



FUEL REDUCTION PLAN - FINAL

For the Community of Scripps Ranch,
San Diego, California
(including the Scripps Ranch and Tierrasanta 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

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



**City of San Diego Brush Management Project
Fuel Reduction Plan for the Community of Scripps Ranch**

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1.0 INTRODUCTION

The City of San Diego Open Space Division, under three awarded FEMA grants, 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 Scripps Ranch area (consisting of the Scripps Ranch and Tierrasanta subareas), 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 Scripps Ranch fuel reduction subarea is located in the City of San Diego, in the communities of Scripps Ranch and Tierrasanta, east of Interstate 15, both north and south of State Route 52 (Figures 1 & 2). The Scripps Ranch subarea is located east and south of Miramar Reservoir, south of Spring Canyon Road and west of Pomerado Road. The Tierrasanta subarea is bound by SR 52 to the north and Mission Gorge Road to the south.

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 INITIAL BIOLOGICAL ASSESSMENT

HELIX Environmental Planning, Inc. (HELIX) conducted an initial assessment of the Scripps Ranch and Tierrasanta subarea to document existing conditions and compliance with City brush management regulations (City 2008a and 2008b). As part of the initial assessment, HELIX biologists Brian Parker and Kimberly Davis mapped the vegetation communities in accordance with the City's Biological Guidelines (City 2004), identified potential coastal California gnatcatcher (*Poliophtila californica californica*; CAGN) habitat, and qualitatively assessed brush management compliance of the polygons identified within the Scripps Ranch and Tierrasanta subareas, in accordance with the methodology described in HELIX's technical proposal for the project (HELIX 2008). Preliminary maps were provided to the contractor and City for the Scripps Ranch subarea, which identified the potential CAGN habitat where surveys would be required and a prioritization map for conducting work activities in the Scripps Ranch subarea.

2.2 COASTAL CALIFORNIA GNATCATCHER SURVEYS

Prior to the contractor starting fuel reduction work in the Scripps Ranch and Tierrasanta subareas during the CAGN breeding season (March 1-August 15), HELIX conducted protocol surveys for the CAGN in 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 biologist

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Jason Kurnow surveyed for CAGN in all coastal sage scrub and coastal sage-chaparral scrub mapped in the Scripps Ranch and Tierrasanta subareas, in accordance with the approved U.S. Fish and Wildlife Service guidelines (USFWS 1997). Surveys for the Scripps Ranch subarea were conducted on February 25, March 4, and March 11, 2009. Surveys for the Tierrasanta subarea were conducted on April 14, 16, 21, 23, and 28 and May 1, 2009.

2.3 PRE-FUEL REDUCTION DATA COLLECTION

In addition to the initial assessment and the CAGN surveys, HELIX biologists collected the pre-fuel reduction data in order to assess wildfire hazard/compliance. Data was collected 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.

Pre-fuel reduction data collection for the Scripps Ranch subarea was conducted by Amy Mattson and Shelby Howard. Pre-fuel reduction data collection for the Tierrasanta subarea was conducted by Shelby Howard, Greg Mason, Dale Ritenour, and Brian Parker.

2.4 RARE PLANT SURVEYS AND NESTING BIRD SURVEYS

Finally, approximately 1 week prior to the contractor beginning brush management activities in an area, HELIX biologists conducted a pre-thinning sensitive plant species survey, raptor nest survey, and migratory bird nest survey. All sensitive plant species were documented and those to be avoided were marked with bright orange or pink flagging tape so that it was easily visible to the brush removal crew. All shrubs and trees containing an active raptor or bird nest were also documented on an aerial photograph and the shrub or tree was marked with bright flagging tape.

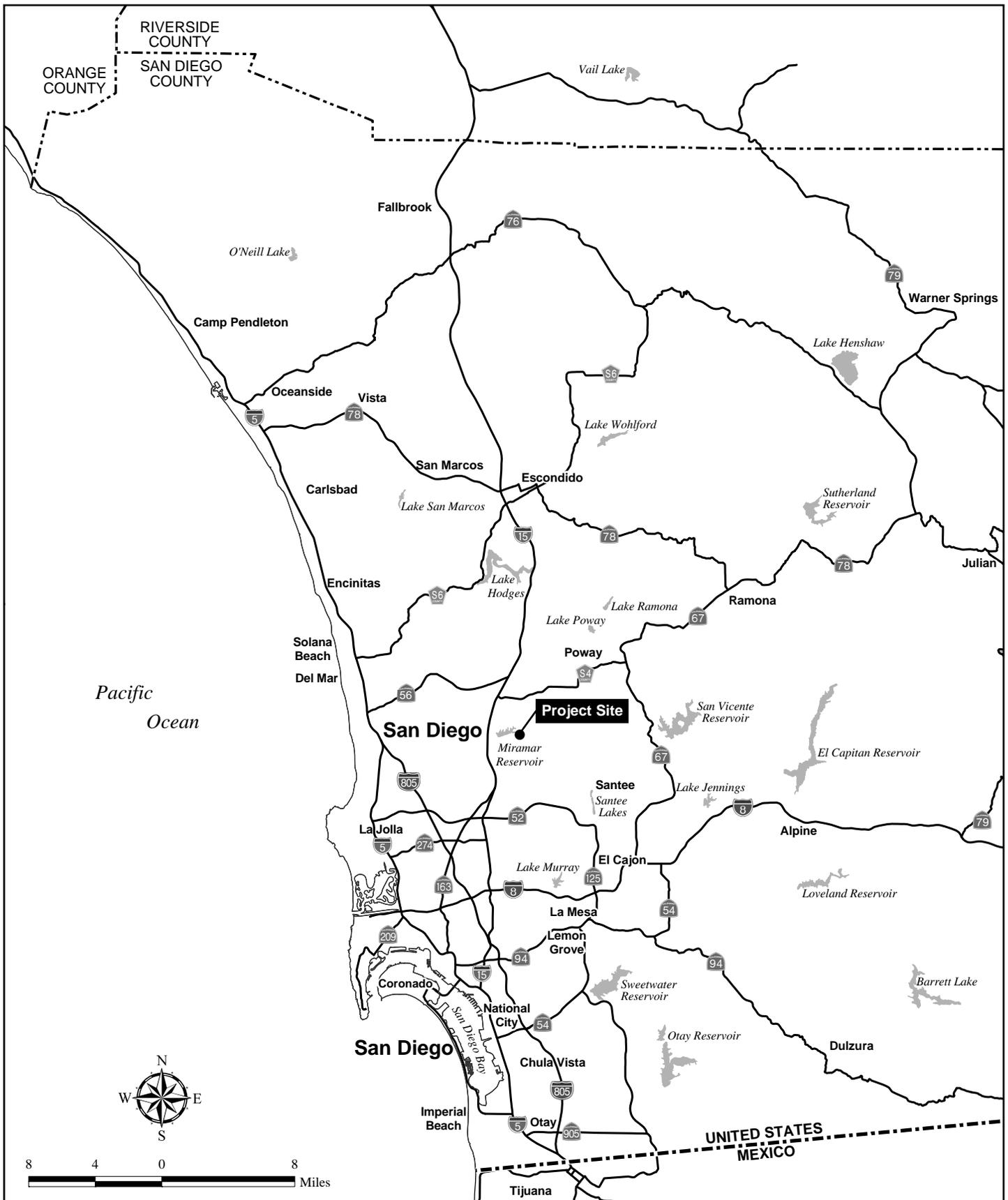
2.5 NOMENCLATURE

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 Scripps Ranch and Tierrasanta subareas as they exist prior to the execution of fuel reduction in 2009. Vegetation communities in the Scripps Ranch subarea are provided in Figure 3; vegetation communities for the Tierrasanta subarea are provided in Figures 3b and 3c. Sensitive biological resources observed in the Scripps Ranch subarea are provided in Figure 4; sensitive biological resources observed in the Tierrasanta subarea are provided in Figures 4b and 4c. Brush management compliance and proposed access for the Scripps Ranch subarea are provided in Figure 5; brush management compliance and proposed access for the Tierrasanta subarea are provided in Figure 5b.

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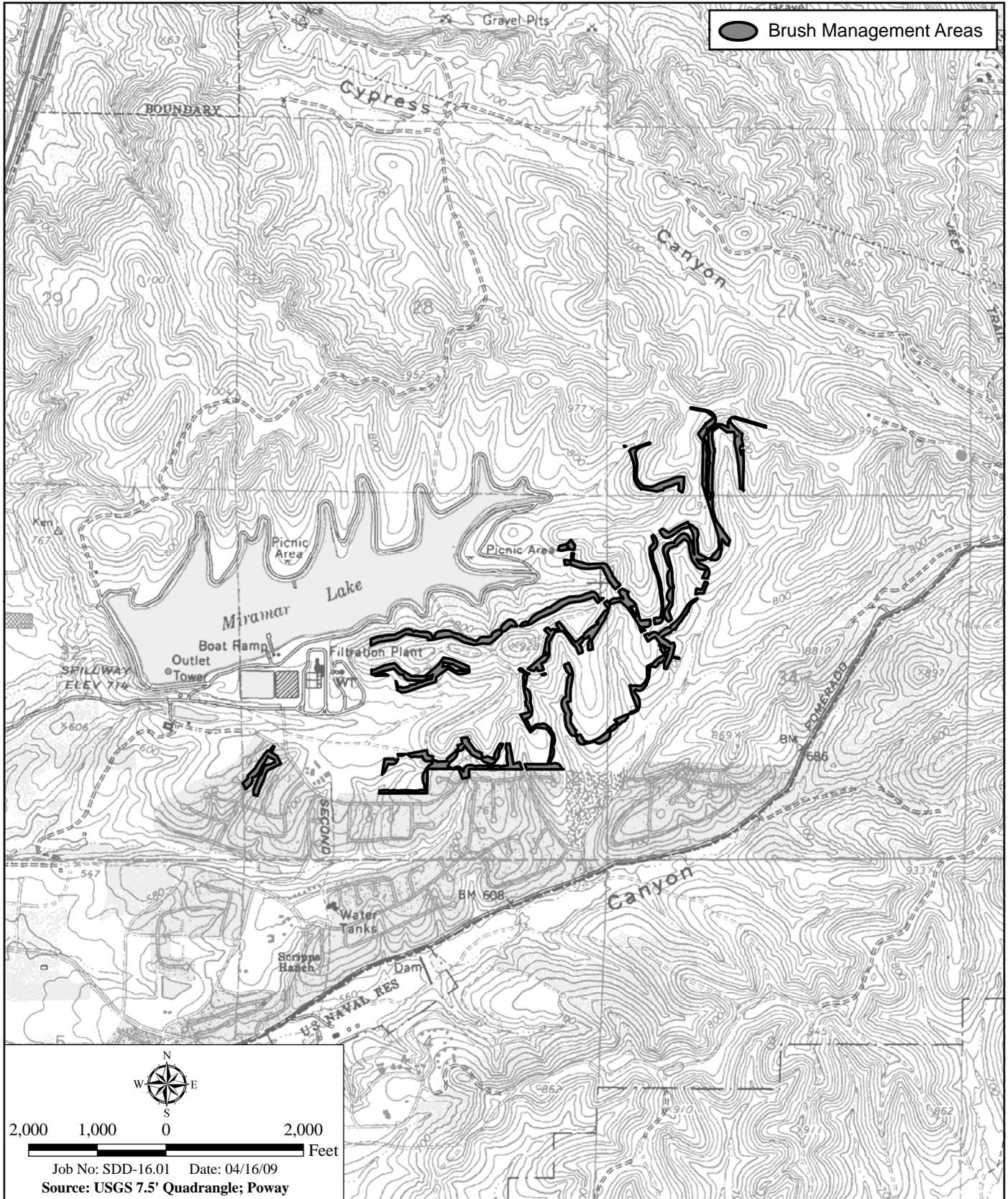


