coastal-scrub; elevation 60-2,100 feet.
GYMNOSPERMS				
CUPRESSACEAE CYPRESS FAMILY				
Hesperocyparis forbesii [=*Callitropsis forbesii*] Tecate cypress	–/–	1B.1	MSCP	Evergreen tree; closed-cone coniferous forest, chaparral; Otay Mountain; elevation 700–5,000 feet.
ANGIOSPERMS: MONOCOTS				
JUNCACEAE RUSH FAMILY				
Juncus acutus ssp. *leopoldii* spiny rush	–/–	4.2	–	Perennial herb; coastal dunes, meadows and seeps, coastal salt marsh, riparian; blooms May–June; elevation less than 3,000 feet.
POACEAE GRASS FAMILY				
Achnatherum diegoensis San Diego County needlegrass	–/–	4.1	–	Perennial herb; rocky soils, chaparral, coastal sage scrub, often near streams; blooms Feb.–June; elevation less than 2,300 feet.
ANGIOSPERMS: DICOTS				
ASTERACEAE SUNFLOWER FAMILY				
Bahiopsis [=*Viguiera*] *laciniata* San Diego County viguiera	–/–	4.2	–	Shrub; chaparral, coastal sage scrub; blooms Feb.–June; elevation less than 2,500 feet.
Isocoma menziesii var. *decumbens* [=var. *menziesii*] decumbent goldenbush	–/–	1B.2	–	Shrub; chaparral, coastal sage scrub, sandy soils, often in disturbed areas; blooms April–Nov.; elevation less than 500 feet.

ATTACHMENT 7
SENSITIVE PLANT SPECIES OBSERVED - MCMILLIN PARCELS
(continued)

Species	State/Federal Status	CNPS List	City of Chula Vista	Habitat/Blooming Period
Iva hayesiana San Diego marsh-elder	–/–	2.2	–	Perennial herb; marshes and swamps, playas, riparian areas; blooms April–Sept.; elevation below 1,700 feet.
Microseris douglasii var. *platycarpha* small-flowered microseris	–/–	4.2	–	Annual herb; Clay lenses on perennial grasslands, vernal pools, openings in coastal sage scrub; blooms March–May; elevation 50–3,500 feet.
Pentachaeta aurea golden-rayed pentachaeta	–/–	4.2	–	Annual herb; cismontane woodland, coastal sage scrub, lower montane coniferous forest, perennial grasslands, blooms March–July; elevation 300–6,100 feet.
CACTACEAE **CACTUS FAMILY**				
Ferocactus viridescens San Diego barrel cactus	–/–	2.1	MSCP	Succulent; chaparral, coastal sage scrub, valley and foothill grassland, vernal pools; blooms May–June; elevation less than 1,500 feet.
CONVOLVULACEAE **MORNING-GLORY FAMILY**				
Dichondra occidentalis western dichondra	–/–	4.2	–	Perennial herb; chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland; blooms Mar.–July; elevation less than 1,650 feet.
CRASSULACEAE **STONECROP FAMILY**				
Dudleya variegata variegated dudleya	–/–	1B.2	NE, MSCP	Perennial herb; openings in chaparral, coastal sage scrub, grasslands, vernal pools; blooms May–June; elevation less than 2,000 feet.
FABACEAE **LEGUME FAMILY**				
Hosackia crassifolia var. *otayensis* [=*Lotus crassifolia* var. *otayensis*] Otay Mountain lotus	–/–	1B.1	–	Perennial herb; chaparral, metavolcanic substrate, often in disturbed areas; blooms May–Aug.; elevation 3,000–3,300 feet. Known only from Otay Mountain and one occurrence in Baja California.

ATTACHMENT 7
SENSITIVE PLANT SPECIES OBSERVED - MCMILLIN PARCELS
(continued)

FEDERAL CANDIDATES AND LISTED PLANTS

FE = Federally listed endangered
FT = Federally listed threatened
FC = Federal candidate for listing as endangered or threatened

STATE LISTED PLANTS

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

CALIFORNIA NATIVE PLANT SOCIETY Rare Plant Rankings

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 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.
.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
.2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
.3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

