



## FUEL REDUCTION PLAN - FINAL

For the Carmel Valley Grant Area,  
San Diego, California

(including the Penasquitos Creek and Del Mar Heights  
subareas)

Contract No. 9442-09-W-RFP

FEMA Grant Number: FEMA-1577-DR-CA HMGP 1577-6-2 and  
1577-8-3, and FEMA-1585-DR-CA HMGP 1585-9-1

June 17, 2010

*Prepared for:*

**City of San Diego**  
Park & Recreation Department  
Open Space Division  
World Trade Center, 4th Floor  
1250 Sixth Avenue  
San Diego, CA 92101

*Prepared by:*

**HELIX Environmental Planning, Inc.**  
7578 El Cajon Boulevard, Suite 200  
La Mesa, CA 91941

Contact: Shelby Howard  
(619) 462-1515

Prepared in conformance with the City of San Diego Brush Management Guidelines.



**City of San Diego Brush Management Project  
Fuel Reduction Plan for the Carmel Valley Grant Area**

**TABLE OF CONTENTS**

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.0	INTRODUCTION .....	1
2.0	METHODS.....	1
2.1	Pre-Fuel Reduction Data Collection .....	1
2.2	Coastal California Gnatcatcher Surveys .....	1
2.3	Rare Plant Surveys and Nesting Bird Surveys .....	2
2.4	Nomenclature.....	2
3.0	PRE-FUEL REDUCTION SITE CONDITIONS/CONSTRAINTS.....	2
3.1	Vegetation Communities .....	2
	3.1.1 Penasquitos Creek.....	2
	3.1.2 Del Mar Heights .....	3
3.2	Sensitive Plant Species .....	4
	3.2.1 Penasquitos Creek.....	4
	3.2.2 Del Mar Heights .....	5
3.3	Coastal California Gnatcatcher.....	7
	3.3.1 Penasquitos Creek.....	7
	3.3.2 Del Mar Heights .....	7
3.4	Nesting Birds and Raptors .....	7
3.5	Brush Management Compliance .....	7
3.6	Proposed Access Points .....	8
4.0	FUEL REDUCTION EXECUTION/MONITORING.....	8
5.0	FUEL REDUCTION RECOMMENDATIONS .....	9
6.0	DELIVERABLES.....	9
7.0	REFERENCES.....	10

**LIST OF APPENDICES**

<u>Letter</u>	<u>Title</u>
A	Vegetation Communities in the Carmel Valley Area
B	Sample Pre-thinning Photos
C	Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

## LIST OF FIGURES

<u>Number</u>	<u>Title</u>	<u>Follows Page</u>
1	Regional Location Map .....	1
2a	Project Location Map (Penasquitos Creek).....	1
2b	Project Location Map (Del Mar Heights).....	1
3a	Vegetation (Penasquitos Creek).....	2
3b	Vegetation (Del Mar Heights) .....	2
4a	Sensitive Resources (Penasquitos Creek) .....	2
4b	Sensitive Resources (Del Mar Heights) .....	2
5a	Brush Management Compliance and Proposed Access (Penasquitos Creek).....	2
5b	Brush Management Compliance and Proposed Access (Del Mar Heights).....	2
6	Fuel Reduction Diagram .....	9

## LIST OF TABLES

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Vegetation Communities within the Penasquitos Creek Fuel Reduction Area .....	3
2	Vegetation Communities within the Del Mar Heights Fuel Reduction Area .....	3

## 1.0 INTRODUCTION

The City of San Diego Open Space Division (City) was awarded three FEMA grants. The City is carrying out brush management covering City owned land in the areas of Carmel Valley (~77.9 acres of urban-wild land interface [UWI]), Scripps Ranch (~166.22 acres of UWI), and Del Cerro (~97.96 acres of UWI) – totaling approximately 342 acres. This fuel reduction plan is prepared for the Carmel Valley area and presents pre-fuel reduction site conditions, identifies sensitive resources for avoidance/reduced impacts, and outlines recommendations for implementing fuel reduction along the length of the project area. Recommendations made herein are in accordance with Section 142.0412 of the San Diego Municipal Code (SDMC), the Fire Prevention Bureau Policy B-08-01, and the City of San Diego Fire Safety and Brush Management Guide.

The Carmel Valley grant covers fuel reduction areas in 2 general areas of the City of San Diego: Los Penasquitos Canyon Creek and Del Mar Heights (Figures 1, 2a, and 2b).

The goal of this plan is to present pre-fuel reduction site conditions for future comparison with post-fuel reduction conditions, document any rare plants/sensitive species observed during pre-thinning site surveys, and recommend an appropriate course of action to achieve compliance with the City's brush management regulations.

## 2.0 METHODS

### 2.1 PRE-FUEL REDUCTION DATA COLLECTION

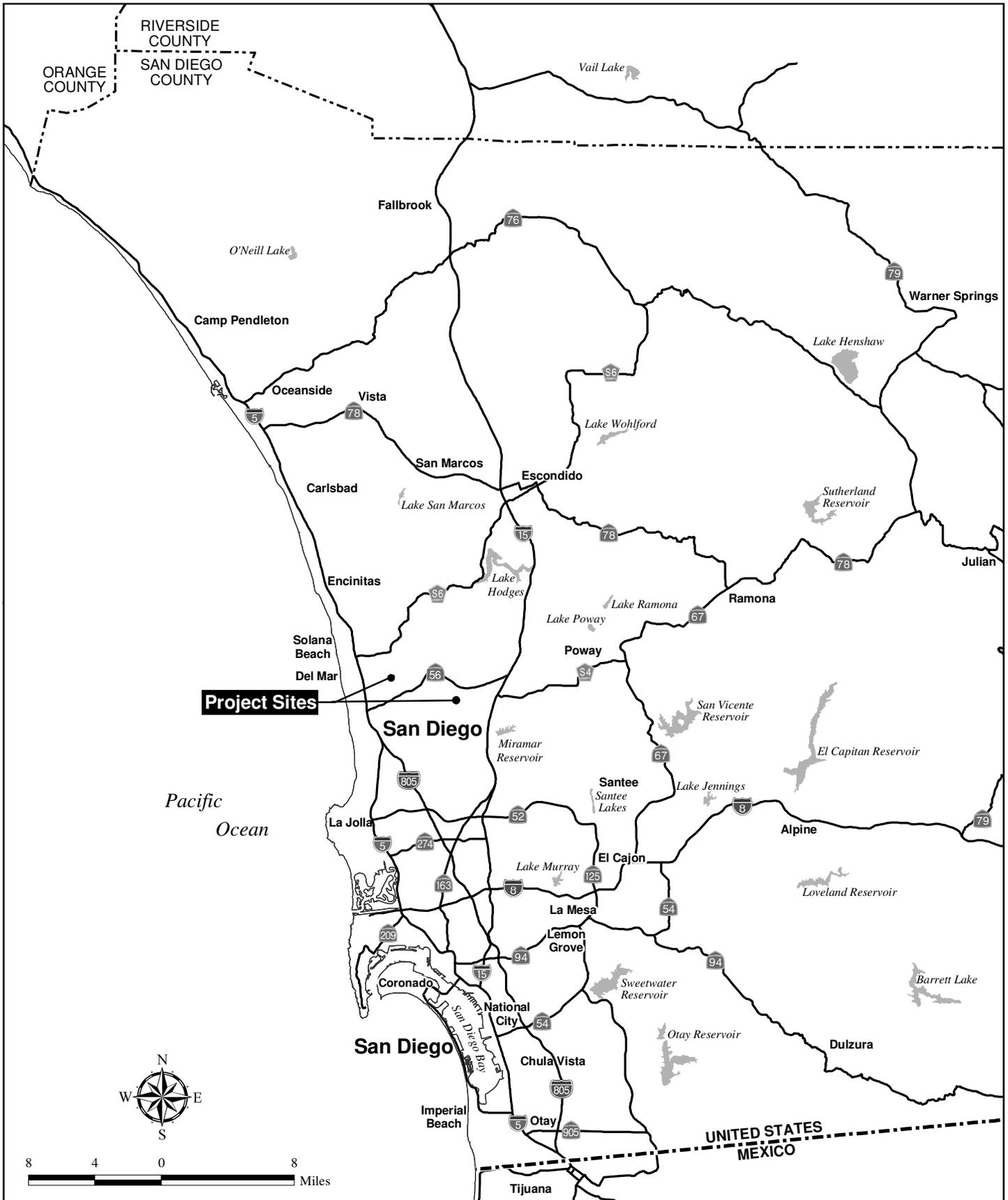
HELIX Environmental Planning, Inc. (HELIX) biologists collected the pre-fuel reduction data in order to document existing conditions, compliance with City brush management regulations (City 2008a and 2008b), and to assess wildfire hazard/compliance. HELIX biologists Dale Ritenour and Brian Weller collected data approximately every 200 feet along the length of the project area to document pre-fuel reduction site conditions. Data collection included taking photographs in two different directions, recording the compass heading of each photograph (to the nearest 5 degrees), using a Global Positioning System (GPS) with submeter accuracy to document the data collection location, hammering a nail in the ground with a pink feather attached to mark the data collection location, noting access points on an aerial photograph, and identifying potential encroachments by adjacent landowners, and identifying hazardous fuel load.

Data collection also consisted of identifying potential coastal California gnatcatcher (*Poliioptila californica californica*; CAGN) habitat, mapping the vegetation communities in accordance with the City's Biological Guidelines (City 2004), and qualitatively assessing brush management compliance of the polygons identified within the Carmel Valley fuel reduction area, in accordance with the methodology described in HELIX's technical proposal for the project (HELIX 2008).

### 2.2 COASTAL CALIFORNIA GNATCATCHER SURVEYS

If fuel reduction activities will occur during the CAGN breeding season (March 1 to August 15), focused surveys for CAGN are required. HELIX conducted protocol surveys for the CAGN in

HELIX

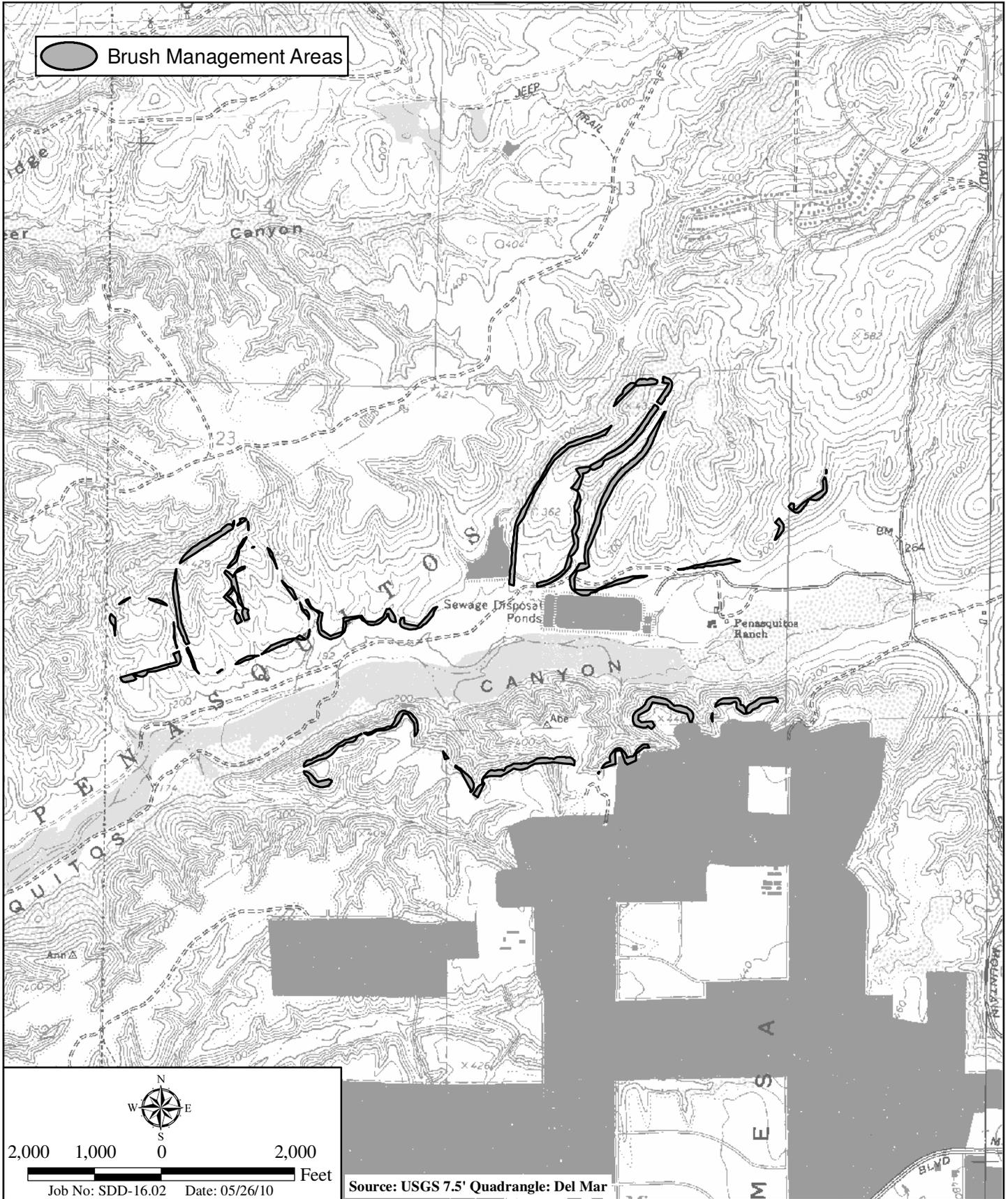


E:\ArcGIS\SSDD-16.01 CityBrushMgmt\Map\BIO\Fuel\_Modification\_Plan\Carmel Valley\Fig1\_Regional.mxd -NM