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Regional Location Map

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - SCRIPPS RANCH

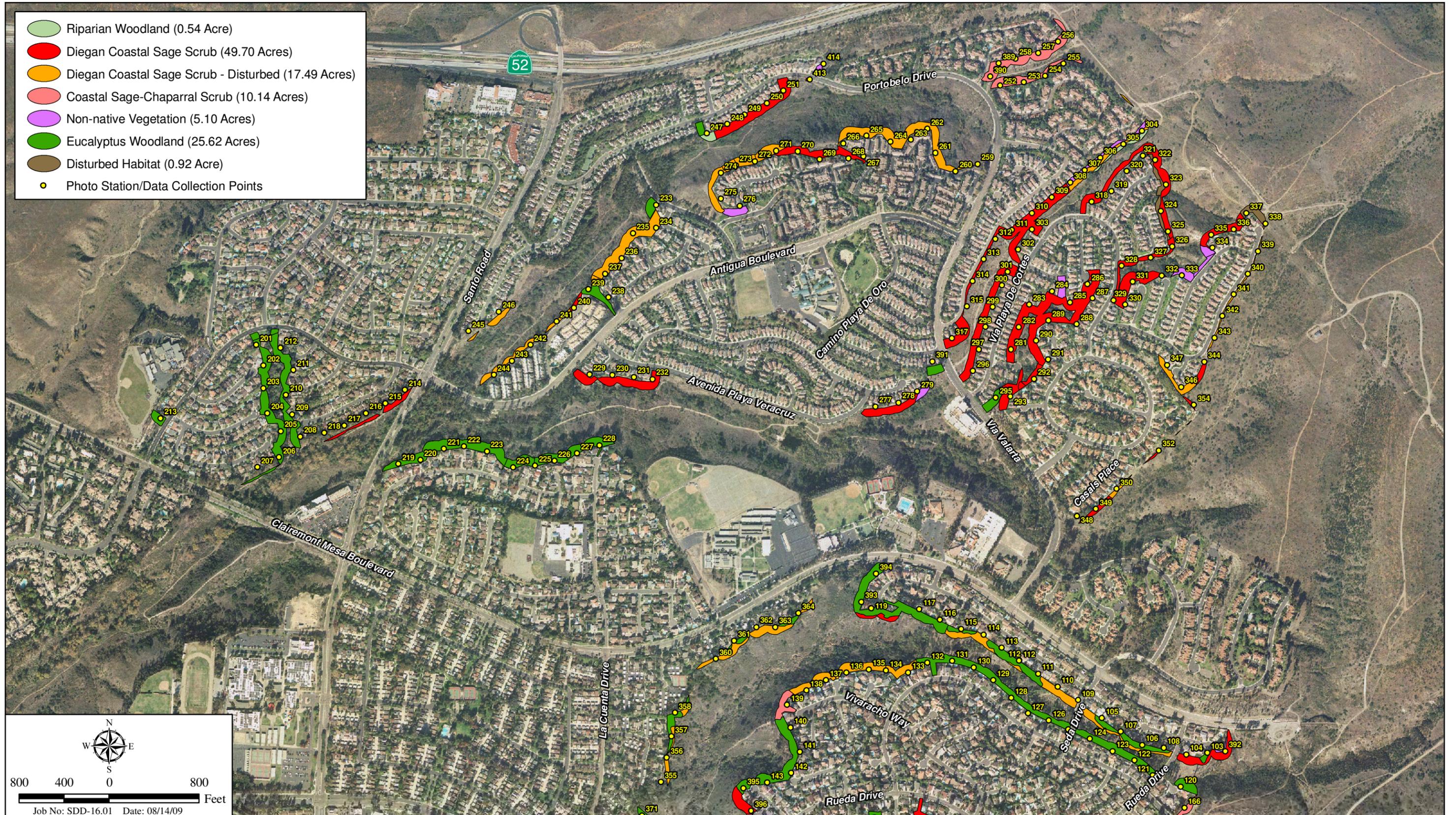
Figure 1



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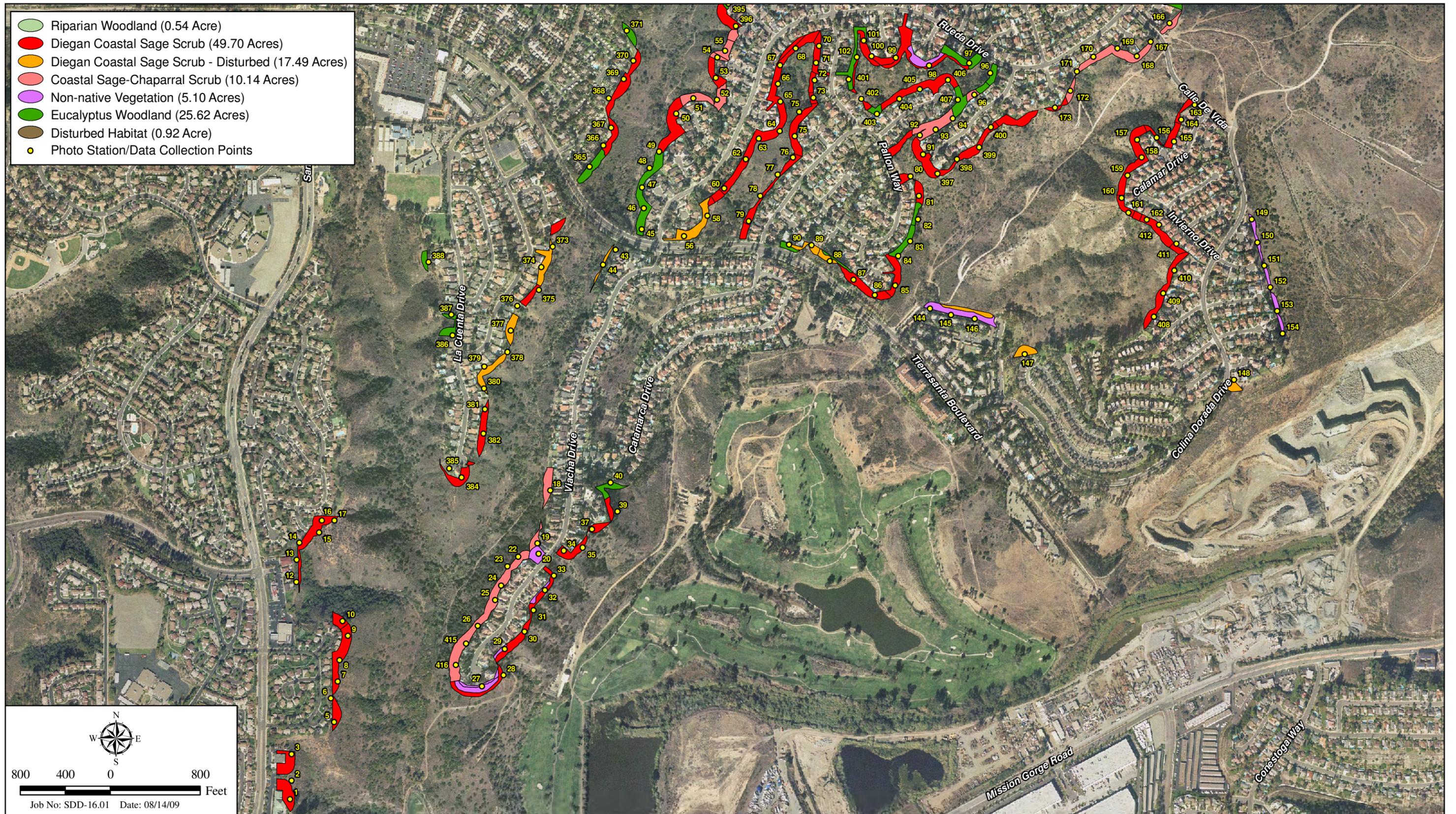
Project Location Map

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - SCRIPPS RANCH



Vegetation

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - TIERRASANTA



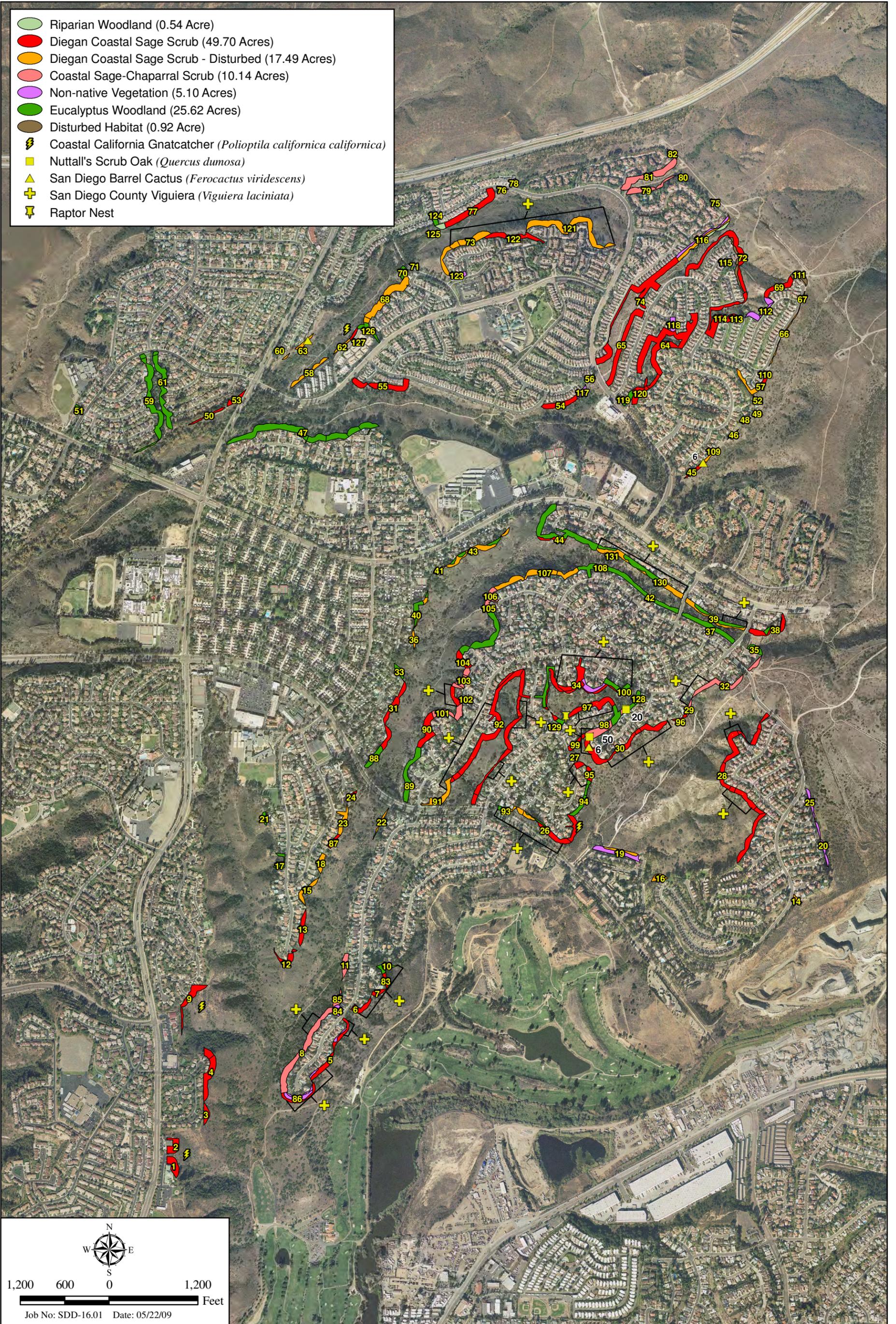
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Vegetation