CITY OF CHULA VISTA

NE = Narrow endemic
MSCP = Multiple Species Conservation Program covered species

ATTACHMENT 8

ATTACHMENT 8
SENSITIVE WILDLIFE SPECIES OBSERVED - McMILLIN PARCELS

Species	Status	Habitat
INVERTEBRATES (Nomenclature from Mattoni 1990; and Opler and Wright 1999)		
NYMPHALIDAE BRUSH-FOOTED BUTTERFLIES		
Quino checkerspot *Euphydryas editha quino*	FE, MSCP	Open, dry areas in foothills, mesas, lake margins. Larval host plant *Plantago erecta.* Adult emergence mid-January through April.
AMPHIBIANS (Nomenclature from Crother 2008)		
PELOBATIDAE SPADEFOOT TOADS		
Western spadefoot *Spea hammondii*	CSC	Vernal pools, floodplains, and alkali flats within areas of open vegetation.
REPTILES (Nomenclature from Crother 2008)		
COLUBRIDAE COLUBRID SNAKES		
Two-striped gartersnake *Thamnophis hammondii*	CSC, *	Permanent freshwater streams with rocky bottoms. Mesic areas.
BIRDS (Nomenclature from American Ornithologists' Union 1998 and Unitt 1984)		
ACCIPITRIDAE HAWKS, KITES, & EAGLES		
Cooper's hawk (nesting) *Accipiter cooperii*	CSC, MSCP	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas. Migrant and winter visitor.

ATTACHMENT 8
SENSITIVE WILDLIFE SPECIES OBSERVED - McMILLIN PARCELS
(continued)

Species	Status	Habitat
Golden eagle (nesting and wintering) *Aquila chrysaetos canadensis*	CSC, CFP, BEPA, MSCP	Require vast foraging areas in grassland, broken chaparral, or sage scrub. Nest in cliffs and boulders. Uncommon resident.
Northern harrier (nesting) *Circus cyaneus hudsonius*	CSC, MSCP	Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident.
ALAUDIDAE LARKS		
California horned lark *Eremophila alpestris actia*	*	Sandy shores, mesas, disturbed areas, grasslands, agricultural lands, sparse creosote bush scrub.
EMBERIZIDAE EMBERIZIDS		
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	CSC, MSCP	Coastal sage scrub, chaparral, grassland. Resident.
MAMMALS (Nomenclature from Jones et al. 1997 and Hall 1981)		
LEPORIDAE RABBITS & HARES		
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	CSC	Open areas of scrub, grasslands, agricultural fields.
CERVIDAE DEER		
Southern mule deer *Odocoileus hemionus fuliginata*	MSCP	Many habitats.

ATTACHMENT 8
SENSITIVE WILDLIFE SPECIES OBSERVED - McMILLIN PARCELS
(continued)

STATUS CODES

Listed/Proposed
FE = Listed as endangered by the federal government
FPE = Federally proposed endangered
FPT = Federally proposed threatened
FT = Listed as threatened by the federal government
SE = Listed as endangered by the state of California
ST = Listed as threatened 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)
MSCP = Multiple Species Conservation Program covered species
PSE = Proposed as endangered by the state of California
* = 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
- 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)

ATTACHMENT 9

ATTACHMENT 9
PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON

Scientific Name	Common Name	Origin
LYCOPODS		
SELAGINELLACEAE	**SPIKE-MOSS FAMILY**	
Selaginella cinerascens A.A. Eaton	ashy spike-moss	N
FERNS		
DRYOPTERIDACEAE	**WOOD FERN FAMILY**	
Dryopteris arguta (Kaulf.) Maxon	wood fern	N
POLYPODIACEAE	**POLYPODY FAMILY**	
Polypodium californicum Kaulf.	California polypody	N
PTERIDACEAE	**BRAKE FAMILY**	
Adiantum jordanii Mull. Hal.	California maiden-hair	N
Aspidotis californica (Hook.) Copel.	California lace fern	N
Cheilanthes clevelandii D.C. Eaton	Cleveland's lip fern	N
Cheilanthes newberryi (D.C. Eaton) Domin	California cottonfern	N
Pentagramma triangularis (Kaulf.) Yatsk., Windham & E. Wollenw.	goldback fern	N
GYMNOSPERMS		
CUPRESSACEAE	**CYPRESS FAMILY**	
Hesperocyparis forbesii (Jeps.) Bartel [=*Callitropsis forbesii*]	Tecate cypress	N
ANGIOSPERMS: MONOCOTS		
AGAVACEAE	**AGAVE FAMILY**	
Chlorogalum parviflorum S. Watson	smallflower soap plant	N
Yucca whipplei Torr.	our Lord's candle	N
CYPERACEAE	**SEDGE FAMILY**	
Carex spissa L.H. Bailey	San Diego sedge	N
IRIDACEAE	**IRIS FAMILY**	
Sisyrinchium bellum S. Watson	blue-eyed grass	N
LILIACEAE	**LILY FAMILY**	
Calochortus dunnii Purdy	Dunn's mariposa lily	N
Calochortus splendens Benth.	lilac mariposa	N
Lilium humboldtii Roezl & Leichtlin sp. *ocellatum* (Kellogg) Thorne	ocellated Humboldt lily	N