# Regional Location Map

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - CARMEL VALLEY

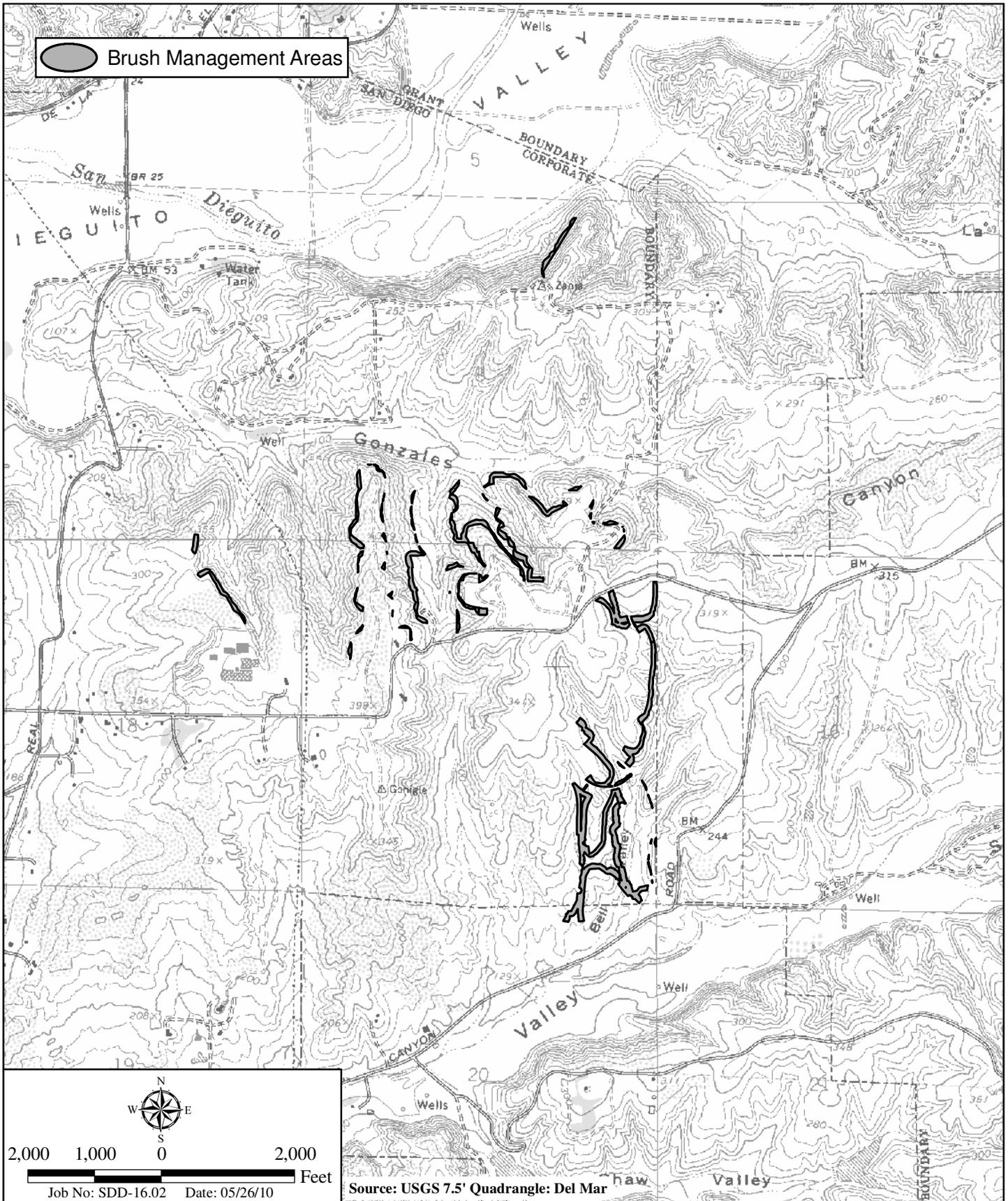
Figure 1



I:\ArcGIS\SDD-16.01 CityBrushMgmt\Map\BIO\Fuel\_Modification\_Plan\Camel Valley\Fig2a\_Location.mxd -NM

## Project Location Map

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - PEÑASQUITOS CREEK



## Project Location Map

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - DEL MAR HEIGHTS

the 3 habitat types identified as potential CAGN habitat in the project's RFP (i.e., coastal sage scrub, coastal sage-chaparral scrub, and maritime succulent scrub; City 2008c). HELIX's subcontractor Renee Owens (Owens Wildlife Biology) surveyed for CAGN in all coastal sage scrub and coastal sage-chaparral scrub mapped in the Penasquitos Creek work area, in accordance with the approved U.S. Fish and Wildlife Service guidelines (USFWS 1997). Surveys for the Penasquitos Creek work area were conducted on April 30, May 7, and May 14, 2010.

At the time this plan was prepared, HELIX had not yet conducted focused CAGN surveys for the Del Mar Heights work area.

## **2.3 RARE PLANT SURVEYS AND NESTING BIRD SURVEYS**

Approximately 1 to 2 weeks prior to the contractor beginning brush management activities in an area, HELIX biologists will conduct a pre-thinning sensitive plant species survey, raptor nest survey (if trees are present), and migratory bird nest survey. All sensitive plant species will be documented and those to be avoided will be marked with bright pink flagging tape so that it will be easily visible to the brush removal crew. All shrubs and trees containing an active raptor or bird nest will also be documented on an aerial photograph, bright pink flagging tape will be used to indicate the location of the nest, and a HELIX biologist will show the work crew where the active bird nest is located prior to work activities beginning in that area.

## **2.4 NOMENCLATURE**

Nomenclature in this report follows Holland (1986) for vegetation communities, Rebman and Simpson (2006) for plant species names, and the American Ornithologists' Union (2008) for bird species names. Sensitive plant species status is taken from CNPS (2009).

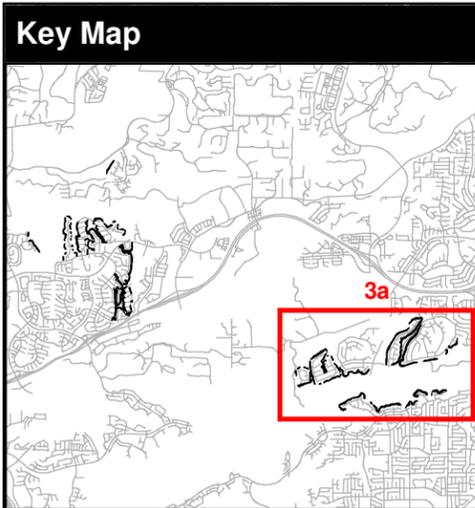
## **3.0 PRE-FUEL REDUCTION SITE CONDITIONS/CONSTRAINTS**

This section describes the site conditions within the Carmel Valley fuel reduction areas as they exist prior to the execution of fuel reduction in 2010. Vegetation communities and photo station/data collection points are provided in Figures 3a and 3b. Sensitive biological resources observed during the pre-fuel reduction data collection are provided in Figures 4a and 4b. Brush management compliance and proposed access to the work areas are provided in Figures 5a and 5b.

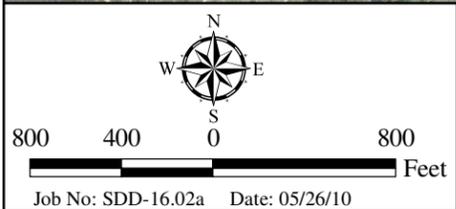
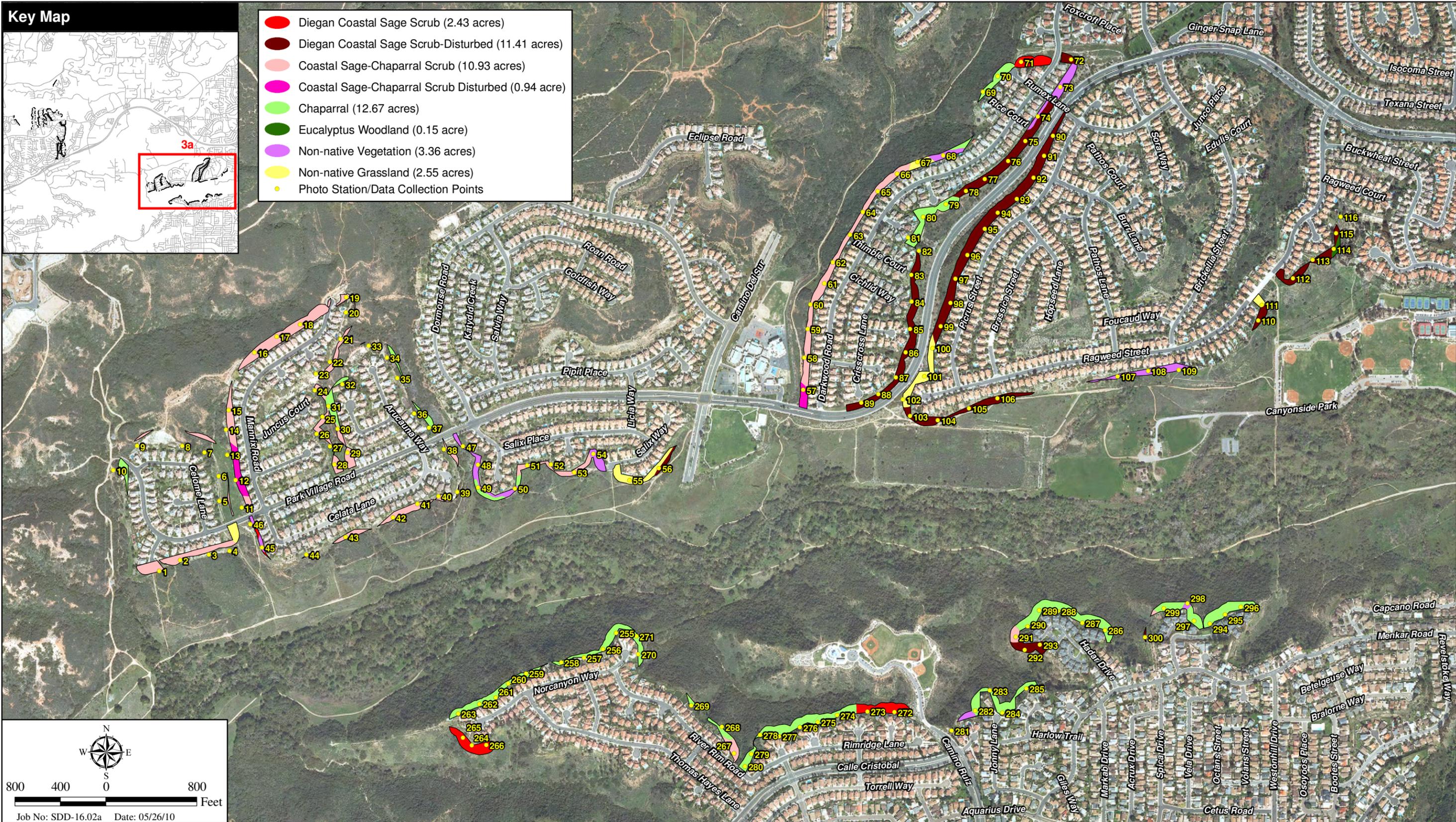
### **3.1 VEGETATION COMMUNITIES**

#### **3.1.1 Penasquitos Creek**

Six vegetation communities (Diegan coastal sage scrub [including disturbed], coastal sage-chaparral scrub [including disturbed], chaparral, eucalyptus woodland, non-native grassland, and non-native vegetation) were mapped within the Penasquitos Creek fuel reduction area (Figure 3a; Table 1). Four of the vegetation communities are considered sensitive by the City: Diegan



- Diegan Coastal Sage Scrub (2.43 acres)
- Diegan Coastal Sage Scrub-Disturbed (11.41 acres)
- Coastal Sage-Chaparral Scrub (10.93 acres)
- Coastal Sage-Chaparral Scrub Disturbed (0.94 acre)
- Chaparral (12.67 acres)
- Eucalyptus Woodland (0.15 acre)
- Non-native Vegetation (3.36 acres)
- Non-native Grassland (2.55 acres)
- Photo Station/Data Collection Points