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - TIERRASANTA

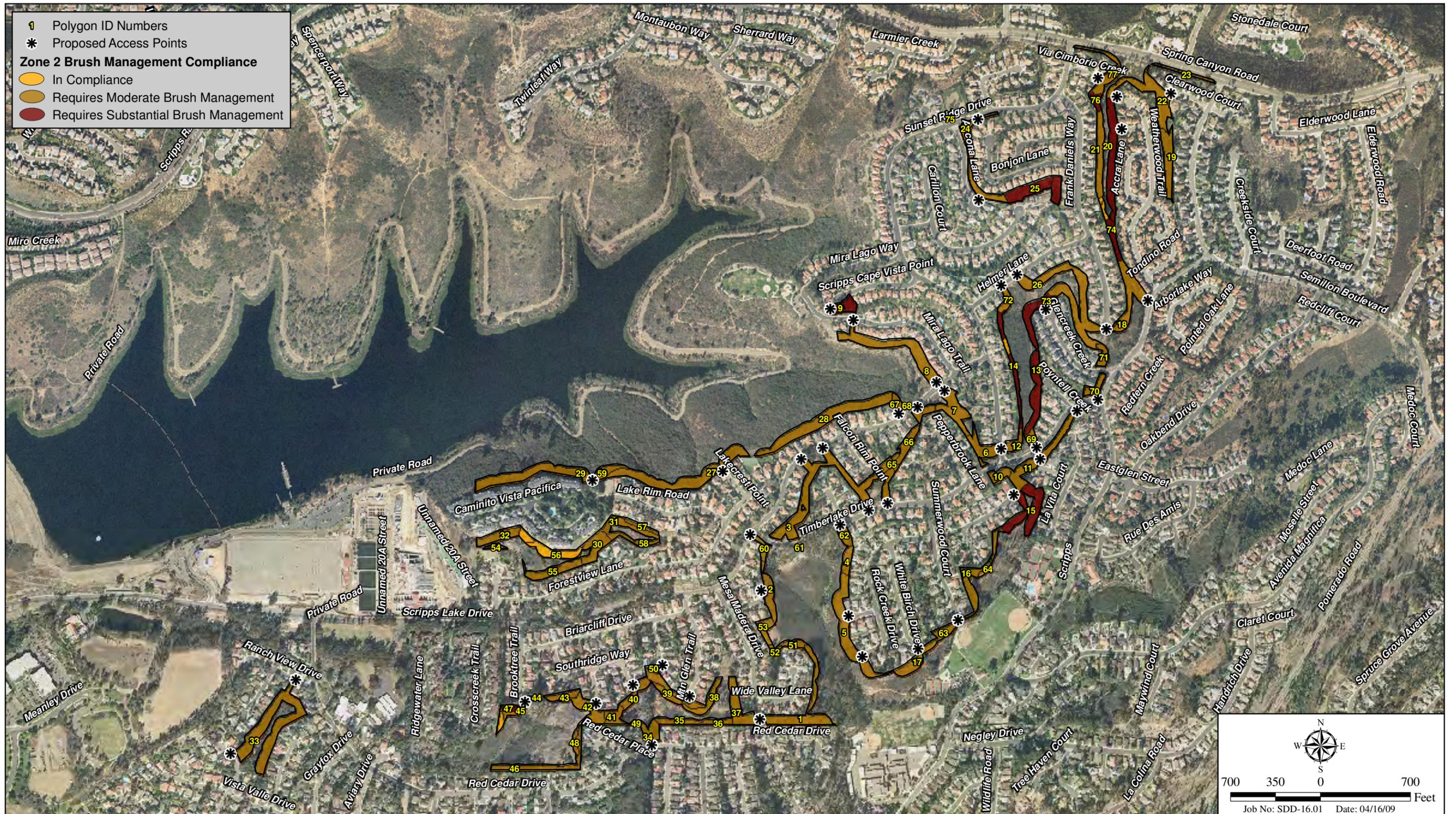


Figure 3c



Sensitive Resources

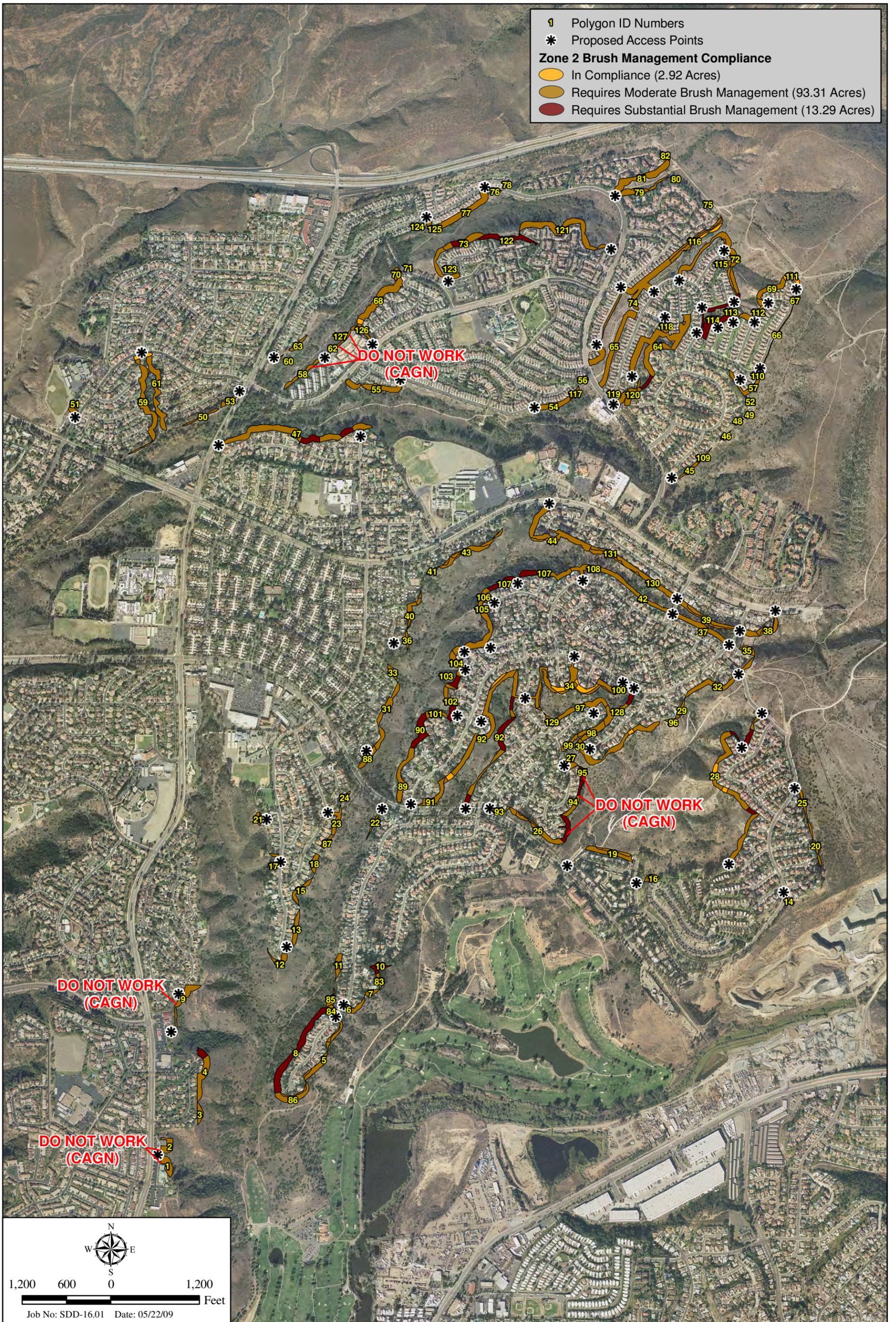
CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - TIERRASANTA



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Brush Management Compliance and Proposed Access

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - SCRIPPS RANCH



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Brush Management Compliance and Proposed Access

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - TIERRASANTA

3.1 SCRIPPS RANCH

3.1.1 Vegetation Communities

Eight vegetation communities were mapped within the Scripps Ranch subarea (Figure 3). Five of the vegetation communities are considered sensitive by the City: Diegan coastal sage scrub, coastal sage-chaparral scrub, southern maritime chaparral, southern mixed chaparral, and chamise chaparral. Non-sensitive communities include non-native vegetation, eucalyptus woodland, and disturbed habitat. The vegetation community acreages for the Scripps Ranch subarea are provided in Table 1; a description of each vegetation community is provided in Appendix A.

Vegetation Community	Acres
Diegan Coastal Sage Scrub	5.8
Coastal Sage-Chaparral Scrub	2.6
Southern Maritime Chaparral	2.2
Southern Mixed Chaparral	7.3
Chamise Chaparral	2.6
Eucalyptus Woodland	17.5
Non-native Vegetation	7.8
Disturbed Habitat	1.1
TOTAL	52.9

3.1.2 Sensitive Plant Species

Two sensitive plant species were documented within the Scripps Ranch subarea: San Diego County viguiera (*Viguiera laciniata*) and San Diego barrel cactus (*Ferocactus viridescens*).

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.

Status on site: Over 100 individuals were scattered throughout the brush management area south of Mira Lago Trail (Points 174 through 178; Figure 4). Approximately 21 additional individuals were documented as several clumps within a small brush management area located at the corner of Timberlake Drive and Scripps Trail (Point 248; Figure 4).

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: Individuals occurred in 6 scattered locations throughout the Scripps Ranch subarea, ranging from 1 to 15 individuals each (Figure 4).

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3.1.3 Coastal California Gnatcatcher

No CAGN were detected during protocol surveys.

3.1.4 Nesting Birds and Raptors

One active Cooper's hawk (*Accipiter cooperii*) nest, one active mourning dove (*Zenaida macroura*) nest, and five inactive nests were documented in the Scripps Ranch subarea (Figure 4). The Cooper's hawk nest was documented adjacent to data point 12 and the mourning dove nest was documented adjacent to data point 212. Three inactive raptor or common raven (*Corvus corax*) nests were documented in the northeastern portion of the project area, south of Spring Canyon Road. A fourth inactive raptor or raven nest was documented adjacent to data point 22, east of Mountain Glen Trail. An inactive, unidentified bird nest was found in the coastal sage-chaparral scrub adjacent to data point 59, east of Rock Creek Drive.

3.1.5 Brush Management Compliance

Three areas of the Scripps Ranch subarea were considered to be in compliance with City brush management regulations (Figure 5a). Portions of Polygons 32 and 56 in the western portion of the project, a portion of Polygon 14 in the eastern portion of the project, and portions of Polygons 21 and 74 in the northeastern portion of the project were considered to be in compliance because brush had recently been thinned to less than 50 percent cover, trees were not present within the areas, no leaf litter or debris was present, and no brush management is needed (Figure 5).

The majority of the Scripps Ranch subarea was assessed as needing moderate brush management. Moderate brush management was a category determined by HELIX during the initial assessment 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.

Several areas were considered by HELIX to need substantial brush management and these areas generally occurred in the eastern and northeastern portions of the Scripps Ranch subarea. Substantial brush management was a category determined by HELIX during the initial assessment as 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.

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

3.1.6 Proposed Access Points

Proposed access points to each fuel reduction area are shown in Figure 5a.

3.2 TIERRASANTA

3.2.1 Vegetation Communities

Five vegetation communities were mapped within the Tierrasanta subarea (Figures 3b and 3c). Two of the vegetation communities are considered sensitive by the City: Diegan coastal sage scrub and coastal sage-chaparral scrub. Non-sensitive communities include non-native vegetation, eucalyptus woodland, and disturbed habitat. The vegetation community acreages for the Tierrasanta subarea are provided in Table 2; a description of each vegetation community is provided in Appendix A.

Vegetation Community	Acres
Riparian Woodland	0.5
Diegan Coastal Sage Scrub (including disturbed)	67.2
Coastal Sage-Chaparral Scrub	10.1
Non-native Vegetation	5.1
Eucalyptus Woodland	25.6
Disturbed Habitat	0.9
TOTAL	109.5

3.2.2 Sensitive Plant Species

Three sensitive plant species were documented within the Tierrasanta subarea: San Diego County viguiera (*Viguiera laciniata*), San Diego barrel cactus (*Ferocactus viridescens*), and Nuttall's scrub oak (*Quercus dumosa*).

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.

Status on site: Hundreds of individuals were documented throughout the Tierrasanta subarea (Figure 4b). Individuals were too numerous to get an accurate count.

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: The species was documented in 3 locations in the Tierrasanta subarea: 6 individuals in the central portion (Polygon 30), 6 individuals in the northeast portion (Polygon 45), and 1 individual in the northwest portion (Polygon 63; Figure 4b).

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Nuttall's scrub oak (*Quercus dumosa*)

Listing: --/--; CNPS List 1B.1; County Group A

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: Approximately 70 individuals were documented in 2 locations in the central portion of the Tierrasanta subarea in coastal sage-chaparral scrub habitat east of Pallon Way and south of Rueda Drive (Polygon 98; Figure 4b).

3.2.3 Coastal California Gnatcatcher

The CAGN was detected in 3 locations within the Tierrasanta subarea during protocol surveys (Figure 4b). The species was detected in the southwestern portion of the project area (adjacent to Polygons 1 and 2; east of Santo Road and south of Corporal Drive), in the central portion of the project area (Polygon 26; north of Tierrasanta Boulevard and east of Pallon Way), and in the northern portion of the project area (Polygons 58, 62, and 127; east of Santo Road, north of Antigua Boulevard, and south of Menorca Drive).

The CAGN was detected in 1 additional location in the southwest portion of the project area during the pre-fuel reduction data collection (adjacent to Polygon 9; east of Santo Road and south of Halfbeak Way).

3.2.4 Nesting Birds and Raptors

One raptor nest was observed in the central portion of the project area during the pre-fuel reduction data collection. The raptor nest was located in a tall eucalyptus tree within a small patch of eucalyptus woodland east of Cartulina Road and north of Tambor Court (Polygon 129; Figure 4b).

3.2.5 Brush Management Compliance

Several areas, totaling 2.92 acres, of the Tierrasanta subarea were considered to be in compliance with City brush management regulations (Figure 5b; Appendix D) either because the areas have been completely cleared, because areas are in compliance with brush management regulations, or because they contain wetland vegetation, which does not require brush management. Portions of Polygons 28, 34, 92, 111, and 126 have been cleared by homeowners and were in complete compliance as of the time of the pre-fuel reduction data collection. Polygon 125 and a portion of Polygon 116 contain wetland vegetation that is associated with a creek; no brush management is needed in these areas. Finally, portions of Polygons 59, 61, and 112 are part of community parks; these areas contain irrigated lawn grass and these areas are devoid of shrubs and trees.

The majority of the Tierrasanta subarea (93.31 acres) was determined to need moderate brush management. Moderate brush management was a category determined by HELIX during the initial assessment 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.

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Several areas were considered by HELIX to need substantial brush management in the Tierrasanta subarea, which totaled 13.29 acres (Figure 5b). Substantial brush management was a category determined by HELIX during the initial assessment as 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.

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

3.2.6 Proposed Access Points

Proposed access points to each fuel reduction area are shown in Figure 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

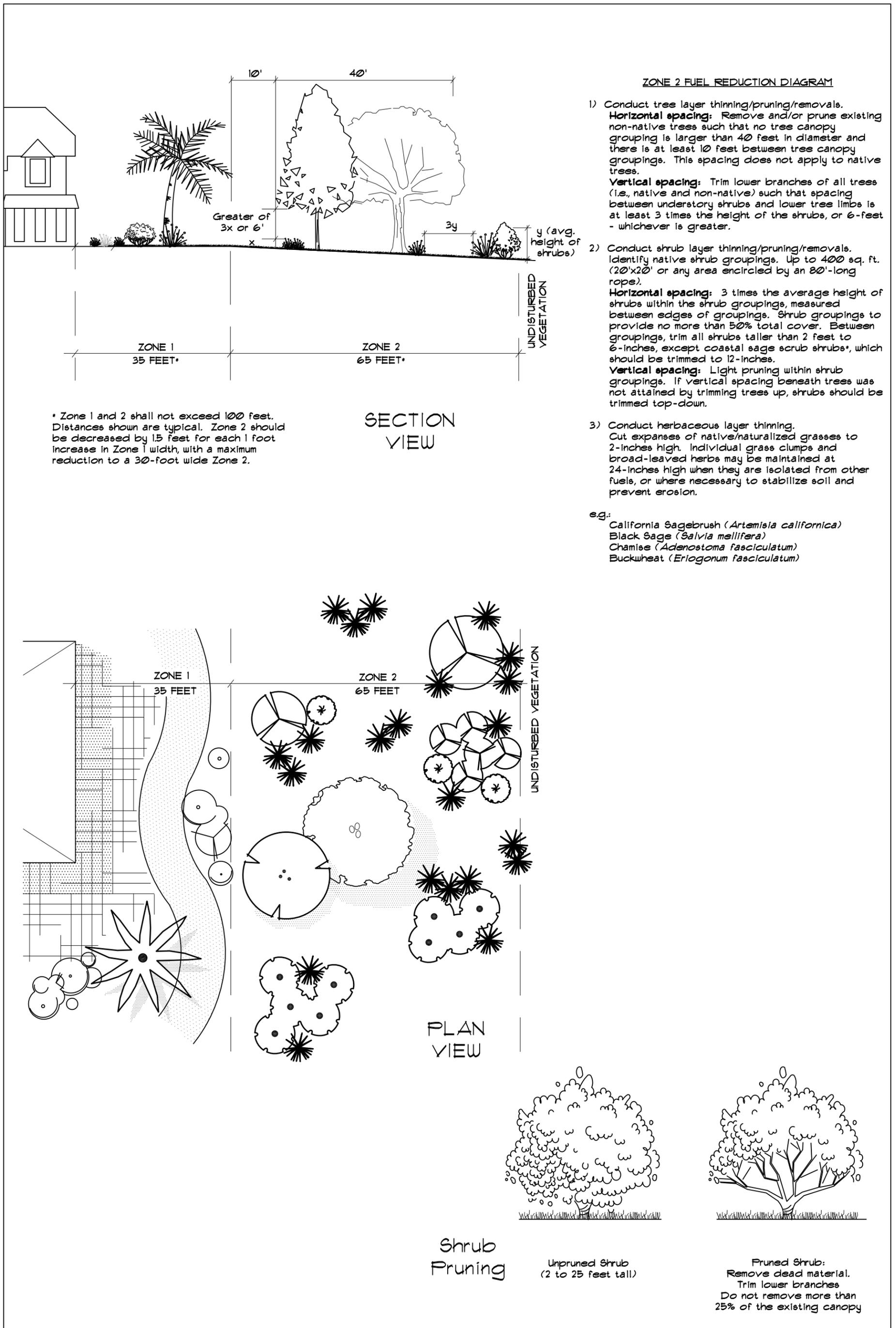
Recommendations for bringing the Scripps Ranch subarea into compliance with City brush management regulations are provided in Appendix C. Recommendations for bringing the Tierrasanta subarea into compliance with City brush management regulations are provided in Appendix D. Specific recommendations are 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 Scripps Ranch and Tierrasanta subareas, 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

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Scale: 1"=20'

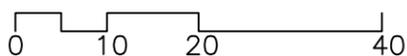


Figure 6

7.0 REFERENCES

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Appendix A
VEGETATION COMMUNITIES IN THE SCRIPPS RANCH AREA
(INCLUDING SCRIPPS RANCH AND TIERRASANTA SUBAREAS)

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 (*use latin name if first use*).

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.