ATTACHMENT 9
PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON
(continued)

Scientific Name	Common Name	Origin
POACEAE (GRAMINEAE)	**GRASS FAMILY**	
Achnatherum coronatum (Thurb.) Barkworth	giant stipa	N
Achnatherum diegoensis (Swallen) Barkworth	San Diego County needlegrass	N
Avena barbata Link	slender wild oat	I
Avena fatua L.	Wild oat	I
Brachypodium distachyon (L.) P. Beauv.	purple falsebrome	I
Bromus hordeaceus L.	soft chess	I
Bromus madritensis L. ssp. *rubens* (L.) Husnot	red brome	I
Bromus sterilis L.	barren brome, poverty brome	I
Calamagrostis koeleriodes [=*C. densa*] Vasey	San Diego reedgrass	N
Gastridium ventricosum (Gouan) Schinz & Thell.	nit grass	I
Lamarckia aurea (L.) Moench	goldentop	I
Lolium multiflorum Lam.	Italian ryegrass	I
Nassella lepida (Hitchc.) Barkworth	foothill needlegrass	N
Nassella pulchra (Hitchc.) Barkworth	purple needlegrass	N
Rhynchelytrum repens (Willd.) C.E. Hubb.	natal grass	I
THEMIDACEAE	**BRODIAEA FAMILY**	
Dichelostemma capitatum (Benth.) A.W. Wood	blue dicks	N
Muilla clevelandii (S. Watson) Hoover	San Diego goldenstar	N
ANGIOSPERMS: DICOTS		
ANACARDIACEAE	**SUMAC OR CASHEW FAMILY**	
Malosma laurina Nutt. ex Abrams	laurel sumac	N
Rhus ovata S. Watson	sugar bush	N
Toxicodendron diversilobum (Torr. & A. Gray) Greene	western poison oak	N
APIACEAE (UMBELLIFERAE)	**CARROT FAMILY**	
Apiastrum angustifolium Nutt.	wild-celery	N
Daucus pusillus Michx.	rattlesnake weed	N
APOCYNACEAE	**DOGBANE FAMILY**	
Asclepias fascicularis Decne.	narrow-leaf milkweed	N
ASTERACEAE	**SUNFLOWER FAMILY**	
Acourtia microcephala DC.	purple-head, sacapellote	N
Artemisia californica Less.	California sagebrush	N
Baccharis salicifolia (Ruiz & Pav.) Pers.	mule fat, seep-willow	N
Bahiopsis [=*Viguiera*] *laciniata* (A. Gray) E.E. Schilling & Panero	San Diego County viguiera	N
Bidens pilosa L. var. *pilosa*	common beggar-ticks, Spanish-needles	I
Carduus pycnocephalus L.	Italian thistle	I

ATTACHMENT 9
PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON
(continued)

Scientific Name	Common Name	Origin
Centaurea melitensis L.	tocalote, star-thistle	I
Dittrichia graveolens (L.) Greuter	stinkwort stinkwort	I
Erigeron foliosus Nutt.	leafy fleabane	N
Eriophyllum confertiflorum (DC.) A. Gray var. *confertiflorum*	golden-yarrow	N
Gnaphalium luteoalbum L.	everlasting	I
Gutierrezia californica (DC.) Torr. & A. Gray	California matchweed	N
Hazardia squarrosa (Hook. & Arn.) Greene	saw-toothed goldenbush	N
Hedypnois cretica (L.) Dum. Cours.	crete weed	I
Hypochaeris glabra L.	smooth cat's-ear	I
Lactuca serriola L.	prickly lettuce	I
Logfia [=*Filago*] *gallica* (L.) Cross. & Germ.	narrow-leaf herba impia	I
Osmadenia tenella Nutt.	osmadenia	N
Porophyllum gracile Benth.	odora	N
Pseudognaphalium biolettii Anderb.	bicolor cudweed	N
Rafinesquia californica Nutt.	California chicory	N
Solidago velutina DC. ssp. *californica* (Nutt.) Semple	California goldenrod	N
Sonchus oleraceus L.	common sow thistle	I
Venegasia carpesioides DC.	Jesuit flower	N
BORAGINACEAE	**BORAGE FAMILY**	
Eriodictyon trichocalyx A. Heller	hairy yerba santa	N
Phacelia minor (Harvey) Thell. ex F. Zimm.	wild canterbury-bell	N
BRASSICACEAE (CRUCIFERAE)	**MUSTARD FAMILY**	
Brassica nigra (L.) W.D.J. Koch	black mustard	I
Hirschfeldia incana (L.) Lagr.-Fossat	short-pod mustard	I
Thysanocarpus laciniatus Nutt.	notch fringepod	N
CARYOPHYLLACEAE	**PINK FAMILY**	
Silene gallica L.	windmill pink	I
Stellaria nitens Nutt.	shining chickweed	N
Salsola tragus L.	Russian thistle, tumbleweed	I
CISTACEAE	**ROCK-ROSE FAMILY**	
Helianthemum scoparium Nutt.	peak rush-rose	N
CONVOLVULACEAE	**MORNING-GLORY FAMILY**	
Calystegia macrostegia (Greene) Brummitt	morning-glory	N
Dichondra occidentalis House	western dichondra	N
CRASSULACEAE	**STONECROP FAMILY**	
Crassula connata (Ruiz & Pav.) A. Berger	pygmy-weed	N