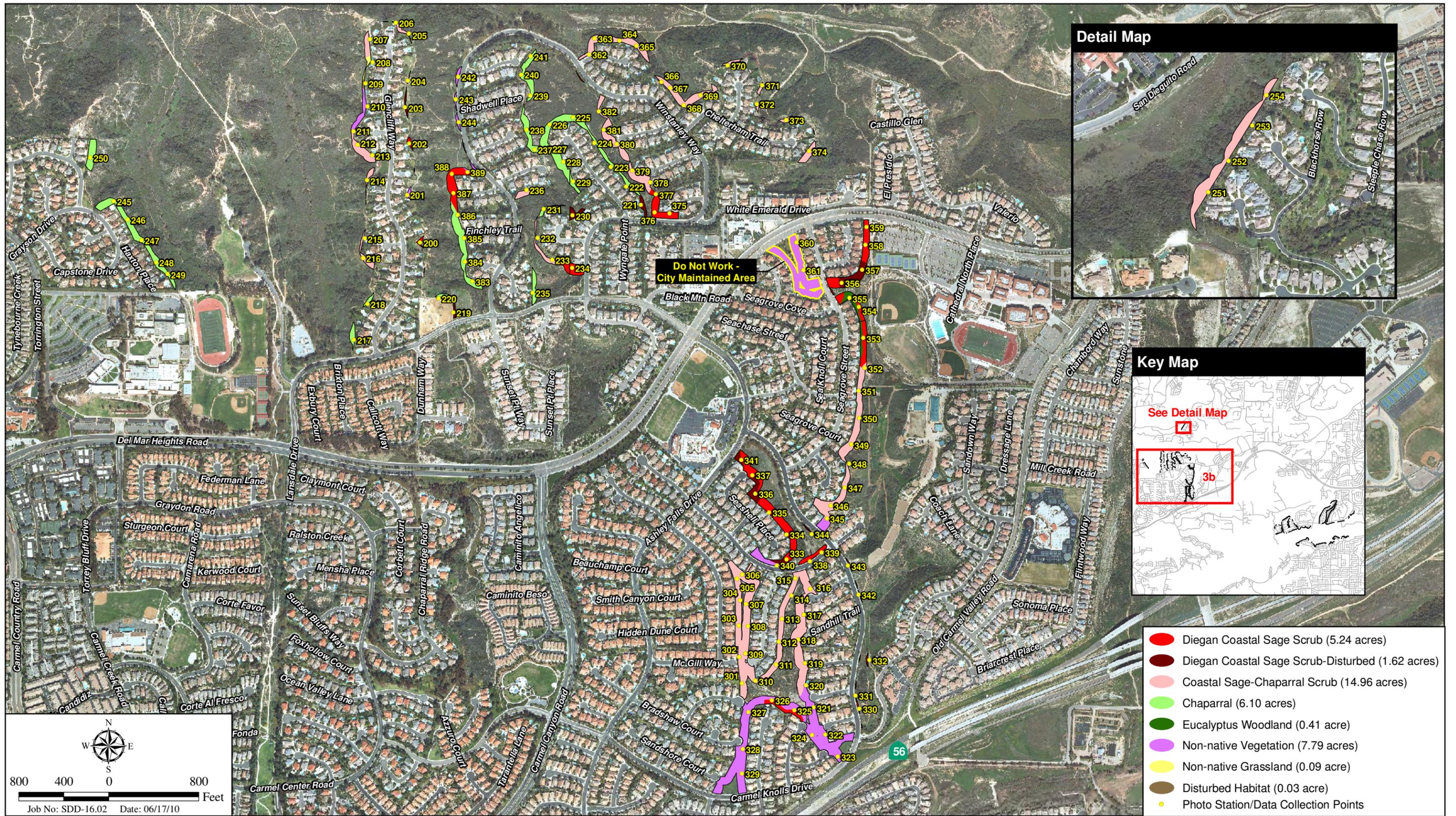
I:\ArcGIS\SDD-16.01 CityBrushMgmt\Map\BIO\Fuel\_Modification\_Plan\Camel Valley\Fig3a\_Vegetation.mxd -NM

## Vegetation

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - PEÑASQUITOS CREEK

Figure 3a





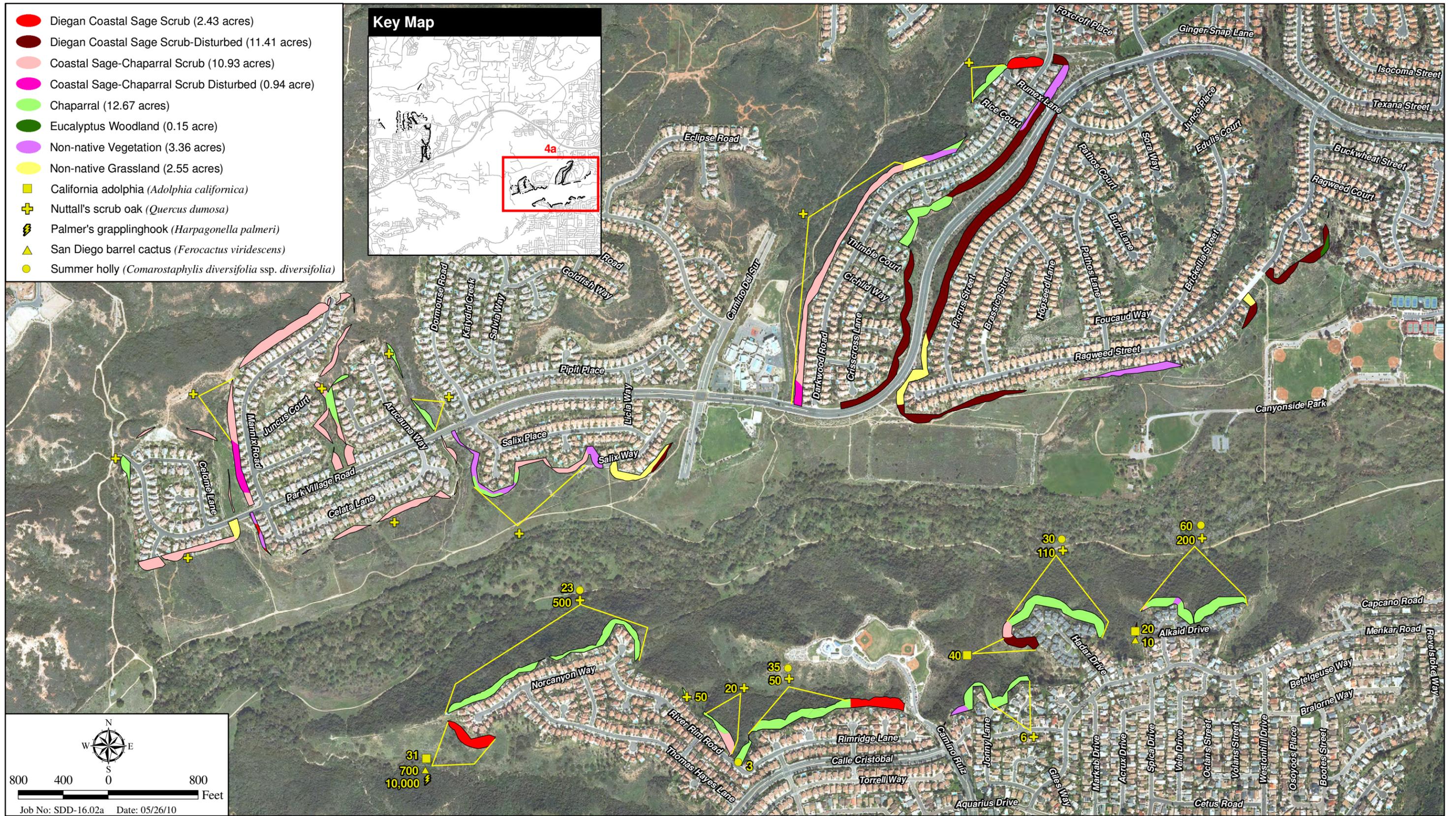
I:\ArcGIS\SDD-16.01 CityBrushMgmt\Map\BIO\Fuel\_Modification\_Plan\Camel Valley\Fig3b\_Vegetation.mxd -NM

# Vegetation

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - DEL MAR HEIGHTS

Figure 3b

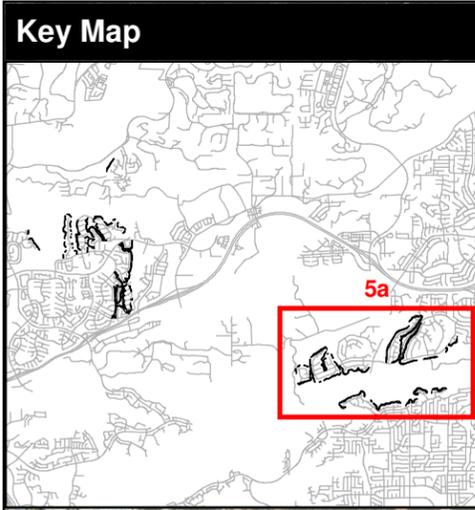




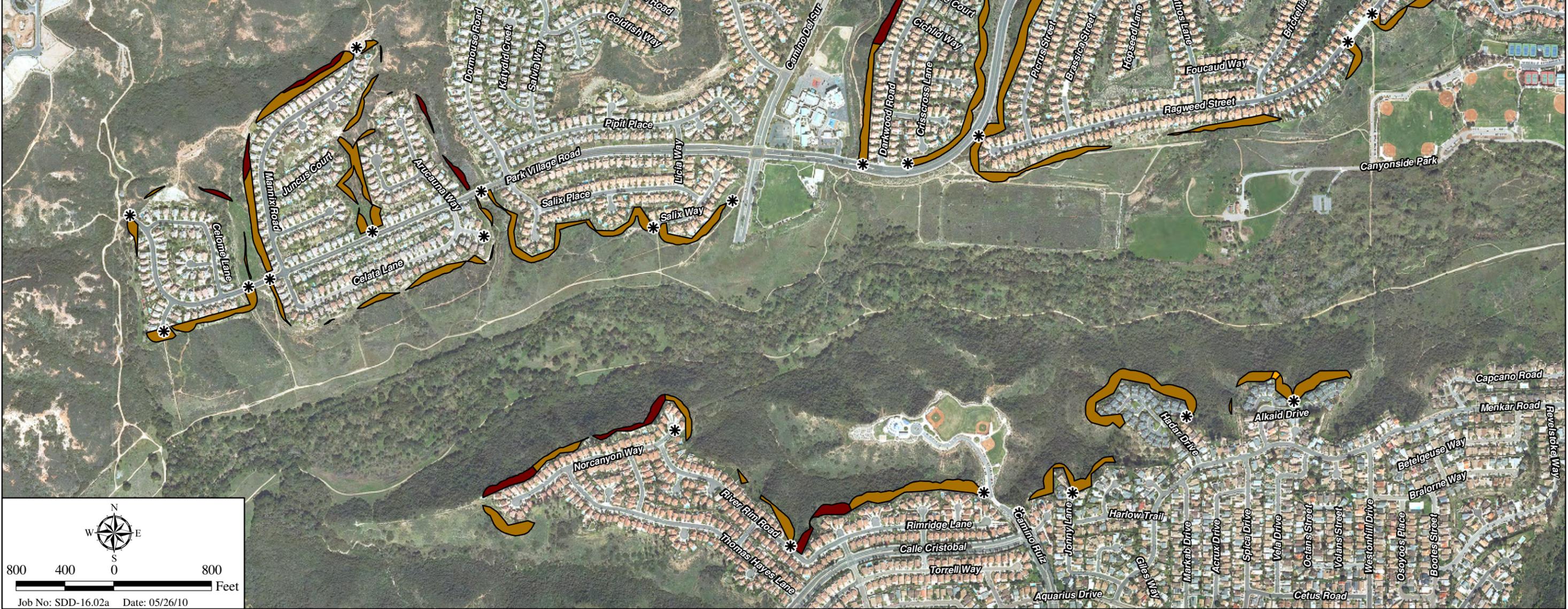
## Sensitive Resources

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - PEÑASQUITOS CREEK





- \* Proposed Access Points
- Zone 2 Brush Management Compliance
- In Compliance (0.07 acre)
- Requires Moderate Brush Management (38.5 acres)
- Requires Substantial Brush Management (5.94 acres)