Southern Maritime Chaparral

Southern maritime chaparral is restricted to the weathered sands within the coastal fog belt in San Diego County from La Jolla to Carlsbad with some scattered patches to the south; Point Loma, Spooner's Mesa and Penasquitos Canyon. This low, fairly open, chaparral is dominated by wart-

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stemmed ceanothus (*Ceanothus verrucosus*) and thick-leaved Eastwood's manzanita (*Arctostaphylos glandulosa* ssp.) Additional species include mission manzanita (*Xylococcus bicolor*), chamise (*Adenostoma fasciculatum*), Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*), scrub oak (*Quercus dumosa*), and summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*). Similar to other chaparral communities, fire is necessary for the reproduction of many of the constituent species which generally resprout from underground root crowns (Conrad 1987). The distribution of this community coincides with some of the most developed areas in San Diego County. Southern maritime chaparral is considered sensitive by the CDFG (Holland 1986) City of San Diego because of its scarcity and the high number of sensitive species that show a high fidelity to this vegetation community.

Southern Mixed Chaparral

Southern mixed 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. In this mixed chaparral the shrubs are generally tall and deep rooted, with a 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. Depending upon relative proximity to the coast, southern mixed chaparral is dominated by 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.

Chamise Chaparral

Chamise chaparral is the most widely distributed chaparral shrub and is dominated by the species chamise (*Adenostoma fasciculatum*). This vegetation community is found from Baja to northern California in pure or mixed stands. Chamise chaparral's ubiquitous distribution may be the result of chamise being the only chaparral species that regenerates from fire from both an underground root crown and the production of seeds (Rundel 1986). It often dominates at low elevations and on xeric south facing slopes with 60-90 percent canopy cover. Along its lower elevation limit, chamise chaparral intergrades with coastal sage scrub (Rundel 1986). Mission manzanita (*Xylococcus bicolor*) and black sage (*Salvia mellifera*) are minor plant species associated within this vegetation community. Chamise chaparral is considered a sensitive habitat by CDFG and City of San Diego.

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

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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.

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. *obtusa*). 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 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.



Diegan coastal sage scrub
GPS point 52
Photo point SR-PP105-Pre



Diegan coastal sage scrub
GPS point 202
Photo point SR-PP391-Pre



Coastal sage-chaparral scrub
GPS point 62
Photo point SR-PP125-Pre



Coastal sage-chaparral scrub
GPS point 158
Photo point SR-PP307-Pre

Sample Pre-thinning Photos

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - SCRIPPS RANCH

Appendix B



Southern maritime chaparral
GPS point 244
Photo point SR-PP475-Pre



Southern maritime chaparral
GPS point 246
Photo point SR-PP480-Pre



Southern mixed chaparral
GPS point 131
Photo point SR-PP260-Pre



Southern mixed chaparral
GPS point 173
Photo point SR-PP335-Pre

Sample Pre-thinning Photos

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - SCRIPPS RANCH

Appendix B



Chamise chaparral
GPS point 152
Photo point SR-PP299-Pre



Chamise chaparral
GPS point 229
Photo point SR-PP445-Pre



Non-native vegetation
GPS point 126
Photo point SR-PP250-Pre



Non-native vegetation
GPS point 234
Photo point SR-PP455-Pre

Sample Pre-thinning Photos

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - SCRIPPS RANCH

Appendix B



Eucalyptus woodland
GPS point 110
Photo point SR-PP217-Pre



Eucalyptus woodland
GPS point 91
Photo point SR-PP181-Pre

Sample Pre-thinning Photos

CITY OF SAN DIEGO BRUSH MANAGEMENT PROJECT - SCRIPPS RANCH

Appendix B

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
12	23	330	24	70	EW		2	Within this EW, there are some areas with native and non-native understory shrubs. Existing tree cover ranges from 40 to 80 percent and understory shrub cover ranges from 10 to 60 percent. Where there is not understory shrub cover, eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Thin shrubs to no more than 50 percent cover using the prioritization lists provided. Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 6' from the ground, whichever is greater. Areas with non-native grasses under 2' tall should be cut back to 2".
13	25	S	26	N	EW		2	same as 12
15	29	SW	30	SE	DCSS		2	In this primarily native DCSS area (some non-native succulents greater than 2' in height are present), existing shrub cover ranges from 20 to 80 percent - some areas have been previously thinned. Non-native succulents are present in one area, which was previously thinned; non-native succulents should be pruned back to achieve no more than 50 percent cover; if additional thinning is needed, flammable native species should be thinned next to achieve 50 percent cover. In the native shrub areas, flammable native species should be thinned first to achieve 50 percent cover. After flammable native species are thinned, other native species need to be thinned to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping.
17	33	W	34	E	DCSS		2	same as 15
19	37	W	38	E	EW		2	same as 12
20	39	320	40	150	DCSS		2	same as 15
21	41	350	42	150	DCSS		2	same as 15
22	43	170	44	340	DCSS		2	same as 15
23	45	10	46	250	DCSS		2	same as 15
25	49	110	50	300	DCSS		2	same as 15
27	53	140	54	280	DH		2	Existing cover with in this disturbed habitat area ranges from 10 percent to 80 percent. Higher cover areas are the portions of slopes adjacent to homeowner fence lines where iceplant has been planted. Most of this disturbed habitat area is sparsely vegetated with herbaceous annuals. Non-native grasses under 2' tall should be cut back to 2".
28	55	85	56	210	DCSS		2	same as 15
29	57	20	58	195	DCSS		2	same as 15
31	61	20	62	200	DCSS		2	same as 15
33	65	100	66	280	DCSS		2	same as 15
35	69	120	70	250	DCSS		2	same as 15
37	73	50	74	230	EW		2	same as 12
38	75	270	76	80	EW		2	same as 12

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
40	79	60	80	270	EW		3	same as 12
41	81	50	82	190	DCSS		1	Area has been cleared by homeowner and is considered to be in compliance with brush management regulations; shrub cover is less than 50 percent and no thinning or pruning is needed.
42	83	W	84	E	NNV		2	Existing cover in this NNV community ranges from 10 to 70 percent. Where pine and eucalyptus trees are present, their cover was estimated to range from 20 percent (younger trees) to 70 percent (mature trees spaced closer together). Trees need to be thinned and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation between canopies. Trees should be limbed-up to 6' from the ground. Other areas of this non-native vegetation community contain a mix of native shrubs, non-native shrubs, and ice plant as ground cover. Non-native succulents greater than 2' tall and other non-native plants should be removed from these areas first to attain 50 percent cover. Flammable native species should be removed next, then native species, in order to achieve target shrub cover.
44	87	W	88	E	NNV		2	same as 42
46	91	W	92	E	NNV		2	same as 42; photo point 91 was accidentally deleted
47	93	W	94	NE	NNV		2	same as 42
48	95	S	96	N	DCSS		2	same as 15
50	99	S	100	E	NNV		2	same as 42
52	104	105	105	215	DCSS		2	In this primarily native DCSS area, existing shrub cover is approximately 70 percent and herbaceous cover is approximately 60 percent. Non-native herbaceous cover (primarily non-native grasses) needs to be cut to 2" in height. Flammable native species are present and should be thinned to achieve 50 percent cover. Other native species may need to be thinned to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping.
53	106	320	107	135	EW		2	Within this EW, existing tree cover ranges from 40 to 90 percent cover. The majority of this EW does not contain an understory of plants. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Where native shrubs exist under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or to 6' from the ground, whichever is greater. Some of the EW occurs on slopes greater than 50 percent. For slopes greater than 50 percent, eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 20' horizontal separation distance and trees should be limbed-up to 6 times the shrub height. Areas with herbaceous vegetation under 2' tall should be cut back to 2".

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
55	110	350	111	155	CSCS		3	In this primarily native CSCS area, existing shrub cover ranges from 10 percent to 90 percent and Non-native ranges from 20 percent to 70 percent. Non-native herbaceous cover needs to be cut to 2" in height. Flammable native species are present and should be thinned first to achieve 50 percent cover. After flammable native species are thinned, other native species may need to be thinned to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping.
57	114	30	115	215	CSCS		3	same as 55
58	116	20	117	190	EW		2	same as 53
60	120	330	121	170	CSCS		3	same as 55
62	124	20	125	170	CSCS		3	same as 55
65	129	110	130	260	SMAC		3	This is primarily a native SMAC area, but there are prostrate acacia plants and ornamental species planted adjacent to houses. Existing cover is approximately 90 percent. Prostrate acacia needs to be thinned first, then flammable native species, then other native species in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Six sensitive San Diego barrel cactus plants/clumps are present and should not be removed.
67	133	40	134	270	SMAC	Present	3	same as 65
69	137	60	138	290	NNV		3	This is primarily a NNV area with prostrate acacia plants, non-native palm trees, other non-native trees, and non-native grasses. Existing cover is approximately 90 percent. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Within the shrub layer, prostrate acacia needs to be thinned first followed by any flammable native species, then other native species in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Areas with herbaceous vegetation (e.g., non-native grasses) under 2' tall should be cut back to 2".
71	141	80	142	310	NNV		2	same as 69
73	145	150	146	10	NNV		2	same as 69
75	149	150	150	340	NNV		2	same as 69
77	153	210	154	90	NNV		2	same as 69
78	155	220	156	80	NNV		2	same as 69
79	157	245	158	50	EW		2	same as 53
81	161	200	162	70	EW		2	same as 53
83	165	170	166	40	EW		2	same as 53
85	169	150	170	70	EW		2	same as 53

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
86	171	50	172	270	EW		2	Within this EW there are some areas with native and non-native understory shrubs. Existing tree cover ranges from 60 to 90 percent and understory shrub cover ranges from 10 to 80 percent. Where there is not understory shrub cover, eucalyptus and pine trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Where shrubs exist under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or to 6' from the ground, whichever is greater. Areas with herbaceous vegetation under 2' tall should be cut back to 2".
87	173	240	174	90	EW		2	same as 86
89	177	250	178	80	EW		2	same as 86
91	181	240	182	140	EW		2	same as 86
92	183	200	184	350	EW		2	same as 86
94	187	190	188	350	EW		2	same as 92; one downed eucalyptus tree to the north needs to be removed
96	191	150	192	280	EW		2	same as 92
98	195	110	196	230	CC		2	Existing shrub cover is slightly greater than 50 percent. Flammable native species are present and should be thinned first to achieve 50 percent cover. After flammable native species are thinned, other native species may need to be thinned to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Herbaceous weeds need to be weed-whipped to 2". Adjacent eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground.
99	197	30	198	280	CC		2	same as 98
101	201	170	202	110	CC		2	same as 98
102	203	260	204	325	SMC		2	same as 98
104	207	180	208	320	SMC		2	same as 98
106	211	180	212	330	SMC		2	same as 98
108	215	190	-	-	EW		2	Within this EW, there are some areas where there are native and non-native understory shrubs. Existing tree cover ranges from 30 to 90 percent and understory shrub cover is generally about 20 percent cover (although some areas have shrub cover of 60 to 70 percent). Eucalyptus and acacia trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Where shrubs exist under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or to 6' from the ground, whichever is greater. Areas with herbaceous vegetation under 2' tall should be cut back to 2".

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
109	216	10	-	-	EW		2	Within this EW, there are some areas where there are native and non-native understory shrubs. Existing tree cover is approximately 90 percent, with some areas containing 40 to 60 percent cover. Understory shrub cover is generally about 10 to 20 percent cover (although some areas have shrub cover of 60 to 80 percent). Where there is not understory shrub cover, eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Where native shrubs exist under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or to 6' from the ground, whichever is greater; where non-native shrubs exist under eucalyptus canopies, cut non-native shrubs back to 6" stump, then limb-up eucalyptus to 6' clearance. Areas with herbaceous vegetation under 2' tall should be cut back to 2".
110	217	210	218	10	EW		2	same as 109
111	219	230	220	350	EW		2	same as 109
112	221	210	222	110	EW		2	same as 109
113	223	320	224	190	EW		2	same as 109
114	225	60	226	180	EW		2	same as 109
115	227	30	228	170	EW		2	same as 109
116	229	280	230	60	SMC		2	The majority of this area has been previously cleared and existing shrub cover is approximately 20 percent. Several areas have shrub cover greater than 50 percent and non-native pampas grass is present in several areas. Where brush thinning is needed, pampas grass should be removed first, then other non-native species, then flammable native species need to be thinned, then other native species need to be thinned in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Herbaceous weeds need to be weed-whipped to 2".
117	231	80	232	270	SMC		2	same as 116
118	233	60	234	205	SMC		2	same as 116
119	235	65	236	250	SMC		2	same as 116
120	237	60	238	250	SMC		2	same as 116
121	239	50	240	240	SMC		2	same as 116
122	241	240	242	70	SMC		2	same as 116
123	243	240	244	110	SMC		2	same as 116

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
124	245	260	246	110	NNV		2	This is primarily a NNV area with ice plant, pampas grass, ornamental daisies, ornamental succulents, scattered chaparral shrubs, and non-native grasses. Existing shrub cover ranges from approximately 20 to 60 percent. Herbaceous cover is approximately 70 to 80 percent. Pampas grass needs to be thinned first followed by thinning of ornamental succulents and other non-native shrubs. Flammable native species would need to be thinned next, then other native species need to be thinned in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Areas with non-native grasses under 2' tall should be cut back to 2".
125	247	280	248	90	NNV		2	same as 124
126	249	260	250	80	NNV		2	same as 124
127	251	220	252	10	NNV		2	same as 124
128	253	210	254	50	NNV		2	same as 124
129	255	230	256	110	NNV		2	same as 124
130	257	250	258	50	SMC		2	same as 116
131	259	220	260	50	SMC		2	same as 116; large lemonadeberry and laurel sumac need to be pruned and limbed up to achieve umbrella shaping
132	261	230	262	60	SMC		2	same as 116
133	263	220	264	70	SMC		2	same as 116
134	265	250	266	80	SMC		2	same as 116
135	267	240	268	70	SMC		2	same as 116
136	269	290	-	-	EW		2	Within this EW, existing tree cover is approximately 80 percent and there is little understory shrub or herb cover. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Areas with herbaceous vegetation under 2' tall should be cut back to 2".
137	270	230	271	290	EW		3	Within this EW, there are some areas with native and non-native understory shrubs. Existing tree cover is approximately 90 percent and understory shrub cover is generally about 20 percent cover (although some areas have shrub cover of approximately 90 percent). Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Where shrubs exist under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or to 6' from the ground, whichever is greater. Areas with herbaceous vegetation under 2' tall should be cut back to 2".
138	272	60	273	300	EW		3	same as 137

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
139	274	270	-	-	EW		2	Within this EW, there are some areas with native and non-native understory shrubs. Existing tree cover is approximately 90 percent and understory shrub cover ranges from 20 to 80 percent cover. Where there is not understory shrub cover, eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Where shrubs exist under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or to 6' from the ground, whichever is greater. Areas with herbaceous vegetation under 2' tall should be cut back to 2".
140	275	60	276	300	CC		2	The existing shrub cover in this CC area is approximately 80 percent, although there is an area that has been previously cleared where existing shrub cover is approximately 20 percent. Where brush thinning is needed, remove pampas grass first, then other non-native species (prostrate acacia), then flammable native species, then other native species need to be thinned in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Herbaceous weeds need to be weed-whipped to 2".
141	277	70	278	250	CC	Present	2	Same as 140; 1 sensitive San Diego barrel cactus (<i>Ferocactus viridescens</i>) is present and should not be removed.
142	279	50	280	210	EW	--	2	same as 139
143	281	50	282	260	NNV	--	2	This is primarily a NNV area with prostrate acacia plants, non-native trees, eucalyptus trees, and non-native grasses. Where trees are present, their cover is approximately 90 percent. Eucalyptus and other non-native trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Within the shrub layer, prostrate acacia, eucalyptus saplings, and other non-native shrubs need to be thinned first followed by any flammable native species, then other native species in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Areas with herbaceous vegetation (non-native grasses) under 2' tall should be cut back to 2".
144	283	50	284	260	NNV	--	2	same as 143
145	285	100	286	310	NNV	--	2	same as 143
146	287	50	-	-	EW	--	2	same as 139
147	288	220	289	70	EW	--	2	same as 139
148	290	240	291	120	EW	--	1	Area has been cleared by existing landowner or HOA; area is considered to be in compliance with brush management regulations; tree canopy cover is less than the 40' maximum canopy mass and there was 10' horizontal separation distance from the adjacent trees.
149	292	290	293	115	DCSS	--	1	Area has been cleared by existing landowner or HOA; area is considered to be in compliance with brush management regulations; shrub cover is less than 50 percent and no thinning or pruning is needed.