ATTACHMENT 9
PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON
(continued)

Scientific Name	Common Name	Origin
CUCURBITACEAE	**GOURD FAMILY**	
Marah macrocarpus (Greene) Greene	wild cucumber	N
ERICACEAE	**HEATH FAMILY**	
Arctostaphylos otayensis Weisl. & B. Schreib.	Otay manzanita	N
Comarostaphylis diversifolia (Parry) Greene ssp. *diversifolia*	summer holly	N
Xylococcus bicolor Nutt.	mission manzanita	N
FABACEAE (LEGUMINOSAE)	**LEGUME FAMILY**	
Acmispon glaber (Vogel) Brouillet [=*Lotus scoparius*]	deerweed	N
Acmispon maritimus (Torr. & A. Gray) D.D. Sokoloff var. *brevivexillus* (Ottley) Brouillet [=*Lotus salsuginosus* var. *brevivexillus*]	humble lotus	N
Acmispon micranthus (Torr. & A. Gray) Brouillet [=*Lotus hamatus*]	grab lotus	N
Acmispon strigosus (Nutt.) Brouillet [=*Lotus strigosus*]	bishop's/strigose lotus	N
Lupinus concinnus J. Agardh	bajada lupine	N
Lupinus hirsutissimus Benth.	stinging lupine	N
Lupinus truncatus Nutt.	chaparral lupine	N
Pickeringia montana Nutt. var. *tomentosa* (Abrams) I.M. Johnst.	woolly chaparral pea	N
Vicia ludoviciana Nutt. var. *ludoviciana*	deerpea vetch	N
FAGACEAE	**OAK FAMILY**	
Quercus berberidifolia Liebm.	scrub oak	N
GERANIACEAE	**GERANIUM FAMILY**	
Erodium cicutarium (L.) L'Hér. ex Aiton	red stemmed filaree	I
GROSSULARIACEAE	**GOOSEBERRY FAMILY**	
Ribes malvaceum Sm. var. *viridifolium* Abrams	chaparral currant	N
LAMIACEAE	**MINT FAMILY**	
Lepechinia ganderi Epling	Gander's pitcher sage	N
Monardella hypoleuca A. Gray ssp. *lanata* (Abrams) Munz	felt-leaved monardella	N
Salvia apiana Jeps.	white sage	N
Salvia munzii Epling	Munz's sage	N
MALVACEAE	**MALLOW FAMILY**	
Malva parviflora L.	cheeseweed	I
MYRSINACEAE		
Anagallis arvensis L.	scarlet pimpernel, poor-man's weatherglass	I
ONAGRACEAE	**EVENING-PRIMROSE FAMILY**	
Clarkia epilobioides (Nutt. ex Torr. & A. Gray) A. Nelson & J.F. Macbr.	willow herb clarkia, canyon clarkia	N

ATTACHMENT 9
PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON
(continued)