Job No: SDD-16.02a Date: 05/26/10

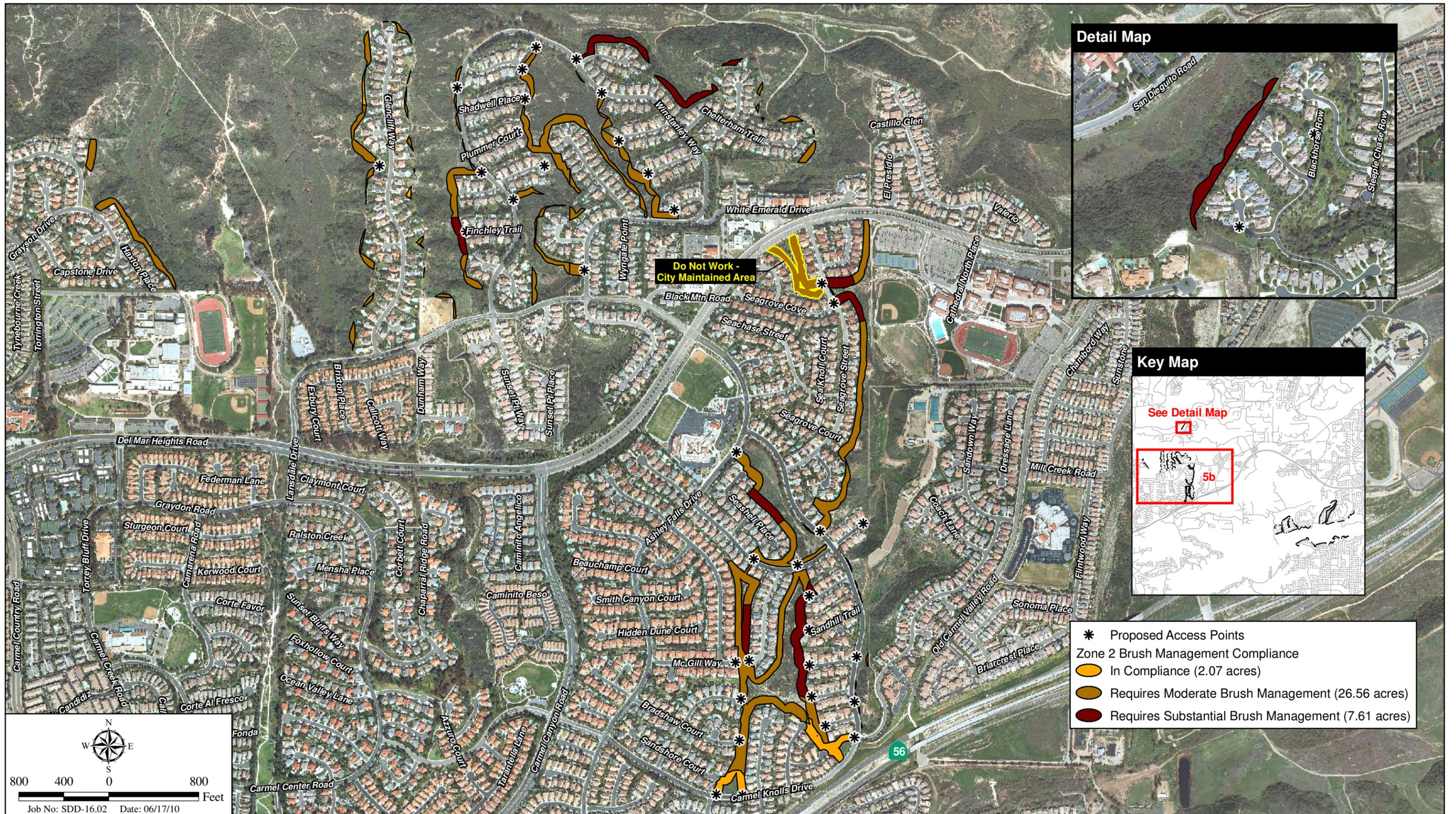
I:\ArcGIS\SDD-16.01 CityBrushMgmt\Map\BIO\Fuel\_Modification\_Plan\Camel Valley\Fig5a\_BrushManagement\_Compliance.mxd -NM

### Brush Management Compliance and Proposed Access

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - PEÑASQUITOS CREEK



Figure 5a



## Brush Management Compliance and Proposed Access

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - DEL MAR HEIGHTS

coastal sage scrub, coastal sage-chaparral scrub, chaparral, and non-native grassland. A description of each vegetation community is provided in Appendix A.

<b>Table 1 Vegetation Communities within the Penasquitos Creek Fuel Reduction Area</b>	
<b>Vegetation Community</b>	<b>Acres</b>
Diegan Coastal Sage Scrub (including disturbed)	13.84
Coastal Sage-Chaparral Scrub (including disturbed)	11.87
Chaparral	12.67
Eucalyptus Woodland	0.15
Non-native Grassland	2.55
Non-native Vegetation	3.36
<b>TOTAL</b>	<b>44.44</b>

### 3.1.2 Del Mar Heights

Seven vegetation communities (Diegan coastal sage scrub [including disturbed], coastal sage-chaparral scrub, chaparral, eucalyptus woodland, non-native grassland, non-native vegetation, and disturbed habitat) were mapped within the Del Mar Heights fuel reduction area (Figure 3b; Table 2). Four of the vegetation communities are considered sensitive by the City: Diegan coastal sage scrub, coastal sage-chaparral scrub, chaparral, and non-native grassland. A description of each vegetation community is provided in Appendix A.

<b>Table 2 Vegetation Communities within the Del Mar Heights Fuel Reduction Area</b>	
<b>Vegetation Community</b>	<b>Acres</b>
Diegan Coastal Sage Scrub (including disturbed)	6.86
Coastal Sage-Chaparral Scrub	14.96
Chaparral	6.10
Eucalyptus Woodland	0.41
Non-native Grassland	0.09
Non-native Vegetation	7.79
Disturbed Habitat	0.03
<b>TOTAL</b>	<b>36.24</b>

## 3.2 SENSITIVE PLANT SPECIES

### 3.2.1 Penasquitos Creek

Five sensitive plant species were documented within the Penasquitos Creek area: California adolphia (*Adolphia californica*), summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), San Diego barrel cactus (*Ferocactus viridescens*), Palmer's grapplinghook (*Harpagonella palmeri*), and Nuttall's scrub oak (*Quercus dumosa* Figure 4a).

#### **California adolphia (*Adolphia californica*)**

**Listing:** --/--; CNPS List 2.1

**Distribution:** Below 1,000 feet in elevation in western San Diego County and northwestern Baja California, Mexico

**Habitat:** Most often found in sage scrub but occasionally occurs in peripheral chaparral habitats, particularly hillsides near creeks. Usually associated with xeric locales where shrub canopy reaches 4 or 5 feet.

**Status on site:** California adolphia was documented in 3 locations south of Los Penasquitos Creek: approximately 31 individuals were documented west of Norcanyon Way, approximately 40 individuals were documented west of Hadar Drive, and approximately 20 individuals were documented west of Alkaid Drive (Figure 4a).

#### **Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)**

**Listing:** --/--; CNPS List 1B.2

**Distribution:** Orange, Riverside, and San Diego counties south into Baja California, Mexico

**Habitat:** Mesic north-facing slopes in southern mixed chaparral are the preferred habitat of this large, showy shrub. Rugged steep drainages seem to be a preferred location for isolated shrubs.

**Status on site:** Summer holly was documented in 4 locations south of Los Penasquitos Creek: approximately 23 individuals were documented north of Norcanyon Way, approximately 35 individuals were documented north of Rimridge Lane, approximately 30 individuals were documented north of Hadar Drive, and approximately 60 individuals were documented north of Alkaid Drive (Figure 4a).

#### **San Diego barrel cactus (*Ferocactus viridescens*)**

**Listing:** --/--; CNPS List 2.1; City MCSP Covered

**Distribution:** San Diego County; Baja California, Mexico

**Habitat:** Optimal habitat for this cactus appears to be Diegan coastal sage scrub hillsides, often at the crest of slopes and growing among cobbles.

**Status on site:** San Diego barrel cactus was documented in 2 locations south of Los Penasquitos Creek: approximately 700 individuals were documented west of Norcanyon Way and approximately 10 individuals were documented west of Alkaid Drive (Figure 4a).

#### **Palmer's grapplinghook (*Harpagonella palmeri*)**

**Listing:** --/--; CNPS List 4.2

**Distribution:** Below approximately 3,300 feet in elevation in Los Angeles, Orange, Riverside, and San Diego counties; Baja California and Sonora, Mexico; San Clemente Island; Arizona

**Habitat:** Clay soils in annual grasslands and coastal sage scrub

## HELIX

**Status on site:** A patch of approximately 10,000 individuals was documented in the fuel modification zone west of Norcanyon Way (Figure 4a).

**Nuttall's scrub oak (*Quercus dumosa*)**

**Listing:** --/--; CNPS List 1B.1

**Distribution:** San Diego, Orange, and Santa Barbara counties; Baja California, Mexico

**Habitat:** Chaparral with a relatively open canopy cover is the preferred habitat in flat terrain (also found in coastal scrub). On north-facing slopes, may grow in dense monotypic stands. Sandy or clay loam soils

**Status on site:** Nuttall's scrub oak was documented throughout the Penasquitos Creek subarea (Figure 4a). The number of scrub oaks within each brush management area south of Los Penasquitos Creek ranged from 6 to 500 individuals. The number of scrub oaks within each brush management area north of Los Penasquitos Creek were not quantified during the pre-fuel reduction data collection surveys; the number of scrub oaks will be determined during the rare plant surveys (described in Section 2.3 above).

### 3.2.2 Del Mar Heights

Eight sensitive plant species were documented within the Del Mar Heights area: California adolphia (*Adolphia californica*), summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), western dichondra (*Dichondra occidentalis*), Palmer's grapplinghook (*Harpagonella palmeri*), San Diego marsh elder (*Iva hayesiana*), Nuttall's scrub oak (*Quercus dumosa*), ashy spike-moss (*Selaginella cinerascens*), and San Diego County viguiera (*Viguiera laciniata*; Figure 4b).

**California adolphia (*Adolphia californica*)**

**Listing:** --/--; CNPS List 2.1

**Distribution:** Below 1,000 feet in elevation in western San Diego County and northwestern Baja California, Mexico

**Habitat:** Most often found in sage scrub but occasionally occurs in peripheral chaparral habitats, particularly hillsides near creeks. Usually associated with xeric locales where shrub canopy reaches 4 or 5 feet.

**Status on site:** California adolphia was documented in 4 locations: approximately 15 individuals and approximately 35 individuals were documented east of Ashley Falls Drive, approximately 20 individuals were documented east of Chelterham Trail, and approximately 43 individuals were documented east of Finchley Trail (Figure 4b).

**Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)**

**Listing:** --/--; CNPS List 1B.2

**Distribution:** Orange, Riverside, and San Diego counties south into Baja California, Mexico

**Habitat:** Mesic north-facing slopes in southern mixed chaparral are the preferred habitat of this large, showy shrub. Rugged steep drainages seem to be a preferred location for isolated shrubs.

**Status on site:** Summer holly was documented in 6 locations (either as a single individual or 2 individuals): west of Finchley Trail, north of Chelterham Trail, east of Chelterham Trail, west of Winstanley Way, and west of Blackhorse Row (Figure 4b).

**Western dichondra (*Dichondra occidentalis*)**

## HELIX

**Listing:** --/--; CNPS List 4.2

**Distribution:** Santa Barbara County to Baja California, Mexico; San Miguel Island

**Habitat:** Dry, sandy banks in coastal sage scrub, chaparral, or southern oak woodland. Often proliferates on recently burned slopes.

**Status on site:** A patch of 20 individuals was observed east of Carmel Knolls Drive (Figure 4b).

**Palmer's grapplinghook (*Harpagonella palmeri*)**

**Listing:** --/--; CNPS List 4.2

**Distribution:** Below approximately 3,300 feet in elevation in Los Angeles, Orange, Riverside, and San Diego counties; Baja California and Sonora, Mexico; San Clemente Island; Arizona

**Habitat:** Clay soils in annual grasslands and coastal sage scrub

**Status on site:** A patch of approximately 2,000 individuals was documented in the fuel modification zone west of Wyngate Point (Figure 4b).

**San Diego marsh-elder (*Iva hayesiana*)**

**Listing:** --/--; CNPS List 2.2

**Distribution:** San Diego County; Baja California, Mexico

**Habitat:** Creeks of intermittent streambeds are preferred habitat for this low-growing, conspicuous shrub. Typically, the riparian canopy is open, allowing substantial sunlight to reach this marsh-elder. Sandy alluvial embankments with cobbles are frequently utilized.

**Status on site:** A patch of 30 San Diego marsh-elder was documented northeast of Finchley Trail (Figure 4b).

**Nuttall's scrub oak (*Quercus dumosa*)**

**Listing:** --/--; CNPS List 1B.1

**Distribution:** San Diego, Orange, and Santa Barbara counties; Baja California, Mexico

**Habitat:** Chaparral with a relatively open canopy cover is the preferred habitat in flat terrain (also found in coastal scrub). On north-facing slopes, may grow in dense monotypic stands. Sandy or clay loam soils

**Status on site:** Nuttall's scrub oak was documented throughout the Del Mar Heights subarea (Figure 4b). The number of scrub oaks within each brush management area ranged from 1 to 50 individuals.

**Ashy spike-moss (*Selaginella cinerascens*)**

**Listing:** --/--; CNPS List 4.1

**Distribution:** Orange and San Diego counties; northwestern Baja California, Mexico

**Habitat:** Flat mesas in coastal sage scrub and chaparral. A good indicator of site degradation, as it rarely inhabits disturbed soils.