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
150	294	260	295	70	DCSS	--	1	same as 149
151	296	230	297	40	EW	--	2	same as 139
152	298	210	299	80	CC	--	2	same as 140
153	300	310	301	80	CC	--	2	same as 140; old fence present between 152 and 153 needs to be removed; bougainvillea present needs to be pruned.
154	302	280	-	-	CC	--	2	same as 140
								In this primarily native CSCS area, existing shrub cover ranges from 60 to 80 percent. Some of the brush management areas have been previously thinned and contain lower shrub cover (approximately 20 to 60 percent) and a high amount of herbaceous cover. Dead plant material hanging over fencelines (GPS point 157) should be removed first. Non-native pampas grass is present and should be removed next. Other non-native species should then be removed. Flammable native species are also present and should be thinned next. Further thinning of other native species may be needed in areas to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native grasses need to be cut to 2" in height.
155	303	170	-	-	CSCS	--	2	
156	304	100	-	-	CSCS	--	2	same as 155
157	305	260	306	80	CSCS	Present	2	same as 155; 1 sensitive San Diego barrel cactus is present and should not be removed
158	307	230	308	60	CSCS	--	2	same as 155
159	309	250	310	150	CSCS	Present	2	same as 155; 15 sensitive San Diego barrel cactus plants are present and should not be removed
160	311	320	312	180	CSCS	--	2	same as 155
161	313	330	314	130	CSCS	--	2	same as 155; encroachment includes tiles, pots, trash, and possible grubbing
162	315	290	-	-	CSCS	--	2	same as 155
163	316	0	-	-	EW	--	2	same as 53
164	317	150	318	280	EW	--	2	same as 53
165	319	110	320	330	CSCS	--	2	same as 155
166	321	150	322	340	CSCS	--	2	same as 155
167	323	90	324	240	CSCS	--	2	same as 155
168	325	60	326	230	EW	--	3	same as 53
								The existing shrub cover in this SMC area is approximately 90 percent, although there are areas adjacent to fencelines where shrub cover is much lower due to previous thinning. Remove non-native pampas grass first, then other non-native species, then flammable native species, then other native species need to be thinned in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Herbaceous weeds need to be weed-whipped to 2"; homeowner at 169 has cleared vegetation and mulch pile present needs to be removed.
169	327	340	328	170	SMC	--	3	
170	329	340	330	140	SMC	--	3	same as 169

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
171	331	320	332	190	SMC	--	3	same as 169
172	333	350	334	190	SMC	--	3	same as 169
173	335	350	336	160	SMC	--	3	same as 169
174	337	120	-	-	CSCS	Present	2	In this primarily native CSCS area, existing shrub cover ranges from 30 to 70 percent. Some of the brush management areas have been previously thinned and contain lower shrub cover (approximately 20 to 40 percent) and a high amount of herbaceous cover and ornamental plant cover. Non-native pampas grass is present and should be removed first. Other non-native species should be removed next, including non-native opuntia. Flammable native species should be thinned after the pampas grass and non-native species have been removed. Further thinning of other native species may be needed in areas to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native grasses need to be cut to 2" in height. More than 100 sensitive San Diego sunflower (<i>Viguiera laciniata</i>) plants present between 174 and 178 should not be thinned or pruned (brush management recommendations listed above will achieve 50 percent cover).
175	338	250	339	120	CSCS	Present	2	same as 175
176	340	250	341	70	CSCS	Present	2	same as 175
177	342	270	343	110	CSCS	Present	2	same as 175
178	344	320	345	120	CSCS	Present	2	same as 175
183	353	160	354	296	EW		2	Within this EW, existing tree cover ranges from 40 to 90 percent cover. The majority of this EW does not contain an understory of plants. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Where native shrubs exist under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or to 6' from the ground, whichever is greater. Some of the EW occurs on slopes greater than 50 percent. For slopes greater than 50 percent, eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 20' horizontal separation distance and trees should be limbed-up to 6 times the shrub height. Areas with non-native grasses under 2' tall should be cut back to 2".
184	355	184	356	320	NNV		2	This NNV area consists of non-native trees, euclalyptus trees, and an understory of herbaceous ornamental plants. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Non-native grasses should be cut back to 2".

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
185	357	200	358	350	CSCS		2	In this primarily native CSCS area, existing shrub cover ranges from 10 percent to 90 percent and herbaceous cover ranges from 20 percent to 70 percent. Herbaceous cover needs to be cut to 2" in height. Non-native pampas grass and eucalyptus saplings need to be removed first, then flammable native species should be thinned first to achieve 50 percent cover. Other native species may need to be thinned to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native grasses should be cut back to 2".
186	359	172	360	5	CSCS		2	same as 185
187	361	186	362	304	CSCS		2	same as 185
188	363	146	364	314	CSCS		2	same as 185
189	365	46	366	280	CSCS		2	same as 185
190	367	40	368	270	SMC		2	same as 98
191	369	86	370	306	SMC		2	same as 98
192	371	62	372	204	EW		2	same as 53
193	373	308	374	260	EW		2	same as 53
194	375	316	376	186	EW		2	same as 53
195	377	28	378	270	EW		2	same as 53
196	379	350	380	258	EW		2	same as 108
197	381	346	382	250	EW		2	same as 108
198	383	336	384	175	EW		2	same as 108
199	385	54	386	227	EW		2	same as 108
200	387	163	388	299	EW		2	same as 108
201	389	132	390	310	EW		2	same as 108
202	391	12	392	240	EW		2	same as 108
203	393	4	394	106	EW		2	same as 108
204	395	355	396	225	EW		2	same as 108
205	397	15	398	230	EW		2	same as 108
206	399	75	400	172	EW		2	same as 108
207	401	155	402	272	DCSS		2	In this primarily native DCSS area, existing shrub cover ranges from 20 to 70 percent, and some areas have been previously thinned. Several large ornamental trees and eucalyptus trees occur in the area and should be pruned and limbed-up to 6' from the ground. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Non-native shrub species should be removed first. Flammable native species are present and should be thinned next to achieve 50 percent cover. After flammable native species are thinned, other native species need to be thinned to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native grasses should be cut back to 2".

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
208	403	196	404	292	DCSS	Present	2	same as 207; 4 sensitive San Diego barrel cactus to the west of 208 should not be removed
209	405	126	406	315	DCSS		2	same as 207
210	407	136	408	316	CC		2	Existing shrub cover is approximately 70 percent. Non-native shrub species should be removed first. Flammable native species are present and should be thinned next to achieve 50 percent cover. After flammable native species are thinned, other native species need to be thinned to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native grasses should be cut back to 2". Several large pine trees occur in the area and should be pruned and limbed-up to 6' from the ground.
211	409	64	410	262	CC		2	same as 210
212	411	352	412	255	EW	Present	2	Within this EW, existing tree cover is approximately 60 percent cover and contains a mix of native and non-native understory of shrub species. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Where shrubs exist under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or to 6' from the ground, whichever is greater. Areas with non-native grasses under 2' tall should be cut back to 2"; active mourning dove nest immediately south of Point 212 was flagged for avoidance
213	413	340	414	193	SMC		2	same as 169
214	415	335	416	186	SMC		2	Chaparral has been thinned between point 213 and 100 feet north of point 214 and existing cover is less than 50 percent; non-native grasses need to be whipped to 2" in height.
215	417	332	418	175	SMC		2	same as 169; large dead tree down on the slope needs to be removed; some debris pushed onto slope is a possible encroachment.
216	419	325	420	136	SMC		1	Landowner at point 216 is in compliance (existing cover is less than 50 percent and herbaceous plants are less than 2" tall); areas surrounding point 216 are the same as 169.
217	421	32	422	146	SMC		2	same as 169; very large Ficus tree between points 216 and 217 needs to be limbed-up to 6' from the ground
218	423	336	424	163	CSCS		2	same as 155

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
219	425	62	426	260	NNV		2	This NNV area contains non-native pine, palm, acacia, and eucalyptus trees with an understory of non-native ornamental plants and scattered native shrubs. Where trees are present, their cover is approximately 90 percent. Eucalyptus and other non-native trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Within the shrub layer, non-native plants need to be removed first followed by any flammable native species, then other native species in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Areas with non-native grasses under 2' tall should be cut back to 2".
220	427	255	428	27	NNV		2	same as 219
221	429	198	430	26	NNV		2	same as 219
222	431	214	432	320	CSCS		2	In this primarily native CSCS area, existing shrub cover ranges from 10 to 90 percent as some of the brush management areas have been previously thinned. Non-native pampas grass is present and should be removed first. Other non-native species should be removed next, including Bougainvillea and ornamental shrubs. Flammable native species are also present and should be thinned after the pampas grass and non-native species have been removed. Further thinning of other native species may be needed in areas to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native grasses need to be cut to 2" in height.
223	433	155	434	338	CSCS		2	same as 222
224	435	166	436	345	CSCS		2	same as 222
225	437	144	438	354	CSCS		1	Area between 225 and 226 is in compliance; existing cover is less than 50 percent and herbaceous plants are less than 2" tall.
226	439	124	440	335	EW		3	Within this EW, existing tree cover is approximately 80 percent cover where trees are present. Shrubs are generally absent under the eucalyptus trees. Non-native shrubs (prostrate acacia) and native shrubs are present between the eucalyptus stands with an existing cover ranging from 30 to 80 percent. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Non-native shrub cover between the trees needs to be thinned to 50 percent cover. If additional thinning is needed, flammable native shrubs should be removed next, then other native shrubs. Areas with non-native grasses under 2' tall should be cut back to 2".
227	441	138	442	320	EW		3	same as 226

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GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
228	443	148	444	340	CC		2	Existing shrub cover generally ranges from 50 to 80 percent, but some areas have been previously thinned and have shrub cover that is approximately 20 to 40 percent. Non-native shrub species should be removed first. Flammable native species are also present and should be thinned after the non-native species have been removed. Further thinning of other native species may be needed in areas to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native grasses need to be cut to 2" in height.
229	445	157	446	318	CC		2	same as 228
230	447	207	448	43	CC		2	same as 228
231	449	139	450	320	CC		2	same as 228
232	451	334	452	170	NNV		3	This is primarily a NNV area with prostrate acacia plants, non-native trees, eucalyptus trees, and non-native grasses. Where trees are present, their cover is approximately 90 percent. Eucalyptus and other non-native trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Within the shrub layer, prostrate acacia, eucalyptus saplings, and other non-native shrubs need to be thinned first followed by any flammable native species, then other native species in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Areas with herbaceous vegetation (non-native grasses) under 2' tall should be cut back to 2".
233	453	348	454	184	NNV		3	same as 232
234	455	352	456	180	NNV		3	same as 232
235	457	334	458	182	NNV		3	same as 232
236	459	354	460	196	NNV		3	same as 232
237	461	37	462	236	SMAC		2	This is primarily a native SMAC area, but there are prostrate acacia plants and ornamental species planted adjacent to the houses, as well as scattered tamarisk, acacia, and eucalyptus trees. Where trees are present, their cover is approximately 90 percent. Eucalyptus and other non-native trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Tamarisk trees should be removed. Trees should be limbed-up to 6' from the ground. Existing shrub cover is approximately 90 percent. Prostrate acacia should be removed after the tamarisk, then flammable native species, then other native species in order to achieve 50 percent cover. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Areas with non-native grasses should be cut back to 2".
238	463	77	464	293	SMAC		2	same as 237
239	465	162	466	340	SMAC	Present	2	same as 237; 7 sensitive San Diego barrel cactus should not be removed
240	467	148	468	343	SMAC		2	same as 237

Appendix C - Scripps Ranch Existing Conditions Site Evaluation Forms and Recommendations

GPS Point	Photo Point A (compass direction)*		Photo Point B (compass direction)*		Habitat	Sensitive Species	Brush Management Compliance	Notes/Recommendations
241	469	155	470	352	EW		2	Within this EW, existing tree cover is approximately 80 percent where trees are present. Shrubs are generally absent under the trees. Non-native shrubs (prostrate acacia) and native shrubs are present between the eucalyptus stands - with existing cover ranging from 30 to 80 percent. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. Non-native shrub cover between the trees needs to be thinned to 50 percent cover. If additional thinning is needed, flammable native shrubs should be removed next, then other native shrubs. Areas with non-native grasses under 2' tall should be cut back to 2".
242	471	153	472	336	EW		2	same as 241
243	473	337	474	187	EW		2	same as 241
244	475	320	476	158	SMAC		2	same as 237
245	477	306	478	176	SMAC	Present	2	same as 237; several sensitive San Diego barrel cactus plants at Point 245 should be avoided.
246	479	344	480	148	SMAC		2	same as 237
247	481	84	482	180	NNV		2	same as 219
248	483	240	484	40	EW	Present	2	same as 53; 21 sensitive San Diego County viguiera plants are present and should be avoided.