Scientific Name	Common Name	Origin
Clarkia purpurea (Curtis) A. Nelson & J.F. Macbr. ssp. *quadrivulnera* (Douglas ex Lindl.) H. Lewis & M. Lewis	four-spot	N
OXALIDACEAE	**OXALIS FAMILY**	
Oxalis californica (Abrams) R. Knuth [=*Oxalis albicans* ssp. *californica*]	California oxalis	N
PAPAVERACEAE	**POPPY FAMILY**	
Dendromecon rigida Benth.	bush poppy	N
PHRYMACEAE [=SCROPHULARIACEAE]	**HOPSEED FAMILY**	
Mimulus aurantiacus Curtis	bush monkey-flower	N
Mimulus clevelandii Brandegee	Cleveland's bush monkeyflower	N
Mimulus guttatus DC.	common monkey-flower	N
PLANTAGINACEAE	**PLANTAIN FAMILY**	
Antirrhinum nuttallianum Benth. ex A. DC.	Nuttall snapdragon	N
Collinsia heterophylla Buist ex Graham	Chinese houses	N
Keckiella cordifolia (Benth.) Straw	climbing bush penstemon	N
PLATANACEAE	**PLANE TREE OR SYCAMORE FAMILY**	
Platanus racemosa Nutt.	western sycamore	N
POLYGONACEAE	**BUCKWHEAT FAMILY**	
Eriogonum fasciculatum Benth.	California buckwheat	N
Pterostegia drymarioides Fisch. & C.A. Mey.	California thread-stem	N
PRIMULACEAE	**PRIMROSE FAMILY**	
Dodecatheon clevelandii Greene ssp. *clevelandii*	shooting star, wild cyclamen	N
Ceanothus oliganthus Nutt.	hairy ceanothus	N
Ceanothus otayensis McMinn	Otay mountain ceanothus	N
Rhamnus crocea Nutt.	spiny redberry	N
Rhamnus ilicifolia Kellogg	holly-leaf redberry	N
ROSACEAE	**ROSE FAMILY**	
Adenostoma fasciculatum Hook. & Arn.	chamise	N
Cercocarpus minutiflorus Abrams	mountain-mahogany	N
Chamaebatia australis (Brandegee) Abrams	mountain misery	N
Heteromeles arbutifolia (Lindl.) M. Roem.	toyon, Christmas berry	N
SALICACEAE	**WILLOW FAMILY**	
Populus fremontii S. Watson ssp. *fremontii*	Fremont cottonwood, alamo	N
Salix laevigata Bebb	red willow	N
Salix lasiolepis Benth.	arroyo willow	N
SAXIFRAGACEAE	**SAXIFRAGE FAMILY**	
Jepsonia parryi (Torr.) Small	mesa saxifrage	N

ATTACHMENT 9
PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON
(continued)

Scientific Name	Common Name	Origin
SCROPHULARIACEAE	**FIGWORT FAMILY**	
Cordylanthus rigidus (Benth.) Jeps. ssp. *setigerus* T.I. Chuang & Heckard	thread-leaved bird's-beak	N
Scrophularia californica Cham. & Schltdl.	California figwort	N
STERCULIACEAE	**CACAO FAMILY**	
Fremontodendron mexicanum	Mexican flannelbush	N
TAMARICACEAE	**TAMARISK FAMILY**	
Tamarix ramosissima Ledeb.	saltcedar	I
VIOLACEAE	**VIOLET FAMILY**	
Viola pedunculata Torr. & A. Gray	johnny-jump-up	N

SOURCES: Jepson Online Interchange <http://ucjeps.berkeley.edu/interchange.html> (2009); K. N. Brenzel (editor), *Sunset Western Garden Book* (Sunset Publishing, Menlo Park, CA, 2001); John P. Rebman and Michael G. Simpson, *Checklist of the Vascular Plants of San Diego County,* 4th ed. (San Diego Natural History Museum, San Diego, CA, 2006); USDA Plants Database <http://plants.usda.gov/> (2008).

ORIGIN
N = Native to locality
I = Introduced species from outside locality

ATTACHMENT 10

ATTACHMENT 10
WILDLIFE SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
INVERTEBRATES (Nomenclature from Milne and Milne 1980; Mattoni 1990; and Opler and Wright 1999)			
HESPERIIDAE	**SKIPPERS**		
Antelopedes campestris	sachem		
Erynnis funeralis	funereal duskywing		
Euphyes vestris harbisoni	Harbison's dun skipper		
Hylephila phyleus	fiery skipper		
Poanes melane	umber skipper		
PAPILIONIDAE	**PARNASSIANS & SWALLOWTAILS**		
Papilio eurymedon	pale swallowtail		
Papilio rutulus	western tiger swallowtail		
PIERIDAE	**WHITES & SULPHURS**		
Anthocharis sara	Sara or Pacific orangetip		
Colias sp.	unknown sulphur		
Pontia protodice	common or checkered white		
Pieris rapae	cabbage white		
LYCAENIDAE	**BLUES, COPPERS, & HAIRSTREAKS**		
Callophrys dumetorum	bramble or coastal green hairstreak		
Celastrina ladon echo	echo blue or spring azure		
Leptotes marina	Marine blue		
NYMPHALIDAE	**BRUSH-FOOTED BUTTERFLIES**		
Limenitis lorquini lorquini	Lorquin's admiral		
Cholsyna gabbii	Gabb's checkerspot		
Junonia coenia	common buckeye		
Nymphalis antiopa antiopa	mourning cloak		
Speyeria callippe comstocki	Comstock's fritillary		
Vanessa sp.	unknown lady butterfly		