**Status on site:** Ashy spike moss was documented east of Carmel Knolls Drive (Figure 4b).

**San Diego County viguiera (*Viguiera laciniata*)**

**Listing:** --/--; CNPS List 4.2

**Distribution:** San Diego and Orange County; Baja California, Mexico

**Habitat:** Diegan coastal sage scrub and coastal sage-chaparral scrub. Generally, shrub cover is more open than at mesic, coastal locales supporting sage scrub. Occurs on a variety of soil types.

---

**HELIX**

**Status on site:** A patch of approximately 4 individuals was documented south of Thurston Place, a patch of 100 individuals and a patch of approximately 1,000 individuals were documented east of Seagrove Street (Figure 4b).

### **3.3 COASTAL CALIFORNIA GNATCATCHER**

Fuel reduction activities can be conducted in Diegan coastal sage scrub, coastal sage-chaparral scrub, and maritime succulent scrub without restrictions related to CAGN (including the locations described below) if activities are conducted between August 16 and February 28. Protocol CAGN surveys would need to be conducted if fuel reduction activities will occur in the communities listed above between March 1 and August 15.

#### **3.3.1 Penasquitos Creek**

Protocol CAGN surveys were conducted for the Penasquitos Creek subarea and no CAGN was detected.

#### **3.3.2 Del Mar Heights**

No CAGN were detected during the pre-fuel reduction data collection (no protocol surveys for CAGN have been conducted as of the time that this plan was prepared).

### **3.4 NESTING BIRDS AND RAPTORS**

No active raptor nests or other active bird nests were noted during the pre-fuel reduction areas. HELIX will conduct searches for nesting birds and active raptor nests prior to the start of fuel reduction activities in each area, as described in Section 2.3 above.

### **3.5 BRUSH MANAGEMENT COMPLIANCE**

Portions of the Carmel Valley fuel reduction area were considered to be in compliance with City brush management regulations (Figures 5a and 5b). A very small area of habitat north of Alkaid Drive mapped as non-native vegetation was considered to be in compliance because plant cover was either very low or absent completely (Figure 5a; Appendix C). Two areas in the southern portion of the Del Mar Heights subarea were considered to be in compliance because they were maintained as part of a walking trail and park area (shrub cover was below 50 percent, herbaceous cover was below 2 feet in height, and trees were either absent or had been limbed up to the proper height; Figure 5b; Appendix C).

The majority of the Carmel Valley fuel reduction area was assessed as needing moderate brush management. Moderate brush management was a category determined by HELIX and generally is defined as areas where shrubs and/or trees need to be thinned or pruned in accordance with City brush management regulations. “Moderate” included areas that had previously been thinned, but some brush management was still needed because debris was present, cover was greater than 50 percent, or trees needed to be pruned.

## **HELIX**

Several areas were considered by HELIX to need substantial brush management. Substantial brush management was a category determined by HELIX and is generally defined as areas where no brush management had occurred, existing habitat is very dense, and/or trees are spaced in close proximity to each other. Dense stands of chaparral and coastal sage scrub communities are included in this category (Figures 5a and 5b).

Sample photos from various habitat types are provided in Appendix B; remaining photos are provided in the attached CD.

### **3.6 PROPOSED ACCESS POINTS**

Proposed access points to each fuel reduction area are shown in Figures 5a and 5b.

## **4.0 FUEL REDUCTION EXECUTION/MONITORING**

The following is a checklist of items that need to be conducted prior to starting fuel reduction activities within any particular area.

- ❑ Flagging fuel reduction limits by contractor.
- ❑ Documentation of pre-fuel reduction site conditions by the project biologist.
- ❑ Rare plant survey by the project biologist.
- ❑ Nesting raptor/other bird survey by the project biologist.
- ❑ CAGN surveys (for work conducted between March 1 and August 15 in coastal sage scrub, coastal sage-chaparral scrub, or maritime succulent scrub)
- ❑ Identification of any cultural/Native American resources requiring monitoring, as described in the RFP

Prior to the start of fuel reduction activities, HELIX will provide an initial training and orientation program to the contractor. HELIX will provide a brush management regulations pamphlet to all fuel reduction personnel during the initial orientation and will explain the brush management program. Copies of a plant photo booklet will also be distributed to personnel. Monthly refresher training sessions (monthly tailgates) will also be conducted by HELIX on the first working day of each month. Any new crew members will receive an orientation on the brush management program. Fuel reduction monitors will keep a log of session dates and times of the training provided to personnel, which will be provided as a summary table in the post fuel reduction report.

During fuel reduction implementation, guidance will be provided by the biological monitor; however, it is the contractor's responsibility to be familiar with all applicable City brush management regulations/guidelines, as specified by the City in their Request for Bid. Upon completion of fuel reduction in an area, the biological monitor must inspect the area and determine that all work is completed in compliance with the applicable City open space regulations/guidelines.

## **5.0 FUEL REDUCTION RECOMMENDATIONS**

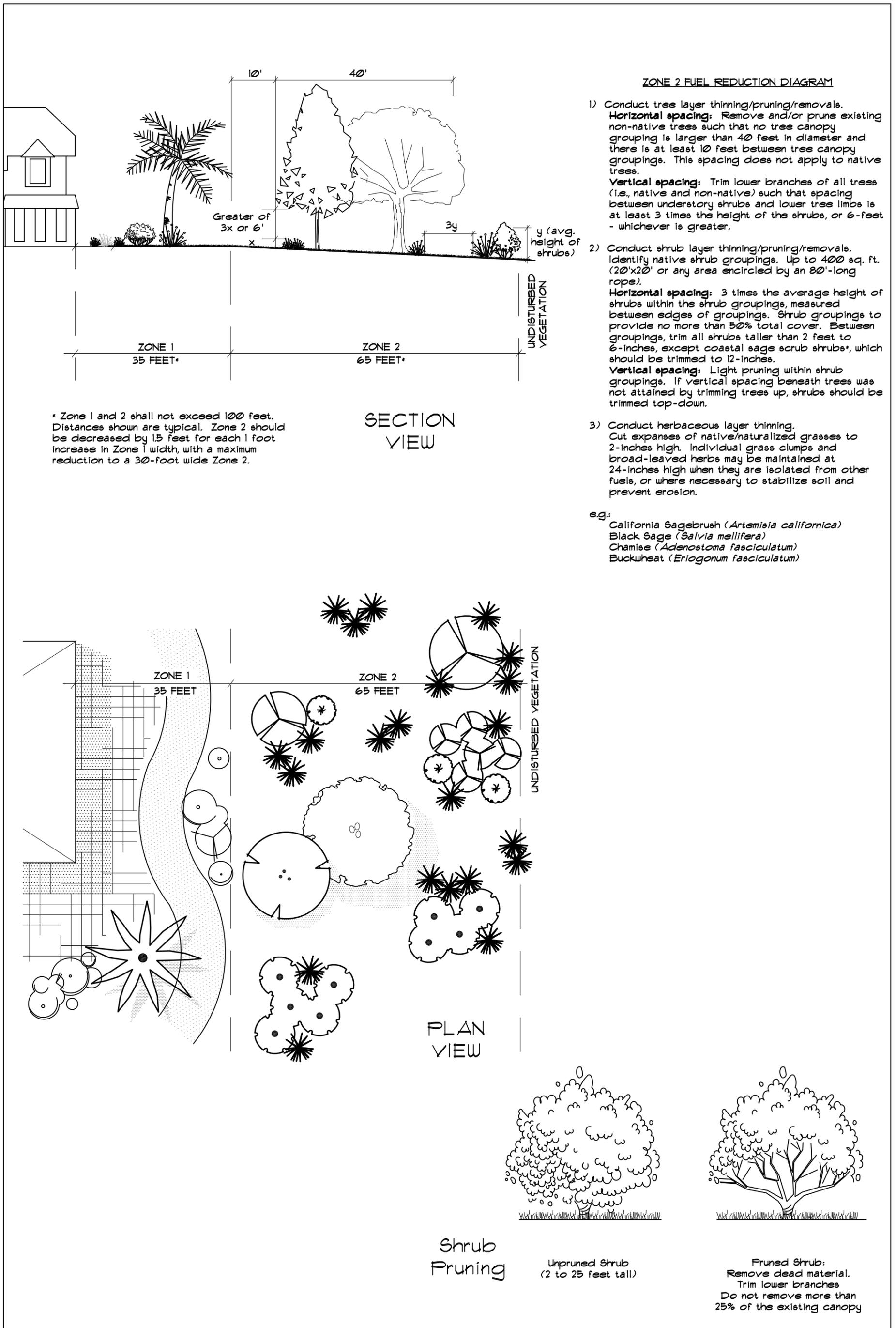
Recommendations for bringing the Carmel Valley fuel reduction area into compliance with City brush management regulations are provided in Appendix C. Specific recommendations are provided for each vegetation community within a given landscape area. Landscape areas can be loosely defined as each urban canyon or block of open space. If vegetation communities within a landscape area varied, specific recommendations were provided for each area. Recommendations were made in accordance with Section 142.0412 of the SDMC, the Fire Prevention Bureau Policy B-08-01, and the City of San Diego Fire Safety and Brush Management Guide, as well as the City's clarifications on this project. Figure 6 shows a typical depiction of the brush management regulations and incorporates most of the City's clarifications for this project. More specific details will be provided by a biological monitor in the field, during fuel reduction implementation.

## **6.0 DELIVERABLES**

A daily log will be filled out by the HELIX monitoring biologist each day that he or she is on site to monitor fuel reduction activities. The log will be sent to the City and to the contractor at the end of each week and will contain the monitoring dates, work areas, information on the pre- and post-clearing surveys, and a summary of the observations and activities occurring each day.

Once an area has been cleared by the contractor, a HELIX biologist will walk with the contractor to ensure that the area(s) are considered to be in compliance with brush management regulations. Any items identified during the walk will be noted on a punchlist, which will be provided to the contractor by the HELIX monitor. HELIX will work with the contractor and the City to ensure that all punchlist items are completed before fuel reduction activities are considered to be completed in an area.

Once fuel reduction activities are considered to be complete within the entire Carmel Valley fuel reduction area, HELIX will prepare a Post Fuel Reduction Plan to summarize the post fuel reduction site conditions, in accordance with guidelines provided in HELIX's proposal (HELIX 2008). The Post Fuel Reduction Plan will be provided separately from this report.



## Fuel Reduction Diagram

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - SCRIPPS RANCH

HELIX

Scale: 1"=20'

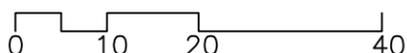


Figure 6

## 7.0 REFERENCES

- American Ornithologists' Union. 2008. List of the 2,048 Bird Species (with Scientific and English Names) Known from the AOU Check-list Area. URL: <http://www.aou.org/checklist/index.php3>.
- California Native Plant Society (CNPS). 2009. Inventory of Rare and Endangered Plants. Internet searchable database Version 7.09b interim. URL: <http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>. Updated quarterly. April 10.
- City of San Diego (City). 2008a. Bulletin #1: Brush Management Guide. Published by San Diego Fire-Rescue Department on July 1.
- 2008b. Clarifications of Brush Management Regulations and Landscape Standards (FPB Policy B-08-1). Revised by Fire Prevention Bureau on June 6.
- 2008c. Request for Proposal (No. 9442-09-W-RFP) to Furnish the City of San Diego with Brush Management Consulting Services.
2004. San Diego Municipal Code/Land Development Code Biology Guidelines. August.
- Conrad, C.E. 1987. Common shrubs of chaparral and associated ecosystems of southern California. Gen. Tech. Rep. PSW-99. Berkeley, CA. Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, 86 pp.
- HELIX Environmental Planning, Inc. (HELIX). 2008. Volume I. Technical Proposal to Provide Brush Management Consultant Services to the City of San Diego. October 23.
- Holland R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, State of California, Department of Fish and Game, Sacramento, 156 pp.
- Jackson, L. 1985. Ecological origins of California's Mediterranean grasses. *Journal of Biogeography* 12: 349-361.
- Keeley, J. and S. Keeley. 1988. Chaparral. North American Vegetation. Eds. M. Barbour and W. Billings. Cambridge University Press, pp. 165-207.
- Rebman, Jon P. and Michael G. Simpson. 2006. Checklist of the Vascular Plants of San Diego County, 4<sup>th</sup> Edition. San Diego Natural History Museum and San Diego State University.
- Rundel, P. 1986. Structure and function in California chaparral. *Fremontia*, Vol. 14 (3), pp. 3-10.
- U.S. Fish and Wildlife Service (USFWS). 1997. Coastal California Gnatcatcher (*Poliioptila californica californica*) Presence/Absence Survey Guidelines. February 28.