Habitat Codes

EW = eucalyptus woodland
 DCSS = Diegan coastal sage scrub
 CSCS = coastal sage-chaparral scrub
 CC = chamise chaparral
 SMC = southern mixed chaparral
 SMAC = southern maritime chaparral
 NNV = non-native vegetation
 DH = disturbed habitat

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 except for the initial GPS points (Points 13 through 50), which are reported as cardinal directions. Compass headings will be determined during the post-fuel reduction data collection using the pre-fuel reduction photographs. This table will be updated when those data are collected.

Appendix D - Tierrasanta 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
1	1	160	2	350	DCSS	--	Y	Present	2	Within this DCSS, existing shrub cover is generally 60 to 80 percent and the majority of this DCSS occurs on slopes greater than 50 percent. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species (chrysanthemum), then other non-native species should be removed next, 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, palm, and acacia) occur within this area 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).
2	3	170	4	355	DCSS	--	Y	Present	2	same as 1
3	5	180	6	355	DCSS	--	Y	Present	2	same as 1
5	9	170	10	0	DCSS	--	Y	Y	2	Within this DCSS, existing shrub cover is generally 50 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 non-native shrub species (along fencelines), followed by flammable native species, then other native species. Although not sensitive, <i>Opuntia littoralis</i> should be avoided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several eucalyptus trees occur along fencelines 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	140	12	10	DCSS	--	N	Y	2	same as 5
7	13	205	14	0	DCSS	--	N	Y	2	same as 5
8	15	180	16	10	DCSS	--	N	Y	2	same as 5
9	17	180	18	355	DCSS	--	N	Y	2	same as 5
10	19	120	20	280	DCSS	--	Y	Y	3	same as 5; homeless living in some of the large shrubs adjacent to work area

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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
12	23	170	24	330	DCSS	--	N	Y	2	In this open DCSS community, vegetation has been previously cleared 20 feet out from the fenceline. Existing native shrub cover is generally 20 percent, with some areas exceeding percent cover due to large laurel sumac. In areas with greater than 50 percent shrub cover, invasive species should be removed first, followed by other non-native species (ornamental shrubs and non-native succulents). If additional thinning is needed, the large laurel sumac should be pruned to achieve 50 percent cover. Several eucalyptus trees occur along fencelines 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).
13	25	200	26	350	DCSS	--	Y	Y	2	same as 12
14	27	240	28	40	DCSS	--	N	Y	2	same as 12
15	29	220	30	0	DCSS	--	N	Y	2	same as 12
16	31	180	32	80	DCSS	--	N	Y	2	same as 12
17	33	60	34	250	DCSS	--	N	Y	2	same as 12
18	35	10	36	140	CSCS	--	Y	Y	2	same as 19
19	37	340	38	170	CSCS	--	Y	Y	2	Within this CSCS, existing shrub cover is generally 40 to 60 percent and the majority of this areas occurs on slopes greater than 50 percent. Portions of this area have existing shrub cover of 10 to 20 percent because they have been previously cleared. Where shrub cover needs to be reduced to 50 percent, remove invasive species first (pampas grass), followed by non-native shrub species (including non-native succulents), followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several eucalyptus trees occur along fencelines and need to be limbed-up to 6 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 D - Tierrasanta 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
20	39	110	40	280	NNV	--	Y	N	2	This small NNV is mostly comprised of iceplant as groundcover. There are also eucalyptus trees that occur with overlapping canopies and a mix of native and non-native shrubs in the understory. Existing shrub cover in the understory is approximately 60 percent. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. Thin shrubs to no more than 50 percent cover using the prioritization lists provided. Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 6 times the shrub height or 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).
22	43	60	44	190	CSCS	--	Y	Y	3	same as 19
23	45	30	46	180	CSCS	Vig lac	Y	Y	3	same as 19
24	47	20	48	200	CSCS	Vig lac	Y	Y	3	same as 19
25	49	0	50	190	CSCS	--	Y	Y	2	same as 19
26	51	200	52	340	CSCS	--	Y	Y	3	In this portion of the CSCS, existing shrub cover is 100 percent (large lemonadeberry) and it is a steep slope. Cover is so thick that no other GPS points could be recorded south of GPS point 26. If invasive or non-native species are present in this stand of CSCS, they should be removed first. Otherwise, shrub cover needs to be reduced to 50 percent by removing lemonadeberry. 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).

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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
					DCSS and NNV	Vig lac	N	Y	2	<p>Within this DCSS, existing shrub cover ranges from 10 to 80 percent and the majority of this areas occurs on slopes greater than 50 percent. Portions of this area have existing shrub cover of 10 to 20 percent because they have been previously cleared. Where shrub cover needs to be reduced to 50 percent, remove invasive species first (pampas grass, Russian thistle, and tree tobacco), followed by non-native shrub species (prostrate acacia), then flammable native species, and then other native species. Viguiera should be removed last, if additional thinning is needed. 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). Scattered eucalyptus and pine trees occur within the brush management area and need to be limbed-up to 6 times the sh ground, whichever is greater. Trees will need to be removed and their canopies trimmed in some areas to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. At GPS Point 27, the area adjacent to the property line has been heavily disturbed and is primarily NNV.</p>
27	53	260	54	60	DCSS and NNV	Vig lac	N	Y	2	
28	55	220	56	330	DCSS	Vig lac	N	Y	2	
29	57	200	58	30	DCSS	Vig lac	Y	Y	2	
30	59	170	60	10	DCSS	Vig lac	Y	Y	2	
31	61	180	62	0	DCSS	Vig lac	Y	Y	2	
32	63	180	64	10	DCSS	--	Y	Y	2	
33	65	160	66	330	DCSS	Vig lac	Y	Y	2	
34	67	100	68	230	DCSS	Vig lac	Y	Y	2	
35	69	225	70	20	DCSS	Vig lac	Y	Y	2	
37**	71	185	72	50	DCSS	Vig lac	Y	Y	2	
39	75	160	76	310	DCSS	Vig lac		Y	2	

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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
40	77	120	78	240	EW	Vig lac	Y	Y	3	This small EW contains mature eucalyptus trees with overlapping canopies and a mix of native and non-native shrubs in the understory. Existing shrub cover in the understory is approximately 60 percent. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. Thin shrubs to no more than 50 percent cover using the prioritization lists provided (avoid <i>Viguiera laciniata</i> where possible). Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 6 times the shrub height or 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).
43	83	15	84	180	DCSS	--	N	Y	2	Within this small DCSS area, existing shrub cover ranges from 20 to 80 percent (portions have been previously cleared). Where shrub cover needs to be reduced to 50 percent, remove non-native shrub species first (no invasive species were observed), then flammable native species, and then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Scattered eucalyptus and other non-native trees occur within the brush management area and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. Trees will need to be removed and their canopies trimmed in some areas to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. 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).
44	85	20	86	180	DCSS	--	N	Y	2	same as 43

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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	87	170	88	0	EW	--	N	N	2	This EW contains a mix of mature and young eucalyptus, pepper, and palm trees with overlapping canopies and a mix of native and non-native shrubs in the understory. Existing shrub cover in the understory is approximately 20 percent, but some areas contain shrub cover greater than 50 percent. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Several native willow trees are present in the area and should not be removed. Thin shrubs to no more than 50 percent cover using the prioritization lists provided. Native prickly pear cactus and scrub oaks should be left in place where possible. Where shrubs remain under eucalyptus canopies, limb-up trees (including willow trees) to 3 times the shrub height or 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).
46	89	180	90	0	EW	--	N	N	2	same as 45
47	91	0	92	180	EW	--	Y	N	2	same as 45
48	93	180	94	40	EW	--	N	N	2	same as 45
49	95	180	96	15	DCSS	--	Y	Y	3	Within this DCSS, existing shrub cover ranges from 20 to 100 percent and the majority of this areas occurs on slopes greater than 50 percent. Portions of this area have lower shrub cover because they have been previously cleared. Where shrub cover needs to be reduced to 50 percent, remove invasive species first, followed by non-native shrub species, then flammable native species, and then other native species. Viguiera should be removed last, if additional thinning is needed. 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). Scattered eucalyptus, pepper, palm, and other non-native trees occur within the brush management area and need to be limbed-up to 6 times the shrub height or to 6' from the ground, whichever is greater. Trees will need to be removed and their canopies trimmed in some areas to obtain the required 40' maximum canopy mass with 30' horizontal separation distance.

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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
50	97	200	98	340	DCSS	--	Y	Y	3	same as 49
51	99	270	100	70	CSCS	--	Y	N	2	Within this CSCS, existing shrub cover ranges from 30 to 90 percent and the majority of this areas occurs on slopes greater than 50 percent. Portions of this area have lower shrub cover because they have been previously cleared. Thin shrubs to 50 percent cover using the prioritization lists provided (thin <i>Viguiera laciniata</i> last). 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). Scattered eucalyptus, pepper, palm, and other non-native trees occur within the brush management area and need to be limbed-up to 6 times the shrub height or to 6' from the ground, whichever is greater. Trees will need to be removed and their canopies trimmed in some areas to obtain the required 40' maximum canopy mass with 30' horizontal separation distance.
52	101	240	102	20	CSCS	Vig lac	Y	N	3	same as 51
53	103	110	104	310	DCSS	Vig lac	Y	Y	2	same as 49
54	105	240	106	60	CSCS	Vig lac	Y	Y	3	same as 51
55	107	200	108	20	CSCS	--	N	N	2	same as 51

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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
56	109	240	110	65	DCSS	Vig lac	N	Y	2	Within this DCSS, existing shrub cover is generally 60 to 80 percent, but ranges from 0 (in areas that have been cleared and planted with iceplant) to 100 percent. Portions of this area occur on slopes greater than 50 percent. Where shrub cover needs to be reduced to 50 percent, remove invasive species first, followed by non-native shrub species, then flammable native species, and then other native species. Viguiera should be removed last, if additional thinning is needed. Also, native prickly pear cactus and cholla should be left in place. 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). Scattered eucalyptus, pepper, palm, and other non-native trees occur within the brush management area. For slopes less than 50 percent, trees will need to be removed and their canopies trimmed in some areas to obtain the required 40' maximum canopy mass with 10' horizontal separation distance; trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. For slopes greater than 50 percent, trees will need to be removed and their canopies trimmed in some areas to obtain the required 40' maximum canopy mass with 30' horizontal separation distance; trees need to be limbed-up to 6 times the shrub height or to 6' from the ground, whichever is greater. Mulch layer should be raked in areas where existing depth is greater than 6".
58	113	330	114	200	DCSS	Vig lac	N	N	1	Area is in compliance - do not work here because all groundcover has been removed to 100' from home.
60	117	215	118	40	DCSS	Vig lac	Y	Y	2	same as 56
62	121	15	122	205	DCSS	--	N	Y	2	same as 56
63	123	45	124	240	DCSS	Vig lac	N	Y	2	same as 56
64	125	240	126	8	DCSS	Vig lac	N	Y	2	same as 56; majority of this area has been cleared and iceplant has been planted for groundcover and prostrate acacia has been planted along fenceline. Acacia needs to be thinned to achieve 50 percent cover.
65	127	330	128	140	DCSS	Vig lac	N	Y	2	same as 56
66	129	355	130	180	DCSS	Vig lac	N	Y	2	same as 56

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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
67	131	160	132	20	DCSS	--	N	Y	1 and 2	same as 56, except the portion of the brush management area that is located along property lines has been cleared of vegetation and planted with iceplant as groundcover; this portion of the brush management area is considered to be in compliance. Beyond the iceplant area the sage scrub shrubs need to be thinned to 50 percent cover. 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	133	20	134	215	DCSS	--	N	Y	1 and 2	same as 67
69	135	70	136	230	DCSS	--	N	Y	1 and 2	same as 67
70	137	170	138	0	DCSS	--	N	Y	2	same as 56
71	139	0	140	190	DCSS	--	N	Y	2	same as 56
72	141	0	142	20	DCSS	Vig lac	N	Y	3	same as 56
73	143	330	144	120	DCSS	Vig lac	N	Y	2	same as 56
74	145	205	146	60	DCSS	Vig lac	N	Y	2	same as 56
75	147	160	148	340	DCSS	--	N	Y	3	same as 56
76	149	200	150	60	DCSS	--	N	Y	3	same as 56
77	151	220	152	30	DCSS	--	N	Y	2	same as 56
78	153	195	154	40	DCSS	Vig lac	N	Y	2	same as 56
79	155	200	156	30	DCSS	--	N	Y	3	same as 56

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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
80	157	230	158	95	DCSS	Vig lac	N	Y	2	<p>Within this DCSS, existing shrub cover is generally 50 to 80 percent, but some areas have lower cover (0 to 30 percent) in areas that have been previously cleared. Portions of this area occur on slopes greater than 50 percent. Where shrub cover needs to be reduced to 50 percent, remove invasive species first, followed by non-native shrub species, then flammable native species, and then other native species. <i>Viguiera</i> should be removed last, if additional thinning is needed. Native prickly pear cactus and cholla should be left in place. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Scattered tree tobacco, eucalyptus, and pepper trees occur within the brush management area. For slopes less than 50 percent, trees will need to be removed and their canopies trimmed in some areas to obtain the required 40' maximum canopy mass with 10' horizontal separation distance; trees need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. For slopes greater than 50 percent, trees will need to be removed and their canopies trimmed in some areas to obtain the required 40' maximum canopy mass with 30' horizontal separation distance; trees need to be limbed-up to 6 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).</p>
81	159	165	160	345	DCSS	Vig lac	N	Y	3	
82	161	205	162	340	EW	Vig lac	N	N	3	<p>This EW contains mature eucalyptus and pepper trees with overlapping canopies and a mix of native and non-native shrubs in the understory. Existing shrub cover in the understory ranges from 30 to 80 percent. Eucalyptus and pepper trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided (thin <i>Viguiera laciniata</i> last). Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 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).</p>
83	163	215	164	15	EW	--	N	N	2	