ATTACHMENT 10
WILDLIFE SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
AMPHIBIANS (Nomenclature from Crother 2001 and Crother et al. 2003)			
HYLIDAE	**TREE FROGS**		
Pseudacris cadaverina	California treefrog		
REPTILES (Nomenclature from Crother 2001 and Crother et al. 2003)			
IGUANIDAE	**IGUANID LIZARDS**		
Phrynosoma coronatum (San Diego/*blainvillii* pop.)	coast horned lizard		
Sceloporus occidentalis	western fence lizard		
Uta stansburiana	common side-blotched lizard		
COLUBRIDAE	**COLUBRID SNAKES**		
Pituophis catenifer annectens	San Diego gophersnake		
CROTALIDAE	**RATTLESNAKES**		
Crotalus ruber	red diamond rattlesnake		
BIRDS (Nomenclature from American Ornithologists' Union 1998 and Unitt 2004)			
COLUMBIDAE	**PIGEONS & DOVES**		
Zenaida macroura marginella	mourning dove	SMC, SRS	/ Y
CUCULIDAE	**CUCKOOS & ROADRUNNERS**		
Geococcyx californianus	greater roadrunner	SMC	/ Y
APODIDAE	**SWIFTS**		
Aeronautes saxatalis	white-throated swift	FO	/ Y
TROCHILIDAE	**HUMMINGBIRDS**		
Calypte anna	Anna's hummingbird	CSS, SMC	/ Y
Calypte costae	Costa's hummingbird	CSS, SMC, SRS	/ S
TYRANNIDAE	**TYRANT FLYCATCHERS**		
Contopus sordidulus	western wood pewee	CSS, OW, SRS	/ S
Empidonax difficilis	Pacific slope flycatcher	SMC, OW, SRS	/ S
Empidonax oberholseri	dusky flycatcher	SMC	/ S
Myiarchus cinerascens cinerascens	ash-throated flycatcher	CSS, SMC, OW	/ S

ATTACHMENT 10
WILDLIFE SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
CORVIDAE	**CROWS, JAYS, & MAGPIES**		
Aphelocoma californica	western scrub-jay	SMC	/ Y
Corvus corax clarionensis	common raven	FO	/ Y
ALAUDIDAE	**LARKS**		
Eremophila alpestris	horned lark	CSS, SMC	/ Y
AEGITHALIDAE	**BUSHTIT**		
Psaltriparus minimus minimus	bushtit	SMC	/ Y
TROGLODYTIDAE	**WRENS**		
Catherpes mexicanus conspersus	canyon wren	CSS, SMC	/ Y
Salpinctes obsoletus obsoletus	rock wren	CSS, SMC	/ Y
Thryomanes bewickii	Bewick's wren	SMC	/ Y
Troglodytes aedon parkmanii	house wren	OW	/ Y
SYLVIIDAE	**GNATCATCHERS**		
Polioptila caerulea	blue-gray gnatcatcher	SMC	/ Y
TIMALIIDAE	**BABBLERS**		
Chamaea fasciata henshawi	wrentit	SMC	/ Y
PTILOGONATIDAE	**SILKY FLYCATCHERS**		
Phainopepla nitens lepida	phainopepla	SMC, OW	/ Y
PARULIDAE	**WOOD WARBLERS**		
Dendroica townsendi	Townsend's warbler	SRS	/ W
Vermivora celata	orange-crowned warbler	SMC, OW	/ Y
Wilsonia pusilla	Wilson's warbler	SMC, OW	/ M
EMBERIZIDAE	**EMBERIZIDS**		
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	CSS, SMC	/ Y
Ammodramus savannarum perpallidus	grasshopper sparrow	CSS	/ Y
Amphispiza belli belli	Bell's sage sparrow	CSS, SMC	/ Y
Chondestes grammacus strigatus	lark sparrow	CSS, SMC	/ Y
Pipilo crissalis	California towhee	CSS, SMC	/ Y
Pipilo maculatus	spotted towhee	SMC	/ Y
Spizella atrogularis cana	black-chinned sparrow	SMC	/ I
Zonotrichia atricapilla	golden-crowned sparrow	SMC	/ W
Zonotrichia leucophrys	white-crowned sparrow	SMC	/ W

ATTACHMENT 10
WILDLIFE SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS
(continued)