### HELIX

## Appendix A VEGETATION COMMUNITIES IN THE CARMEL VALLEY AREA

### Diegan Coastal Sage Scrub

Coastal sage scrub is one of the two major shrub types that occur in southern California, occupying xeric sites characterized by shallow soils (the other is chaparral). Four distinct coastal sage scrub geographical associations (northern, central, Venturan, and Diegan) are recognized along the California coast. Diegan coastal sage scrub is dominated by subshrubs with leaves that abscise during drought and are replaced by a lesser amount of smaller leaves. This adaptation of drought evasion allows these species to better withstand the prolonged drought period in the summer and fall in areas of low precipitation. Coastal sage scrub occurs on a variety of soil types, both chemically and physically, from sandy lithosols on siliceous sandstone to clay-rich chernozems on volcanic ash. Water is less likely to penetrate to depth in clay soils than in siliceous soils. Clay soils generally lose more moisture through runoff, have lower infiltration rates, store more moisture in an equivalent depth of soil, and are likely to lose a greater proportion of moisture through capillary action and transpiration from shallow-rooted species than siliceous soils. Diegan coastal sage scrub may be dominated by a variety of species depending upon soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), laurel sumac (*Malosma laurina*), and black sage (*Salvia mellifera*).

Diegan coastal sage scrub is considered a sensitive habitat by the USFWS, CDFG, and City of San Diego, and is given the highest inventory priority in the California Natural Diversity Database (CNDDDB). This habitat type supports a number of federally and state endangered, threatened, and rare plants as well as several bird, reptile, and insect species that are federally listed or are candidates for federal listing, including the coastal California gnatcatcher (*Poliioptila californica californica*).

### Coastal Sage-Chaparral Scrub

Coastal sage-chaparral scrub is a mixture of sclerophyllous chaparral shrubs and drought-deciduous sage scrub species regarded as an ecotone (transition) between two vegetation communities. This singular community contains floristic elements of both communities including California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), laurel sumac (*Malosma laurina*), chamise (*Adenostoma fasciculatum*), scrub oak (*Quercus berberidifolia*), and ceanothus (*Ceanothus* sp.). This community varies in species composition but always contains coastal sage and chaparral species. Coastal sage-chaparral scrub is considered sensitive by the USFWS, CDFG, and city of San Diego because of its reduced occurrence and potential to support federally and state endangered, threatened, and rare plants as well as sensitive animals including the coastal California gnatcatcher.

### Chaparral

Chaparral is composed of broad-leaved sclerophyllous shrubs that can reach 6 to 10 feet in height and form dense often nearly impenetrable stands with poorly developed understories. The chaparral communities in the Carmel Valley subarea include southern mixed chaparral, chamise chaparral, scrub oak chaparral, and southern maritime chaparral. The shrubs are generally tall and deep rooted, with a

## HELIX

well developed soil litter layer, high canopy coverage, low light levels within the canopy, and lower soil temperatures (Keeley and Keeley 1988). This vegetation community occurs on dry, rocky, often steep north-facing slopes with little soil. As conditions become more mesic, broad-leaved sclerophyllous shrubs that resprout from underground root crowns become dominant. Dominant shrub species in the chaparral communities include chamise (*Adenostoma fasciculatum*), mission manzanita (*Xylococcus bicolor*), coast white lilac (*Ceanothus verrucosus*), Ramona lilac (*Ceanothus tomentosus*), white-stem wild-lilac (*Ceanothus leucodermis*), big-berry manzanita (*Arctostaphylos glauca*), and scrub oak (*Quercus dumosa*). This vegetation community provides important habitat for wide-ranging species such as mule deer (*Odocoileus hemionus*), mountain lion (*Felis concolor*), and golden eagle (*Aquila chrysaetos*). This vegetation community is considered sensitive by the City of San Diego.

### **Eucalyptus Woodland**

Eucalyptus woodland is dominated by eucalyptus (*Eucalyptus* sp.), an introduced species that has often been planted purposely for wind blocking, ornamental, and hardwood production purposes. Most groves are monotypic with the most common species being either the blue gum (*Eucalyptus gunnii*) or red gum (*E. camaldulensis* ssp. *obtusata*). The understory within well-established groves is usually very sparse due to the closed canopy and allelopathic nature of the abundant leaf and bark litter. If sufficient moisture is available, this species becomes naturalized and is able to reproduce and expand its range. The sparse understory offers only limited wildlife habitat; however, as a wildlife habitat, these woodlands provide excellent nesting sites for a variety of raptors, including red-shouldered hawks (*Buteo lineatus*). During winter migrations, a large variety of warblers may be found feeding on the insects that are attracted to the eucalyptus flowers. Eucalyptus trees with active raptor nests are considered sensitive.

### **Non-native Grassland**

Non-native grassland is a dense to sparse cover of annual grasses, often associated with numerous species of showy-flowered native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species include oats (*Avena* sp.), red brome (*Bromus rubens*), ripgut (*B. diandrus*), ryegrass (*Lolium* sp.), and mustard (*Brassica* sp.). Most of the annual introduced species that comprise the majority of species and biomass within the non-native grassland originated from the Mediterranean region, an area with a long history of agriculture and a climate similar to California. These two factors, in addition to intensive grazing and agricultural practices in conjunction with severe droughts, contributed to the successful invasion and establishment of these species and the replacement of native grasslands with an annual dominated non-native grassland (Jackson 1985). Non-native grassland is considered a sensitive habitat by the City of San Diego for its use as foraging habitat by local and migrating raptor species.

### **Non-native Vegetation**

Characterized by predominantly non-native species introduced and established via human action. These areas are typically unirrigated, but may have been previously irrigated, and currently receive water as urban runoff or precipitation.

## **Disturbed Habitat**

Disturbed habitat includes land cleared of vegetation (e.g., dirt roads), land containing a preponderance of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance (previously cleared or abandoned landscaping), or land showing signs of past or present animal usage that removes any capability of providing viable habitat.

## **Developed Land**

Developed land is where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained.



Diegan Coastal Sage Scrub  
Point 264 – Penasquitos Creek  
CV-PP527-Pre



Coastal Sage – Chaparral Scrub  
Point 64 – Penasquitos Creek  
CV-PP127-Pre

HELIX



Non-native vegetation  
Point 47 – Penasquitos Creek  
CV-PP93-Pre



Eucalyptus Woodland and Diegan coastal sage scrub  
Point 115 – Penasquitos Creek  
CV-PP229-Pre

HELIX



Chaparral  
Point 276 – Penasquitos Creek  
CV-PP552-Pre



Non-native grassland  
Point 55 – Penasquitos Creek  
CV-PP109-Pre

HELIX



Diegan Coastal Sage Scrub  
Point 337 – Del Mar Heights  
CV-PP674-Pre



Coastal Sage – Chaparral Scrub  
Point 302 – Del Mar Heights  
CV-PP603-Pre

HELIX



Non-native vegetation  
Point 210 – Del Mar Heights  
CV-PP419-Pre



Eucalyptus Woodland and Diegan coastal sage scrub  
Point 354 – Del Mar Heights  
CV-PP707-Pre

HELIX



Chaparral  
Point 237 – Del Mar Heights  
CV-PP474-Pre



Non-native grassland  
Point 208 – Del Mar Heights  
CV-PP416-Pre

HELIX

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
<b>Penansquitos Creek Subarea</b>										
1	1	225	2	40	CSCS	--	N	Y	2	Existing shrub cover is generally 20 to 60 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees (pepper trees) occur within this area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
2	3	60	4	265	CSCS	Que dum	N	Y	2	same as 1
3	5	300	6	40	CSCS	--	N	Y	2	same as 1
4	7	270	8	315	CSCS	--	N	N	2	same as 1
5	9	330	10	190	CSCS	--	N	Y	2	Existing shrub cover is generally 40 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees (eucalyptus and pepper trees) occur within this area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
6	11	150	12	315	CSCS	--	N	Y	2	same as 5
7	13	250	14	100	CSCS	--	N	Y	3	same as 5
8	15	240	16	100	CSCS	--	N	Y	3	same as 5
9	17	230	18	45	CSCS	--	N	Y	2	same as 5

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
10	19	345	20	145	CHAP	Que dum	N	N	2	Existing shrub cover is generally 40 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees (eucalyptus and pepper trees) occur within this area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
11	21	350	22	135	CSCS		N	Y	2	Existing shrub cover is generally 20 to 80 percent and portions occur on slopes greater than 50 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees (eucalyptus and pepper trees) occur within the brush management zone and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater (trees need to be limbed-up to 6 times the shrub height or to 6' from the ground when they occur on slopes greater than 50 percent). All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
12	23	330	24	140	CSCS-d	--	N	N	2	same as 11
13	25	340	26	135	CSCS	Que dum	N	N	2	same as 11
14	27	355	28	135	CSCS	Que dum	N	N	3	same as 11
15	29	190	30	330	CSCS	Que dum	Y	N	3	same as 11
16	31	40	32	215	CSCS	--	Y	Y	2	same as 11
17	33	65	34	225	CSCS	--	N	Y	3	same as 11
18	35	55	36	155	CSCS	--	N	Y	3	same as 11
19	37	240	37	95	CSCS	--	N	Y	2	same as 11
20	39	180	40	30	CSCS		Y	Y	2	same as 11

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
21	41	15	42	215	CSCS		N	Y	2	same as 11
22	43	200	44	340	CSCS	--	Y	Y	2	same as 11
23	45	245	46	55	CSCS	--	Y	Y	2	same as 11
24	47	140	48	270	CSCS	Que dum	Y	Y	2	same as 11
25	49	245	50	35	CSCS	--	N	Y	2	same as 11
26	51	135	52	275	CSCS	--	Y	Y	2	same as 11
27	53	180	54	290	CSCS		Y	Y	2	same as 11
28	55	170	56	355	CSCS	--	Y	Y	2	same as 11
29	57	140	58	330	CSCS	--	Y	Y	2	same as 11
30	59	340	60	125	CSCS	--	Y	Y	2	same as 11
										Existing shrub cover is generally 40 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species (e.g., pampas grass), then other non-native species (including prostrate acacia), followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees (eucalyptus and pepper trees) occur within this area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
31	61	360	62	125	CHAP	--	N	N	2	
32	63	40	64	210	CHAP		N	Y	2	same as 31
33	65	200	66	60	CHAP		Y	N	2	same as 31
34	67	155	68	325	CHAP	Que dum	Y	N	3	same as 31
35	69	180	70	305	CHAP		Y	N	3	same as 31
36	71	140	72	300	CHAP	Que dum	Y	N	3	same as 31
37	73	290	74	155	CHAP	Que dum	Y	N	3	same as 31
										Existing shrub cover is generally 40 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
38	75	310	76	165	CSCS	--	Y	Y	2	

### Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
39	77	235	78	335	NNG	--	Y	N	2	This small area has been previously cleared and currently contains very low shrub cover (< 10 percent). All grasses (i.e., native and non-native) and all non native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
40	79	270	80	50	CSCS	Que dum	N	Y	2	Existing shrub cover is generally 40 to 80 percent and portions occur on slopes greater than 50 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees (eucalyptus, pepper, and pine trees) occur within the brush management zone and need to be limbed-up to 6 times the shrub height or to 6' from the ground, whichever is greater (they occur on slopes greater than 50 percent). All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
41	81	25	82	250	CSCS	--	Y	Y	2	same as 40
42	83	15	84	275	CSCS	Que dum	Y	Y	2	same as 40
43	85	270	86	30	CSCS		Y	Y	2	same as 40
44	87	270	88	20	NNG		Y	N	2	This small area contains a dense stand of non-native grasses. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).

### Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
45	89	350	90	110	DCSS/NNV	--	Y	Y	2	This area contains a mix of prostrate acacia, coastal sage scrub shrubs, and non-native trees (pine and pepper trees). Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native trees need to be limbed-up to 6 times the shrub height or to 6' from the ground, whichever is greater (they occur on slopes greater than 50 percent). All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
46	91	85	92	320	DCSS/NNV	--	Y	Y	2	
47	93	70	94	350	NNV	--	N	N	2	This area contains a mix of prostrate acacia, hotentog-fig, pampas grass, chaparral shrubs, and non-native trees (pepper trees). Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
48	95	5	96	130	NNV	--	N	N	2	
49	97	10	98	100	CHAP + NNV	Que dum	N	N	2	same as 47
50	99	260	100	360	CHAP + NNV	Que dum	N	N	2	same as 47

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
51	101	285	102	40	CSCS-d	--	Y	Y	2	Existing shrub cover is generally 40 to 80 percent and portions occur on slopes greater than 50 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees (eucalyptus, pepper, and pine trees) occur within the brush management zone and need to be limbed-up to 6 times the shrub height or to 6' from the ground, whichever is greater (they occur on slopes greater than 50 percent). All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
52	103	90	104	350	CSCS-d	Que dum	Y	Y	2	same as 51
53	105	15	106	290	CSCS-d	Que dum	Y	Y	2	same as 51
54	107	240	108	25	NNV	--	N	N	2	This area contains a mix of non-native shrubs, herbs, and trees (pepper trees). Shrub cover is currently less than 50 percent cover. Non-native trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
55	109	295	110	50	NNG	--	N	N	2	This small area contains a dense stand of non-native grasses. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
56	111	250	112	5	DCSS	--	N	Y	2	Existing shrub cover is generally 30 to 60 percent. In areas where shrub cover exceeds 50 percent, shrub cover needs to be reduced using the prioritization lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
57	113	15	114	145	CSCS-d	--	N	N	2	Existing shrub cover is generally 30 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species (e.g., pampas grass), then other non-native species (including prostrate acacia), followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees (eucalyptus and pepper trees) occur within this area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
58	115	30	116	125	CSCS	Que dum	N	N	2	same as 57
59	117	20	118	120	CSCS-d	--	N	Y	2	same as 57
60	119	40	120	140	CSCS-d	Que dum	N	Y	2	same as 57
61	121	25	122	150	CSCS-d	--	N	Y	3	same as 57
62	123	35	124	160	CSCS-d	Que dum	Y	N	3	same as 57
63	125	50	126	190	CSCS-d	Que dum	Y	N	2	same as 57
64	127	35	128	165	CSCS		Y	Y	2	same as 57
65	129	185	130	45	CSCS	Que dum	Y	N	3	same as 57
66	131	35	132	210	CSCS	Que dum	Y	Y	3	same as 57
67	133	70	134	220	NNG	--	Y	N	2	This small area contains a dense stand of non-native grasses. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
68	135	75	136	230	NNV	--	Y	N	3	This area contains a mix of non-native species (pampas grass, landscaping species, non-native grasses, pepper trees). Shrub cover is currently less than 50 percent cover. Non-native trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
69	137	25	138	185	CHAP	Que dum	Y	N	3	Existing shrub cover is generally 40 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
70	139	45	140	200	CHAP	Que dum	Y	N	3	
71	141	75	142	245	DCSS	--	N	Y	2	Existing shrub cover is generally 30 to 70 percent. In areas where shrub cover exceeds 50 percent, shrub cover needs to be reduced to 50 percent using the prioritization lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
72	143	245	144	120	DCSS-d	--	N	N	2	
73	145	230	146	355	NNV	--	N	N	2	This area contains a mix of non-native species (prostrate acacia, landscaping species, non-native grasses, pepper trees). shrub cover needs to be reduced to 50 percent using the prioritization lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).

### Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
74	147	245	148	5	DCSS-d	--	Y	Y	2	Existing shrub cover is generally 30 to 90 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
75	149	245	150	350	DCSS-d	--	Y	Y	2	same as 74
76	151	250	152	5	DCSS-d	--	Y	Y	2	same as 74
77	153	270	154	5	DCSS-d	--	Y	Y	2	same as 74
78	155	260	156	10	DCSS-d	--	Y	Y	2	same as 74
79	157	260	158	10	CHAP	--	Y	Y	2	Existing shrub cover is generally 30 to 60 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
80	159	230	160	25	CHAP	--	Y	Y	2	same as 79
81	161	220	162	30	CHAP	--	Y	N	2	same as 79

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
82	163	300	164	190	DCSS-d	--	N	Y	2	Existing shrub cover is generally 30 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
83	165	190	166	340	DCSS-d	--	Y	Y	2	same as 82
84	167	195	168	335	DCSS-d	--	Y	Y	2	same as 82
85	169	90	170	330	DCSS-d	--	Y	Y	2	same as 82
86	171	240	172	350	DCSS-d	--	Y	Y	2	same as 82
87	173	235	174	330	DCSS-d	--	Y	Y	2	same as 82
88	175	270	176	5	DCSS-d	--	Y	Y	2	same as 82
89	177	275	178	30	DCSS-d	--	Y	Y	2	same as 82
90	179	40	180	165	DCSS-d	--	Y	Y	2	Existing shrub cover is generally 30 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
91	181	50	182	165	DCSS-d	--	Y	Y	2	same as 90
92	183	50	184	175	DCSS-d	--	Y	Y	2	same as 90
93	185	60	186	190	DCSS-d	--	Y	Y	2	same as 90

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
94	187	75	188	170	DCSS-d	--	Y	Y	2	same as 90
95	189	50	190	185	DCSS-d	--	Y	Y	2	same as 90
96	191	50	192	170	DCSS-d	--	Y	Y	2	same as 90
97	193	35	194	150	DCSS-d		Y	Y	2	same as 90
98	195	35	196	145	DCSS-d	--	Y	Y	2	same as 90
99	197	45	198	155	DCSS-d	--	N	Y	2	same as 90
100	199	15	200	150	NNG	--	N	N	2	This small area contains a dense stand of non-native grasses. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
101	201	80	202	215	NNG	--	N	N	2	same as 100
102	203	15	204	140	NNG	--	N	N	2	same as 100
103	205	345	206	60	DCSS-d	--	N	Y	2	Existing shrub cover is generally 20 to 60 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
104	207	290	208	35	DCSS-d	--	N	Y	2	same as 103
105	209	290	210	30	DCSS-d	--	N	Y	2	same as 103
106	211	270	212	40	DCSS-d	--	N	Y	2	same as 103
107	213	290	214	40	NNV		Y	N	2	This area contains a scattered mix of non-native species (prostrate acacia, landscaping species, non-native grasses, pepper trees). Shrub cover is currently less than 50 percent cover. Non-native trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
108	215	280	216	50	NNV		Y	N	2	same as 107
109	217	295	218	55	NNV		N	N	2	same as 107
110	219	230	220	0	DCSS-d	--	Y	Y	2	Existing shrub cover is generally 20 to 60 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
111	221	260	222	15	NNG		N	Y	2	This small area contains a dense stand of non-native grasses. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
112	223	260	224	15	DCSS-d		N	Y	2	same as 110
113	225	265	226	10	DCSS-d	--	N	Y	2	same as 110
114	227	265	228	345	EW	--	N	N	2	All non-native trees less than 3 inches or less in diameter at breast height (dbh) shall be removed. Limb-up eucalyptus trees to 3 times the shrub height or 6' from the ground, whichever is greater. Trees greater than 3 dbh located in euclyptus woodland are exempt from the minimum horizontal tree spacing requirements. Live eucalyptus trees should only occur to achieve tree/shrub vertical requirements. Very few shrubs are present in the the understory (shrub cover is well below 50 percent). All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height* can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (*no native herbs should be cut if under 2-ft in height).

### Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
115	229	170	230	310	DCSS-d	--	N	Y	2	same as 110
116	231	230	232	325	DCSS-d	--	N	Y	2	same as 110
										Existing shrub cover is generally 20 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Nuttall's scrub oak and summer holly where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
255	509	10	510	210	CHAP	Que dum	Y	N	3	
256	511	250	512	30	CHAP	Que dum	Y	N	3	same as 255
257	513	260	514	40	CHAP	Que dum	Y	N	3	same as 255
258	515	60	516	295	CHAP	Com div	Y	N	3	same as 255
259	517	60	518	270	CHAP		Y	N	2	same as 255
260	519	50	520	220	CHAP	Que dum + Com div	Y	N	2	same as 255
261	521	30	522	210	CHAP	Que dum + Com div	Y	N	3	same as 255
262	523	255	524	50	CHAP	Que dum	Y	N	3	same as 255
263	525	55	526	240	CHAP	Que dum	Y	N	3	same as 255
										Existing shrub cover is generally 20 to 60 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing California adolphia and San Diego barrel cactus where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
264	527	310	528	150	DCSS	Ado cal + Fer vir	Y	Y	2	
265	529	70	530	305	DCSS	Fer vir + Har pal	Y	Y	2	same as 264
266	531	40	532	250	DCSS	Ado cal + Har pal	Y	Y	2	same as 264

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
267	533	150	534	325	CSCS		Y	Y	2	Existing shrub cover is generally 20 to 40 percent. Shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
268	535	145	536	300	CHAP	Que dum	Y	N	2	same as 255
269	537	340	538	130	CHAP	Que dum	Y	N	2	same as 255
270	539	195	540	355	CHAP	Que dum	Y	N	2	same as 255
271	541	310	542	140	CHAP	Que dum	Y	N	2	same as 255
272	543	260	544	90	DCSS		N	Y	2	Existing shrub cover is generally 20 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
273	545	65	546	265	DCSS	--	Y	Y	2	same as 272
274	547	70	548	240	CHAP	Que dum+ Com div	Y	N	2	same as 255
275	549	60	550	270	CHAP		Y	N	2	same as 255
276	551	60	552	230	CHAP	Que dum + Com div	Y	N	2	same as 255
277	553	70	554	280	CHAP	Que dum + Com div	Y	N	3	same as 255
278	555	210	556	30	CHAP	Que dum + Com div	Y	N	3	same as 255
279	557	50	558	215	CHAP		Y	N	3	same as 255
280	559	20	560	215	CHAP	Com div	N	N	3	same as 255
281	561	175	562	10	DCSS-d		N	Y	2	same as 272

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
282	563	0	564	265	CHAP		Y	N	2	Existing shrub cover is generally 20 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Nuttall's scrub oak and summer holly where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
283	565	240	566	150	CHAP		Y	N	2	same as 282
284	567	320	568	60	CHAP	Que dum	Y	N	2	same as 282
285	569	210	570	60	CHAP	Que dum	Y	N	2	same as 282
286	571	150	572	285	CHAP	Que dum + Com div	Y	N	2	Existing shrub cover is generally 30 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Nuttall's scrub oak and summer holly where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
287	573	100	574	310	CHAP	Que dum + Com div	Y	N	2	same as 286
288	575	85	576	280	CHAP	Que dum	Y	N	2	same as 286
289	577	90	578	190	CHAP	Que dum	Y	N	2	same as 286
290	579	40	580	250	CHAP	Que dum + Com div	Y	N	2	same as 286

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
291	581	150	582	325	CSCS	--	Y	Y	2	Existing shrub cover is generally 20 to 60 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing California adolphia where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
292	583	75	584	295	DCSS-d	Ado cal	Y	Y	2	same as 291
293	585	240	586	120	DCSS-d	Ado cal	Y	Y	2	same as 291
294	587	20	588	240	CHAP	Que dum + Com div	Y	N	2	same as 286
295	589	5	590	240	CHAP	Que dum	Y	N	2	same as 286
296	591	55	592	270	CHAP	Que dum + Com div	Y	N	2	same as 286
297	593	320	594	110	CHAP	Que dum + Com div	Y	N	2	same as 286
298	595	260	596	150	NNV	--	Y	N	1	This area appears to be an illegal encroachment. The area has been recently cleared and planted with non-native cactus species and ornamental shrub species. Shrub cover is currently less than 50 percent and there are not any non-native grasses or herbs that need to be cut. Therefore this area is considered in compliance with brush management regulations.
299	597	85	598	260	CHAP	Que dum + Com div	Y	N	2	same as 286
300	599	330	600	150	DCSS	Ado cal + Fer vir	Y	Y	2	Existing shrub cover is generally 40 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing California adolphia and San Diego barrel cactus where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*	Photo Point B (compass direction)*	Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations		
<b>Del Mar Heights Subarea</b>										
200	399	160	400	340	DCSS	--	N	Y	2	Existing shrub cover is generally 20 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees (pepper trees) occur within this area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
201	401	10	402	100	NNV		N	N	2	This area contains ornamental species growing as ground cover. Shrub cover is currently less than 50 percent and there are not any grasses or herbs that need to be cut. Therefore this area is considered in compliance with brush management regulations.
202	403	140	404	350	DCSS		N	Y	2	same as 200
203	405	150	406	0	DCSS-d		N	Y	2	same as 200
204	407	175	408	10	DCSS-d	--	N	Y	2	same as 200
205	409	280	410	140	CSCS	--	N	Y	2	same as 200
206	411	150	412	300	CSCS		N	Y	2	same as 200
207	413	340	414	170	CSCS		N	Y	2	same as 200
208	415	330	416	210	NNG		N	N	2	This small area contains a dense stand of non-native grasses and thistle. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
209	417	340	418	170	DH		N	N	1	This area appears to have been recently cleared of all plant material. This area is considered in compliance with brush management regulations because shrub cover is less than 50 percent and there are no grass species or herb species present.
210	419	340	420	200	NNV		N	Y	1	This area contains ice plant growing as ground cover. Shrub cover is currently less than 50 percent and there are not any grasses or herbs that need to be cut. Therefore this area is considered in compliance with brush management regulations.
211	421	180	422	20	CSCS-d		N	Y	2	same as 200
212	423	120	424	300	CSCS-d		N	Y	2	same as 200
213	425	290	426	85	CSCS-d		N	Y	2	same as 200

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
214	427	30	428	180	CSCS-d		N	Y	2	same as 200
215	429	0	430	200	CSCS-d	Que dum	N	Y	2	same as 200; avoid Nuttall's scrub oak where possible
216	431	110	432	300	CSCS-d		N	Y	2	same as 200
										Existing shrub cover is generally 30 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Nuttall's scrub oak where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
217	433	345	434	190	CHAP	Que dum	N	N	2	
218	435	30	436	210	CHAP	Que dum	N	N	2	same as 217
219	437	170	438	0	DCSS-d	--	N	Y	2	same as 200
										Existing shrub cover is generally 30 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Nuttall's scrub oak where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
220	439	65	440	270	CHAP	Que dum	N	N	2	
										Existing shrub cover is generally 30 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
221	441	340	442	140	DCSS-d	--	N	Y	2	