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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
84	165	160	166	35	EW	--	N	N	2	same as 82
85	167	205	168	20	DCSS	--	N	Present	3	same as 80
86	169	315	170	65	DCSS	Vig lac	N	Present	2	same as 80
87	171	305	172	95	DCSS	Vig lac	N	Present	2	same as 80
88	173	300	174	120	DCSS	Vig lac	N	Present	2	same as 80
89	175	120	176	240	DCSS	Vig lac	N	N	2	same as 80
90	177	75	178	275	EW	Vig lac	N	Y	2	This small EW contains mature eucalyptus and pepper trees with overlapping canopies and mostly DCSS shrubs in the understory, except for the far western end which contains iceplant groundcover. Existing shrub cover in the understory ranges from 10 to 60 percent. Eucalyptus and pepper trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided (thin <i>Viguiera laciniata</i> last). Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 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).
91	179	125	180	300	DCSS	Vig lac & Fer vir	N	Y	2	same as 80
92	181	195	182	70	CSCS	Vig lac & Que dum	N	Y	2	Within this CSCS, existing shrub cover is generally 40 to 60 percent, but portions of this area have existing shrub cover of 10 to 20 percent because they have been previously cleared. Where shrub cover needs to be reduced to 50 percent, shrubs should be removed using the prioritization lists provided (thin <i>Viguiera laciniata</i> and <i>Quercus dumosa</i> last). 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). Several eucalyptus trees and myoporum trees occur along fencelines and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater.
93	183	50	184	240	CSCS	Que dum	N	Y	2	same as 92
94	185	220	186	20	CSCS	Que dum	N	Y	2	same as 92

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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
95	187	35	188	240	EW	Que dum	N	Y	2	This small EW contains eucalyptus and pepper trees with overlapping canopies and with a mix of native and non-native shrubs in the understory. Existing shrub cover in the understory ranges from 20 to 60 percent. Eucalyptus and pepper trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided (thin <i>Viguiera laciniata</i> last). Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 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).
96	189	175	190	15	EW	--	N	N	3	
97	191	50	192	300	EW	Vig lac	N	N	3	
98	193	280	194	35	DCSS	Vig lac	N	Y	1 and 2	Within this DCSS, existing shrub cover is generally 30 to 60 percent, but portions of this area have existing shrub cover of 0 to 20 percent because they have been previously cleared. In areas where shrub cover needs to be reduced to 50 percent, thin shrubs using the prioritization lists provided (thin <i>Viguiera laciniata</i> last). 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). Several eucalyptus, pepper, and other non-native trees occur along fencelines and need to be limbed-up to 3 times the shrub height or to 6' from the ground, whichever is greater. Portions of this area (around GPS Points 98 and 99) have been completely cleared of shrubs and herbaceous vegetation and are considered in compliance.
99	195	10	196	260	DCSS	--	N	Y	1 and 2	
100	197	325	198	100	DCSS	Vig lac	N	Y	2	

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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
101	199	350	200	145	EW	--	N	Y	2	This small EW contains eucalyptus and pepper trees with overlapping canopies and with a mix of native and non-native shrubs in the understory. The understory includes DCSS plants and NNG, and existing shrub cover ranges from 0 to 20 percent. Eucalyptus and pepper trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Several tamarisk shrubs are present in the understory and should be removed. Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 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).
102	201	345	202	175	EW	--	N	Y	2	
103	203	180	204	0	EW/ DCSS	Vig lac	Y	Y	2	The EW is generally located along fencelines and the mature eucalyptus and pepper trees have overlapping canopies that exceed the 40' canopy mass requirement. The understory includes a mix of native and non-native shrubs with existing shrub cover that is generally 20 percent. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. The area around GPS Point 103 is a slope greater than 50 percent; horizontal spacing distance between canopy masses needs to be 30' in this area. Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 6' from the ground, whichever is greater. Areas of DCSS occur between EW and in areas further from fencelines. Existing shrub cover is generally 20 to 30 percent, but several areas contain shrub cover of 60 percent. Thin shrubs to 50 percent cover using the prioritization lists provided (thin <i>Viguiera laciniata</i> last). 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	205	95	206	285	EW/ DCSS	Vig lac	N	Y	2	same as 103
105	207	85	208	275	EW/ DCSS	Vig lac	N	Y	2	same as 103
106	209	no photo	210	290	EW/ DCSS	Vig lac	N	Y	1	same as 103

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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
107	211	100	212	280	EW/DCSS	Vig lac	Y	Y	2	same as 103
108	213	115	214	290	EW/DCSS	Vig lac	Y	Y	2	same as 103
109	215	120	216	300	DCSS	Vig lac	N	Y	2	same as 103
110	217	125	218	305	DCSS	Vig lac	Y	Y	2	same as 103
111	219	110	220	290	EW/DCSS	Vig lac	N	Y	2	same as 103
112	221	100	222	280	EW/DCSS	Vig lac	N	Y	2	same as 103
113	223	130	224	310	EW/DCSS	Vig lac	N	Y	2	same as 103
114	225	115	226	295	EW/DCSS	Vig lac	N	Y	2	same as 103
115	227	75	228	255	EW/DCSS	Vig lac	Y	Y	2	same as 103
116	229	110	230	290	EW	Vig lac	Y	N	2	same as 103
117	231	120	232	300	EW	Vig lac	Y	N	2	same as 103
118	233	40	234	220	EW	Vig lac	N	N	2	same as 103; no GPS Point could be recorded because of lack of GPS reception due to heavy canopy cover. GPS Point 118 on Figure 3b depicts the approximately location of this data collection area. Mulch layer should be raked because existing depth is greater than 6".
119	235	80	236	235	EW	Vig lac	N	N	2	same as 103
120	237	95	238	310	DCSS	--	N	Y	2	same as 103
121	239	125	240	295	DCSS	Vig lac	N	Y	2	same as 103
122	241	100	242	300	DCSS	--	Y	Y	2	same as 103
123	243	110	244	300	DCSS	Vig lac	N	Y	2	same as 103
124	245	115	246	280	DCSS	Vig lac	N	Y	2	same as 103
125	247	110	248	290	DCSS	Vig lac	N	Y	2	same as 103
126	249	100	250	280	DCSS	--	N	Y	2	same as 103
127	251	125	252	305	DCSS	--	N	Y	2	same as 103
128	253	120	254	300	DCSS	Vig lac	N	Y	2	same as 103
129	255	120	256	300	DCSS	--	N	Y	2	same as 103
130	257	110	258	290	DCSS	--	Y	Y	2	same as 103
131	259	100	260	280	DCSS	--	N	Y	2	same as 103
132	261	80	262	260	DCSS	--	N	Y	2	same as 103

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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
133	263	70	264	230	DCSS	--	N	Y	2	Within this DCSS, existing shrub cover is generally 50 to 80 percent, but portions of this area have existing shrub cover of 0 to 20 percent because they have been previously cleared. In areas where shrub cover needs to be reduced to 50 percent, thin shrubs using the prioritization lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several eucalyptus, pine, and other non-native trees occur along fencelines 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).
134	265	60	266	270	DCSS	--	N	Y	2	same as 133
135	267	100	268	280	DCSS	--	N	Y	2	same as 133
136	269	75	270	245	DCSS	Vig lac	N	Y	3	same as 133
137	271	60	272	240	DCSS	--	N	Y	2	same as 133
138	273	50	274	230	DCSS	--	N	Y	3	same as 133

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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
139	275	25	276	190	CSCS	--	N	Y	2	Within this CSCS, existing shrub cover is generally 40 to 60 percent, but portions of this area have existing shrub cover of 20 to 30 percent because they have been previously cleared. In areas where shrub cover needs to be reduced to 50 percent, thin shrubs using the prioritization lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several eucalyptus and other non-native trees occur along fencelines 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).
140	277	130	278	315	EW	--	N	N	2	This EW contains mature eucalyptus and pepper trees with overlapping canopies and a mix of native and non-native shrubs in the understory. Existing shrub cover in the understory is generally 20 to 40 percent, but there are several areas where existing shrub cover is 60 to 80 percent. Eucalyptus and pepper trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided. Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 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).
141	279	340	280	160	EW	--	N	N	2	same as 140
142	281	70	282	250	EW	--	N	N	2	same as 140
143	283	no photo	284	no photo	EW	--	N	N	2	same as 140

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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
144	285	290	286	100	NNV/ DCSS	--	N	N	2	The NNV is located along fencelines and consists of ornamental trees that have overlapping canopies that exceed the 40' canopy mass requirement. The understory is generally NNG with scattered native and non-native shrubs (existing shrub cover is generally 10 to 30 percent). Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Where shrubs remain under tree canopies, limb-up trees to 3 times the shrub height or 6' from the ground, whichever is greater. The area further from the fenceline contains DCSS; existing shrub cover is generally 40 to 80 percent. Thin shrubs to 50 percent cover using the prioritization lists provided. 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).
145	287	290	288	110	NNV/ DCSS	--	N	N	2	same as 144
146	289	90	290	270	NNV/ DCSS	--	N	N	2	same as 144
147	291	250	292	75	DCSS	--	N	Y	2	Within this small DCSS area, existing shrub cover is generally 70 percent. Reduce shrub cover to 50 percent using the priority lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several eucalyptus trees occur within the brush management 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).
148	293	180	294	350	DCSS	--	N	Y	2	Within this small DCSS area, existing shrub cover is generally 60 percent. Reduce shrub cover to 50 percent using the priority lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several eucalyptus trees occur within the brush management 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).

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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
149	295	340	296	160	NNV	--	N	N	2	The NNV area is dominated by non-native grasses, but also contains a mix of planted ornamental shrubs (oleander, palms, jade), as well as a few scattered non-native trees (eucalyptus, pepper, pine, and orange trees). Native shrubs are almost entirely absent and overall shrub cover averages 5 percent and does not exceed 50 percent in any areas. Eucalyptus, pine, and pepper trees need to be limbed-up trees to 6' from the ground. 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).
150	297	340	298	160	NNV	--	N	N	2	same as 149
151	299	340	300	160	NNV	--	N	N	2	same as 149
152	301	340	302	160	NNV	--	N	N	2	same as 149
153	303	340	304	160	NNV	--	N	N	2	same as 149
154	305	340	306	160	NNV	--	N	N	2	same as 149
156	309	330	310	145	DCSS	--	Y	Y	3	Within this DCSS, existing shrub cover ranges from 0 to 70 percent; areas of low shrub cover are due to previous clearing. In areas where shrub cover needs to be reduced to 50 percent, thin shrubs using the prioritization lists provided (thin <i>Viguiera laciniata</i> last). Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several non-native 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. Where trees occur on greater than 50 percent slopes, limb up trees to 6 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).
157	311	320	312	140	DCSS	Vig lac	Y	Y	2	same as 156
158	313	110	314	150	DCSS	Vig lac	Y	Y	2	same as 156

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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
159	315	0	316	180	DCSS	--	N	Y	1	The area between GPS Points 159 and 160 is considered to be in compliance and no thinning is needed. The area has been completely cleared and is either bare ground or planted with ice plant. Shrub cover is 0 percent and no herbaceous vegetation greater than 2" is present.
160	317	0	318	180	DCSS	--	N	Y	1	
161	319	300	320	80	DCSS	--	N	Y	1 and 2	same as 156; the homeowner at GPS Point 161 is considered to be in compliance and no thinning is needed. The area has been cleared and planted with ice plant. Shrub cover is 0 percent and no herbaceous vegetation greater than 2" is present.
162	321	285	322	35	DCSS	Vig lac & Fer vir	Y	Y	2	same as 156
163	323	40	324	235	DCSS	--	Y	Y	2	same as 156
164	325	10	326	170	DCSS	Vig lac	Y	Y	3	same as 156
165	327	0	328	215	DCSS	Vig lac	Y	Y	3	same as 156
166	329	215	330	65	CSCS	--	N	Y	2	Within this small CSCS area, existing shrub cover is generally 80 percent. Reduce shrub cover to 50 percent using the priority lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. One eucalyptus tree occurs within the brush management area and needs 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).
167	331	40	332	220	CSCS	--	N	Y	2	Existing shrub cover ranges from 10 to 70 percent; areas of low shrub cover are the result of previous clearing. In areas where shrub cover needs to be reduced to 50 percent, thin shrubs using the prioritization lists provided (thin <i>Viguiera laciniata</i> last). Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several eucalyptus and other non-native 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. Where trees occur on greater than 50 percent slopes, limb up trees to 6 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).
168	333	40	334	285	CSCS	--	N	Y	2	same as 167
169	335	145	336	310	CSCS	--	N	Y	2	same as 167

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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
170	337	50	338	215	CSCS	Vig lac	Y	Y	2	same as 167
171	339	20	340	200	DCSS	Vig lac	Y	Y	2	same as 167
172	341	10	342	190	DCSS	Vig lac	Y	Y	2	same as 167
173	343	70	344	260	DCSS	--	N	Y	2	same as 80
201	402	115	403	330	EW	--	N	N	1 and 2	Within this EW, there are patches of dense, mature eucalyptus trees (with several pine and pepper trees) with overlapping canopies that result in tree cover of approximately 90 percent. Some areas have scattered eucalyptus trees with cover ranging from 20 to 40 percent. Native and non-native shrubs are generally absent from the understory. Where shrubs are present, their cover ranges from 20 to 60 percent. Steep slopes are generally present throughout the area, including adjacent to fencelines. Irrigation is present throughout this area. Where there is not understory shrub cover, trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided. Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 6' from the ground, whichever is greater. For slopes greater than 50 percent, eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance and trees should be limbed-up to 6 times the shrub height. 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). The area adjacent to Antigua Boulevard is part of a park and is considered in compliance because shrub cover is less than 50 percent and tree canopies are less than 40 feet.
202	404	165	405	0	EW	--	N	N	2	same as 201
203	406	170	407	320	EW	--	Y	N	2	same as 201
204	408	100	409	330	EW	--	Y	N	2	same as 201
205	410	170	411	345	EW	--	Y	N	2	same as 201
206	412	230	413	340	EW	--	Y	N	2	same as 201
207	414	230	415	65	EW	--	Y	N	2	same as 201
208	416	325	417	95	EW	--	Y	N	2	same as 201
209	418	295	419	125	EW	--	Y	N	2	same as 201
210	420	340	421	160	EW	--	Y	N	2	same as 201
211	422	335	423	215	EW	--	Y	N	2	same as 201
212	424	305	425	145	EW	--	Y	N	2	same as 201

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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
213	426	285	427	105	EW	--	Y	N	2	This small EW occurs on a steep slope with mature eucalyptus trees continuing overlapping canopies. Existing shrub cover under the trees is approximately 30 percent. Eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. Eucalyptus trees need to be limbed to 6 times the shrub height or to 6' from the ground, whichever is greater. Areas with herbaceous vegetation under 2' tall should be cut back to 2".
214	428	225	429	60	DCSS	--	Y	Y	2	Mature DCSS exists within the areas identified by the City for brush management. Existing shrub cover is approximately 70 percent and portions of the DCSS occur on slopes greater than 50 percent. Thin shrubs to 50 percent cover 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). EW occurs immediately adjacent to fencelines, but EW areas are not identified as part of the brush management area. The EW occurs on a slope greater than 50 percent with mature trees with large, overlapping canopies. Existing native and non-native shrub cover in the understory ranges from 20 to 60 percent. Irrigation is present throughout the EW and there is a considerable amount of trash behind homes. HELIX recommends adding this EW to the brush management area because it would be ineffective fuel modification to thin the DCSS and not the EW because the EW occurs adjacent to homes. Specifically, HELIX recommends that eucalyptus trees be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. Understory shrubs should be thinned to 50 percent cover using the prioritization lists provided. Eucalyptus trees need to be limbed to 6 times the remaining shrub height or to 6' from the ground, whichever is greater.
215	430	225	431	45	DCSS	--	Y	Y	2	same as 214
216	432	225	433	60	DCSS	--	Y	Y	2	same as 214
217	434	220	435	70	DCSS	--	N	Y	2	same as 214
218	436	245	437	70	DCSS	--	Y	Y	2	same as 214; Homeowner at GPS Point 218 has a motion detecting alarm system along fenceline and several large dogs that he claims can jump the fence. Homeowner asked to be notified when brush management will occur so that he can leave his dogs inside while contractor is working.