Scientific Name	Common Name	Occupied Habitat	Seasonality (Birds Only)
CARDINALIDAE	**CARDINALS & GROSBEAKS**		
Passerina caerulea salicaria	blue grosbeak	CSS, SRS	/ S
Passerina amoena	lazuli bunting	CSS, SMC	/ C
Pheucticus melanocephalus maculatus	black-headed grosbeak	SMC, OW, SRS	/ S
FRINGILLIDAE	**FINCHES**		
Carduelis psaltria hesperophilus	lesser goldfinch	SMC, OW	/ Y
Carpodacus mexicanus frontalis	house finch	SMC, CSS, OW, SRS	/ Y
MAMMALS (Nomenclature from Baker et al. 2003)			
SCIURIDAE	**SQUIRRELS & CHIPMUNKS**		
Spermophilus beecheyi	California ground squirrel		
GEOMYIDAE	**POCKET GOPHERS**		
Thomomys bottae	Botta's pocket gopher		
CANIDAE	**CANIDS**		
Canis latrans	coyote		

(I) = Introduced species

HABITATS
CSS = Diegan Coastal sage scrub
CS-CT= Coastal Sage-Chaparral Transition
OW = Open Coast Live Oak Woodland
SICF = Southern Interior Cypress Forest
SMC = Southern Mixed Chaparral
SRS = Southern Riparian Scrub
FO = Flying Overhead

SEASONALITY (birds only)
A = Accidental; species not known to occur under normal conditions; may be an off-course migrant
M = Migrant; uses site for brief periods of time, primarily during spring and fall months
S = Spring/summer resident; probable breeder on-site or in vicinity
T = Transient; uses site regularly but unlikely to breed on-site
V = Rare vagrant
W = Winter visitor; does not breed locally
Y = Year-round resident; probable breeder on-site or in vicinity

ATTACHMENT 11

ATTACHMENT 11
SENSITIVE PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS

Species	State/Federal Status	CNPS List	City of Chula Vista	Habitat/Blooming Period
LYCOPODS				
SELAGINELLACEAE **SPIKE-MOSS FAMILY**				
Selaginella cinerascens Ashy spike-moss	–/–	4.1	–	Perennial herb (rhizomatous); chaparral, coastal-scrub; elevation 60-2,100 feet.
GYMNOSPERMS				
CUPRESSACEAE **CYPRESS FAMILY**				
Hesperocyparis forbesii Tecate cypress	–/–	1B.1	MSCP	Evergreen tree; closed-cone coniferous forest, chaparral; Otay Mountain; elevation 700–5,000 feet.
ANGIOSPERMS: MONOCOTS				
LILIACEAE **LILY FAMILY**				
Calochortus dunnii Dunn's mariposa lily	CR/–	1B.2	NE, MSCP	Perennial herb (bulbiferous); closed-cone coniferous forest, chaparral, gabbroic or metavolcanic, rocky substrate; blooms April–June; elevation 1,200–6,000 feet.
Lilium humboldtii spp. *ocellatum* ocellated Humboldt lily	–/–	4.2	–	Perennial herb (bulbiferous); chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, riparian woodland; blooms March–July; elevation less than 6,000 feet.
POACEAE **GRASS FAMILY**				
Achnatherum diegoensis San Diego County needlegrass	–/–	4.1	–	Perennial herb; rocky soils, chaparral, coastal sage scrub, often near streams; blooms Feb.–June; elevation less than 2,300 feet.

ATTACHMENT 11
SENSITIVE PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS
(continued)

Species	State/Federal Status	CNPS List	City of Chula Vista	Habitat/Blooming Period
THEMIDACEAE **BRODIAEA FAMILY**				
Muilla clevelandii San Diego goldenstar	–/–	1B.1	MSCP	Perennial herb (bulbiferous); chaparral, coastal sage scrub, valley and foothill grassland, vernal pools, clay soils; blooms May; elevation 170–1,500 feet.
ANGIOSPERMS: DICOTS				
ASTERACEAE **SUNFLOWER FAMILY**				
Bahiopsis [=*Viguiera*] *laciniata* San Diego County viguiera	–/–	4.2	–	Shrub; chaparral, coastal sage scrub; blooms Feb.–June; elevation less than 2,500 feet.
CONVOLVULACEAE **MORNING-GLORY FAMILY**				
Dichondra occidentalis western dichondra	–/–	4.2	–	Perennial herb; chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland; blooms Mar.–July; elevation less than 1,650 feet.
ERICACEAE **HEATH FAMILY**				
Arctostaphylos otayensis Otay manzanita	–/–	1B.2	MSCP	Evergreen shrub; chaparral and cismontane woodland on metavolcanic peaks, blooms Jan.–March; elevation 900–5,600 feet. San Miguel and Otay Mountains.
Comarostaphylis diversifolia ssp. *diversifolia* summer holly	–/–	1B.2	–	Evergreen shrub; chaparral; blooms April–June; elevation less than 1,800 feet.
FABACEAE **LEGUME FAMILY**				
Pickeringia montana Nutt. var. *tomentosa* (Abrams) I. M. Johnst. woolly chaparral pea	–/–	4.3	–	Evergreen shrub; gabbroic, granitic, clay; chaparral; blooms May through August; elevation less than 5,500 feet.