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
222	443	340	444	110	CHAP	--	N	N	2	Existing shrub cover ranges from 20 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Nuttall's scrub oak where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
223	445	140	446	310	CHAP		N	N	2	same as 222
224	447	320	448	120	CHAP		N	N	2	same as 222
225	449	265	450	100	CHAP		N	N	2	same as 222
226	451	70	452	185	CHAP		N	N	2	same as 222
227	453	310	454	140	CHAP		N	N	2	same as 222
228	455	310	456	140	CHAP		N	N	2	same as 222
229	457	135	458	310	CHAP		N	N	2	same as 222
230	459	35	460	280	DCSS-d	Har pal	N	Y	2	Existing shrub cover is generally 40 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Palmer's grapplinghook and California adolphia where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
231	461	75	462	185	CHAP	--	Y	N	2	same as 222
232	463	0	464	150	CSCS	Ado cal + Har pal	N	Y	2	same as 230
233	465	290	466	90	CSCS	Ado cal	N	Y	2	same as 230
234	467	260	468	80	DCSS	--	N	Y	2	same as 230
235	469	355	470	160	CHAP	Que dum	N	N	2	same as 230; avoid Nuttall's scrub oak where possible

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
236	471	220	472	40	CSCS	Iva hay + Que dum + Vig lac	N	Y	2	same as 230; avoid Nuttall's scrub oak, San Diego marsh elder, and San Diego viguiera where possible
237	473	70	474	230	CHAP	--	N	N	2	same as 222
238	475	330	476	150	CHAP	--	N	N	2	same as 222
239	477	210	478	330	CHAP	--	N	N	2	same as 222
240	479	130	480	360	CHAP	--	N	N	2	same as 222
241	481	25	482	200	CHAP	--	N	N	2	same as 222
242	483	190	484	355	NNV	--	N	N	2	This area contains a mix of non-native species (non-native trees, prostrate acacia, and a few scattered native species). Shrub cover needs to be reduced to 50 percent using the priority lists provided. Non-native trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
243	485	350	486	170	NNV	Que dum	N	N	2	same as 242; avoid removing Nuttall's scrub oak
244	487	160	488	325	NNV		N	N	2	same as 242
245	489	240	490	180	CHAP		N	N	2	Existing shrub cover ranges from 30 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Nuttall's scrub oak where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
246	491	120	492	310	CHAP	Que dum	N	N	2	same as 245
247	493	130	494	305	CHAP	--	N	N	2	same as 245
248	495	120	496	320	CHAP		N	N	2	same as 245
249	497	130	498	290	CHAP		N	N	2	same as 245
250	499	200	500	0	CHAP		N	N	2	same as 245

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
251	501	200	502	50	CSCS		Y	Y	3	Existing shrub cover is generally 40 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing summer holly where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
252	503	20	504	220	CSCS	--	Y	Y	3	same as 251
253	505	20	506	210	CSCS	Com div	Y	Y	3	same as 251
254	507	15	508	195	CSCS	Com div	Y	Y	3	same as 251
301	601	160	602	330	CSCS		N	Y	2	Existing shrub cover ranges from 30 to 90 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Nuttall's scrub oak, California adolphia, and San Diego vigeira where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
302	603	165	604	350	CSCS	Que dum	N	Y	2	same as 301
303	605	345	606	170	CSCS + MFS	Ado cal	N	Y	2	same as 301; an area of open mule fat scrub (i.e., scattered mule fat plants interspersed with shrubs) occurs between GPS Points 302 and 303. Mule fat plants should not be removed or pruned.
304	607	170	608	345	CSCS	Que dum	N	Y	2	same as 301
305	609	330	610	155	CSCS		N	Y	2	same as 301
306	611	300	612	105	CSCS	--	N	Y	2	same as 301
307	613	170	614	10	CSCS	Que dum	N	Y	3	same as 301
308	615	340	616	170	CSCS	Que dum	N	Y	3	same as 301
309	617	355	618	170	CSCS	Que dum	N	Y	3	same as 301
310	619	335	620	55	CSCS	--	N	Y	2	same as 301
311	621	10	622	200	CSCS	Ado cal	N	Y	2	same as 301
312	623	155	624	355	CSCS	Ado cal + Que dum	N	Y	2	same as 301
313	625	5	626	165	CSCS	Que dum	N	Y	2	same as 301
314	627	10	628	190	CSCS	Que dum	N	Y	2	same as 301

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations	
315	629	180	630	50	CSCS	Vig lac	N	Y	2	same as 301	
316	631	315	632	190	ORN	--	N	N	3	same as 301	
317	633	340	634	160	CSCS	Que dum	N	Y	3	same as 301	
318	635	15	636	165	CSCS	Que dum	N	Y	3	same as 301	
319	637	140	638	310	CSCS		N	Y	3	same as 301	
320	639	150	640	320	CSCS	--	N	Y	3	same as 301	
										<p>This area contains a mix of non-native species (mostly non-native trees and prostrate acacia) that occur as landscaping for a neighborhood park. If the City determines that this is part of the brush management project, shrub cover needs to be reduced to 50 percent using the priority lists provided. Non-native trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height). Portions of this area contain lawn grass and are considered in compliance with brush management regulations.</p>	
321	641	150	642	320	NNV	--	N	N	2		
322	643	145	644	310	NNV	--	N	N	2		Same as 321
323	645	290	646	125	NNV	--	N	N	1		Same as 321
324	647	120	648	310	NNV	--	N	N	1		Same as 321
										<p>Coastal sage scrub occurs as a strip of habitat adjacent to a neighborhood park and walking trail. Existing shrub cover is generally 40 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).</p>	
325	649	280	650	190	DCSS	--	N	Y	2		
326	651	105	652	255	DCSS	--	N	Y	2		Same as 326
327	653	5	654	170	NNV	--	N	N	2		Same as 321
328	655	180	656	350	NNV	--	N	N	2		Same as 321
329	657	350	658	170	NNV	--	N	N	1	Same as 321	

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
330	659	150	660	335	DCSS	--	N	Y	2	This narrow strip of DCSS has generally 90 percent existing shrub cover, but is separated from houses by a paved road (Carmel Knolls Drive). Brush management of this area is not recommended because the presence of the road results in a large Zone 1 area.
331	661	350	662	150	DCSS	--	N	Y	2	
332	663	170	664	330	DCSS-d	--	N	Y	2	This small DCSS area has generally 80 percent existing shrub cover. Shrub cover needs to be reduced to 50 percent cover using the priority lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
333	665	250	666	20	DCSS	--	N	Y	2	Existing shrub cover is generally 40 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees occur within this area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
334	667	310	668	130	DCSS	--	N	Y	2	same as 333
335	669	305	670	125	DCSS	--	N	Y	3	same as 333
336	671	140	672	0	DCSS-d	--	N	Y	3	same as 333
337	673	305	674	140	DCSS	--	N	Y	2	same as 333
338	675	40	676	235	DCSS	--	N	Y	2	same as 333
339	677	230	678	15	DCSS	--	N	Y	2	same as 333
340	679	75	680	275	DCSS	--	N	Y	2	same as 333
341	681	130	682	300	DCSS-d		N	Y	2	same as 333
342	683	150	684	320	DCSS		N	Y	2	same as 330
343	685	325	686	130	DCSS		N	Y	2	same as 330
344	687	290	688	120	DCSS-d		N	Y	2	same as 330

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
345	689	140	690	315	CSCS		N	Y	2	Existing shrub cover is generally 40 to 80 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Selaginella, dichondra, Nuttall's scrub oak, and San Diego vigeira where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees occur within this area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
346	691	280	692	40	CSCS	Selaginella Patches	N	Y	2	same as 345
347	693	15	694	185	CSCS	Dic occ	N	Y	2	same as 345
348	695	185	696	300	CSCS	Que dum	N	Y	2	same as 345
349	697	225	698	15	CSCS	--	N	N	2	same as 345
350	699	190	700	355	CSCS	Vig lac	N	Y	2	same as 345
351	701	350	702	170	CSCS	Vig lac	N	Y	2	same as 345
352	703	340	704	190	CSCS	Vig lac	N	N	2	same as 345
353	705	355	706	160	DCSS/EW	Vig lac	N	Y	2	same as 345; for the portion of the brush management area that contains eucalyptus woodland, remove all non-native trees less than 3 inches or less in diameter at breast height (dbh). Limb-up eucalyptus trees to 3 times the shrub height or 6' from the ground, whichever is greater. Trees greater than 3 dbh located in euclyptus woodland are exempt from the minimum horizontal tree spacing requirements. Live eucalyptus trees should only occur to achieve tree/shrub vertical requirements. Very few shrubs are present in the the understory (shrub cover is well below 50 percent). All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height* can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (*no native herbs should be cut if under 2-ft in height).
354	707	305	708	155	DCSS/EW	--	N	Y	3	same as 354
355	709	230	710	110	DCSS/EW	--	N	Y	3	same as 354
356	711	270	712	40	DCSS-d	--	N	Y	3	same as 345
357	713	220	714	350	DCSS-d	Vig lac	N	Y	2	same as 345
358	715	350	716	170	DCSS	Vig lac	N	Y	2	same as 345

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations
359	717	175	718	325	DCSS	--	N	Y	2	same as 345
360	719	140	720	315	NNV	--	N	N	1	This area contains a mix of non-native species (mostly non-native trees, prostrate acacia, and ornamental ground cover) that occur as landscaping for a neighborhood park. No brush management is to occur in this area because City Maintenance Assessment staff are maintaining the park.
361	721	330	722	155	NNV	--	N	N	1	same as 360
362	723	250	724	30	CSCS	--	N	Y	3	Existing shrub cover is generally 30 to 70 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species, then other non-native species, followed by flammable native species, then other native species. Avoid removing Nuttall's scrub oak and summer holly where possible. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native trees occur within this area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).
363	725	220	726	90	CSCS	Que dum	N	Y	3	same as 362
364	727	260	728	70	CSCS	--	Y	Y	3	same as 362
365	729	270	730		CSCS	--	Y	Y	3	same as 362
366	731	115	732	130	CSCS	--	Y	Y	3	same as 362
367	733	130	734	280	CSCS	--	Y	Y	3	same as 362
368	735	290	736	300	CSCS	Que dum	Y	Y	3	same as 362
369	737	70	738	60	CSCS	Com div	N	Y	3	same as 362
370	739	70	740	210	CSCS	Que dum + Com div	N	N	3	same as 362
371	741	200	742	260	CSCS	--	N	Y	2	same as 362
372	743	350	744	150	CSCS	--	N	Y	2	same as 362
373	745	250	746	85	CSCS	--	N	Y	2	same as 362
374	747	220	748	30	CSCS	Que dum + Com div + Ado cal	N	N	2	same as 362
375	749	260	750	70	DCSS	--	N	Y	2	same as 221
376	751	90	752	0	DCSS	--	N	Y	2	same as 221
377	753	305	754	120	DCSS	--	N	Y	2	same as 221
GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Slope >50 percent	Potential CAGN Habitat	Brush Management Compliance	Notes/Recommendations

## Appendix C - Carmel Valley Existing Conditions Site Evaluation Forms and Recommendations

378	755	175	756	290	CSCS	Que dum + Com div	N	Y	2	same as 222
379	757	330	758	110	CSCS		N	Y	2	same as 222
380	759	120	760	305	CSCS	Que dum	N	Y	2	same as 222
381	761	120	762	30	CSCS		N	Y	2	same as 222
382	763	120	764	10	CSCS		N	Y	2	same as 222
383	765	290	766	80	CHAP	Que dum	N	N	2	same as 220; avoid Nuttall's scrub oak where possible
384	767	355	768	160	CHAP		N	N	2	same as 220
385	769	150	770	340	CHAP		N	N	3	same as 220
386	771	340	772	150	CHAP	Que dum + Com div	N	N	3	same as 220; avoid Nuttall's scrub oak and summer holly where possible
387	773	340	774	165	DCSS		N	Y	2	same as 200
388	775	155	776	70	DCSS		N	Y	2	same as 200
389	777	70	778	260	NNV		N	N	2	This area contains a mix of non-native species (non-native trees, prostrate acacia, and a few scattered native species). Shrub cover needs to be reduced to 50 percent using the priority lists provided. Non-native trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. All grasses (i.e., native and non-native) and all non-native herbs must be reduced to 2-inches in height; all native herbs and/or selected individual clumps of grass greater than 2-ft in height** can be retained when they are isolated from other fuels and/or when necessary for soil stabilization to prevent erosion (**no native herbs should be cut if under 2-ft in height).

### Habitat Codes

EW = eucalyptus woodland  
 DCSS = Diegan coastal sage scrub  
 DCSS-d = Diegan coastal sage scrub - disturbed  
 CSCS = coastal sage-chaparral scrub  
 CHAP = chaparral  
 NNG = non-native grassland  
 NNV = non-native vegetation  
 DH = disturbed habitat  
 DEV = developed

### Brush Management Compliance Rankings

1 = entire brush management area is in compliance  
 2 = needs moderate thinning  
 3 = needs significant thinning

\* Compass directions are measured in degrees