ATTACHMENT 11
SENSITIVE PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS
(continued)

Species	State/Federal Status	CNPS List	City of Chula Vista	Habitat/Blooming Period
LAMIACEAE MINT FAMILY				
Lepechinia ganderi Gander's pitcher sage	–/–	1B.3	NE, MSCP	Shrub; closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland, blooms June–July; elevation 1,000–3,500 feet. Known in California from fewer than 10 occurrences.
Monardella hypoleuca ssp. *lanata* felt-leaved monardella	–/–	1B.2	NE, MSCP	Perennial herb; chaparral, cismontane woodland; blooms June–July; elevation 1,000–4,000 feet.
Salvia munzii Munz's sage	–/–	2.2	–	Evergreen shrub; chaparral, coastal sage scrub, blooms Feb.–April; elevation less than 3,500 feet.
PHRYMACEAE [=SCROPHULARIACEAE] LOPSEED FAMILY				
Mimulus clevelandii Cleveland's bush monkeyflower	–/–	4.2	–	Perennial herb; disturbed areas and openings in chaparral and lower montane coniferous forest; blooms May–July; elevation 3,000–6,600 feet.
RHAMNACEAE BUCKTHORN FAMILY				
Ceanothus otayensis Otay Mountain ceanothus	–/–	1B.2	–	Evergreen shrub; chaparral, metavolcanic or gabbroic; blooms Jan.–April; elevation 2,000–3,600 feet. Known only from the San Miguel and Otay Mountains.
ROSACEAE ROSE FAMILY				
Chamaebatia australis southern mountain misery	–/–	4.2	–	Evergreen shrub; chaparral; blooms Nov.–May; elevation 1,000–2,300 feet.
STERCULIACEAE CACAO FAMILY				
Fremontodendron mexicanum Mexican flannelbush	CR/FE	1B.1	–	Evergreen shrub; closed-cone coniferous forest, chaparral, cismontane woodland; Otay Mountain; blooms March–June; elevation less than 1,600 feet.

ATTACHMENT 11
SENSITIVE PLANT SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS
(continued)

FEDERAL CANDIDATES AND LISTED PLANTS

FE = Federally listed endangered
FT = Federally listed threatened
FC = Federal candidate for listing as endangered or threatened

STATE LISTED PLANTS

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

CALIFORNIA NATIVE PLANT SOCIETY Rare Plant Rankings

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 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.
.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
.2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
.3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

CITY OF CHULA VISTA

NE = Narrow endemic
MSCP = Multiple Species Conservation Program covered species

ATTACHMENT 12

ATTACHMENT 12
SENSITIVE WILDLIFE SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS

Species	Status	Habitat
INVERTEBRATES (Nomenclature from Mattoni 1990; and Opler and Wright 1999)		
HESPERIIDAE SKIPPERS		
Harbison's dun skipper *Euphyes vestris harbisoni*	*	Woodland meadows, bogs, grasslands. Host plant *Carex spissa.* Adult emergence late May–early July.
REPTILES (Nomenclature from Crother 2008)		
IGUANIDAE IGUANID LIZARDS		
Coast horned lizard *Phrynosoma blainvillii*	CSC, MSCP, *	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage.
CROTALIDAE RATTLESNAKES		
Red diamond rattlesnake *Crotalus ruber*	CSC	Desert scrub and riparian, coastal sage scrub, open chaparral, grassland, and agricultural fields.
BIRDS (Nomenclature from American Ornithologists' Union 1998 and Unitt 1984)		
EMBERIZIDAE EMBERIZIDS		
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	CSC, MSCP	Coastal sage scrub, chaparral, grassland. Resident.
Grasshopper sparrow (nesting) *Ammodramus savannarum perpallidus*	CSC	Tall grass areas. Localized summer resident, rare in winter.

ATTACHMENT 12
SENSITIVE WILDLIFE SPECIES OBSERVED - LITTLE CEDAR CANYON PARCELS
(continued)

STATUS CODES

CSC = California Department of Fish and Game species of special concern
MSCP = City of Chula Vista Multiple Species Conservation Program Subarea Plan covered species
* = 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
- 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)