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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
										Within this EW, there are patches of dense, mature eucalyptus trees (with several scattered pine trees and 1 large Ficus tree) with overlapping canopies greater than the 40' maximum canopy mass and relatively open areas in between dense patches of trees. Native and non-native shrub cover in the understory is generally 30 percent, but ranges from 10 to 80 percent. Portions of this EW occur on slopes greater than 50 percent. Irrigation is present throughout this area. Where there is not understory shrub cover, trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided. Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 6' from the ground, whichever is greater. For slopes greater than 50 percent, eucalyptus trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. 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). In areas where trees are absent, thin the shrub layer to 50 percent cover by first removing invasive species (i.e., mustard, pampas grass, and fennel), then other non-native species, then flammable native species, and then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping.
219	438	60	439	245	EW	--	Y	N	2	
220	440	30	441	260	EW	--	Y	N	2	same as 219
221	442	20	443	255	EW	--	Y	N	2	same as 219
222	444	60	445	290	EW	--	Y	N	2	same as 219
223	446	90	447	285	EW	--	Y	N	2	same as 219
224	448	65	449	285	EW	--	Y	N	3	same as 219
225	450	50	451	285	EW	--	Y	N	2	same as 219
226	452	50	453	225	EW	--	Y	N	2	same as 219
227	454	45	455	295	EW	--	Y	N	3	same as 219
228	456	70	457	280	EW	--	Y	N	2	same as 219

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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
229	458	110	459	300	DCSS	--	Y	Y	2	This DCSS is an open sage scrub community with existing native shrub cover of approximately 20 percent, likely due to previous thinning in the area. Native shrub cover is acceptable in this area and does not need to be thinned. However, the area contains a high amount of non-native grasses (fountain grass and Bermuda grass). Several large non-native trees are growing adjacent to fencelines 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).
230	460	75	461	250	DCSS	--	Y	Y	2	same as 229
231	462	105	463	260	DCSS	--	Y	Y	2	same as 229
232	464	20	465	245	DCSS	--	Y	Y	2	same as 229
233	466	30	467	155	EW	--	N	N	2	This small EW contains mature eucalyptus trees with overlapping canopies, but no understory shrubs. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. 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).
										This open DCSS community has been subject to past thinning with existing native shrub cover that is generally 20 to 30 percent, consisting primarily of laurel sumac, black sage, white sage, and lemonadeberry. Overall shrub cover (natives and non-natives) ranges from 10 to 70 percent. In areas with greater than 50 percent shrub cover, pampas grass, fennel, and mustard should be removed first. Then other non-native species should be removed (ornamental shrubs and non-native succulents). Native shrub cover is acceptable in this area and does not need to be thinned. 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
								Y		

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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
237	474	210	475	30	DCSS	--	Y	Y	1	Area is in compliance from GPS point 237 to approximately 100 feet to the southwest. Shrub cover is less than 50 percent, no herbaceous cover is present, and mulch has been spread along the ground. Several orange trees have been planted in this area, but do not need to be pruned.
238	476	305	477	120	EW	--	N	N	2	This small EW contains mature eucalyptus trees with overlapping canopies and a mix of native and non-native shrubs. Trees need to be limbed-up to 3 times the native shrub height or to 6' from the ground, whichever is greater; where non-native shrubs exist under eucalyptus canopies, cut non-native shrubs back to 6" stump, then limb-up eucalyptus to 6' clearance. 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).
239	478	260	479	40	EW and DCSS	--	N	CAGN Present	2	EW occurs immediately adjacent to the apartment complex parking lot and DCSS is present beyond the EW. The EW contains mature trees with large, overlapping canopies with scattered DCSS shrubs in the understory. Existing shrub cover in the understory ranges from 10 to 60 percent. Eucalyptus trees be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Eucalyptus trees need to be limbed to 3 times the shrub height or to 6' from the ground, whichever is greater. DCSS is present beyond the EW; existing shrub cover is generally 40 percent, but there are some patches with 80 percent cover. In areas where shrub cover needs to be reduced to 50 percent, thin shrubs using the prioritization lists provided (thin <i>Viguiera laciniata</i> last). 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 stabilization to prevent erosion (*no native herbs should be cut if under 2-ft in height).
240	480	230	481	20	EW and DCSS	--	N	CAGN Present	2	same as 239
241	482	210	483	35	EW and DCSS	CAGN	N	CAGN Present	2	same as 239

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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
242	484	220	485	25	EW and DCSS	--	N	CAGN Present	2	same as 239
243	486	230	487	35	EW and DCSS	--	N	CAGN Present	2	same as 239
244	488	235	489	45	EW and DCSS	--	N	CAGN Present	2	same as 239
245	490	290	491	115	DCSS	--	N	Y	2	same as 246
246	492	45	493	220	DCSS	Fer vir	N	Y	2	The DCSS in this area has been previously thinned and contains approximately 30 to 40 percent shrub cover. Shrub cover does not need to be thinned. Several eucalyptus trees are scattered in this area and need to be limbed-up to 3 times the native 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).
247	494	70	495	315	EW and RW	--	N	N	EW - 2 RW - 1	This small EW contains mature eucalyptus trees with overlapping canopies and a mix of native and non-native shrubs in the understory. Existing shrub cover in the understory is approximately 20 percent. Eucalyptus trees need to be limbed-up to 3 times the native 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). To the east of GPS point 247, the brush management area includes Riparian Woodland, which is associated with an unnamed drainage. The Riparian Woodland contains 100 percent tree cover (native willow species) and an understory dominated by mule fat. Brush management is not required in wetland habitats; therefore avoid doing work in the area mapped as riparian woodland.

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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
255	510	70	511	245	EW	--	N	Y	2	Within this EW, eucalyptus trees have overlapping canopies greater than the 40' maximum canopy mass and native and non-native shrub species exist in the understory. Existing shrub cover is generally 30 percent, but ranges from 10 to 60 percent. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided. Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 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).
256	512	220	513	50	CSCS	--	N	Y	2	same as 252
257	514	245	515	60	CSCS	--	N	Y	2	same as 252
258	516	235	517	70	CSCS	--	N	Y	2	same as 252
259	518	250	519	105	DCSS	--	N	Y	2	Within this DCSS, existing shrub cover is generally 60 to 80 percent and the majority of this DCSS occurs on slopes greater than 50 percent. Shrub cover needs to be reduced to 50 percent cover by removing invasive species first (fennel, mustard, artichoke thistle, and milk thistle). Other non-native species should be removed next (including non-native succulents), followed by flammable native species, then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Several scrub oaks and ceanothus exist within the brush management area and should be pruned up and not removed. Several pepper trees and palm trees occur within this area and need to be limbed-up to 6 times the remaining shrub height because 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).
260	520	275	521	60	DCSS	--	Y	Y	2	same as 259
261	522	355	523	155	DCSS	--	Y	Y	2	same as 259
262	524	250	525	80	DCSS	--	Y	Y	2	same as 259
263	526	205	527	15	DCSS	--	Y	Y	2	same as 259
264	528	330	529	115	DCSS	--	Y	Y	2	same as 259
265	530	280	531	80	DCSS	--	Y	Y	2	same as 259
266	532	120	533	350	DCSS	--	N	Y	2	same as 259

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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	534	120	535	285	DCSS	--	N	Y	3	Mature DCSS did not burn in the 2003 fire and contains approximately 90 percent cover. Shrub cover needs to be reduced to 50 percent cover by first removing invasive species (mustard), then other non-native species (oleander), then flammable native species, and then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Large stands of pine trees occur in areas adjacent to the apartment complex parking lot with native and non-native shrubs are present in the understory. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Pine trees need to be limbed to 3 times the remaining 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).
268	536	260	537	85	DCSS	--	N	Y	3	same as 267
269	538	265	539	70	DCSS	--	N	Y	3	same as 267
270	540	265	541	110	DCSS	--	Y	Y	3	same as 267
271	542	230	543	95	DCSS	--	Y	Y	2	Within this DCSS, much of the area has been previously thinned and existing native shrub cover is generally 20 to 30 percent. Some areas have dense stands of vegetation with shrub cover greater than 50 percent. The majority of this DCSS occurs on slopes greater than 50 percent. In areas where shrub cover is greater than 50 percent, cover should be reduced to 50 percent by removing invasive species first (fennel, thistle, and mustard). Other non-native species should be removed next, 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).
272	544	255	545	50	DCSS	--	Y	Y	3	same as 271
273	546	230	547	55	DCSS	--	Y	Y	3	same as 271
274	548	195	549	45	DCSS	--	Y	Y	2	same as 271
275	550	140	551	320	DCSS	--	N	Y	2	same as 271

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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
276	552	65	553	245	NNV	--	N	N	2	This is primarily a NNV area with non-native tree and shrub species. Existing trees have overlapping canopies with greater than the 40' maximum canopy mass; native and non-native shrub species exist in the understory. Existing shrub cover ranges from 30 to 60 percent. Non-native trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided. Where shrubs remain under eucalyptus canopies, limb-up eucalyptus trees to 3 times the shrub height or 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).
277	554	80	555	250	DCSS	--	N	Y	2	Within this DCSS, much of the area has been previously thinned and existing native shrub cover is generally 20 percent. Star thistle and non-native grasses are present in dense stands between the shrubs. Irrigation is present but does not work, according to a resident. Native shrub cover is adequate and does not need to be thinned. 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).
278	556	80	557	250	DCSS	--	N	Y	2	same as 277
279	558	40	559	200	NNV	--	Y	Y	2	This is primarily a NNV area with non-native tree and shrub species. Existing tree cover have overlapping canopies greater than the 40' maximum canopy mass and shrub species are generally absent from the understory. Non-native trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 6' from the ground. 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).

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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
281	562	5	563	175	DCSS	--	N	Y	2	Within this DCSS, existing shrub cover is generally 70 percent and portions occur on slopes greater than 50 percent. Shrub cover needs to be reduced to 50 percent cover using the prioritization lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Non-native grasses should be cut back to 2". Several pepper trees and eucalyptus trees are scattered throughout this area and need to be limbed-up to 3 times the remaining shrub height or 6', whichever is greater. Portions of the DCSS have been cleared previously and currently contain mustard, 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).
282	564	15	565	185	DCSS	--	N	Y	2	same as 281
283	566	100	567	15	DCSS	--	N	Y	2	same as 281
284	568	115	569	205	DCSS	--	Y	Y	2	same as 281
285	570	45	571	315	DCSS	--	Y	Y	2	same as 281
286	572	75	573	170	DCSS	--	N	Y	2	same as 281
287	574	200	575	0	DCSS	--	Y	Y	2	same as 281; several scrub oaks are present and may be pruned but avoid removing this species.
288	576	290	577	25	DCSS	--	Y	Y	2	same as 281
289	578	235	579	65	DCSS	--	Y	Y	2	same as 281
290	580	165	581	340	DCSS	--	Y	Y	2	same as 281
291	582	170	583	310	DCSS	--	Y	Y	2	same as 281
292	584	225	585	10	DCSS	--	Y	Y	3	same as 281
293	586	205	587	45	DCSS	--	Y	Y	2	same as 281

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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
295	590	15	591	210	EW	--	N	N	2	Within this EW, eucalyptus trees have overlapping canopies greater than the 40' maximum canopy mass and there are several scattered native and non-native shrub species in the understory. Existing shrub cover is generally 20 percent. Where there is not understory shrub cover, trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Trees should be limbed-up to 3 times the shrub height or 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). Dead tree branches are present and should be removed.
296	592	340	593	195	DCSS	--	N	Y	2	This open DCSS community is recovering from the 2003 fires and existing shrub cover is generally 40 percent. A few areas contain dense stands of larger shrubs (lemonadeberry and laurel sumac) and existing cover in these areas ranges from 40 to 70 percent. Non-native grasses fill the openings between the native shrubs. Cottonwood trees and several willow trees are scattered throughout the north-facing slope. Several eucalyptus trees are scattered throughout the south facing slope. Other than the difference in tree composition, there is little difference between the north-facing and south-facing slopes in this area. Shrub cover needs to be reduced to 50 percent, by removing pampas grass first, then other non-native species (ornamental shrubs), then flammable native species, and finally other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Cottonwood, willow, and eucalyptus 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).
297	594	355	595	190	DCSS	--	N	Y	2	same as 296
298	596	355	597	200	DCSS	--	N	Y	2	same as 296
299	598	0	599	190	DCSS	--	N	Y	2	same as 296
300	600	0	601	205	DCSS	--	N	Y	2	same as 296
301	602	85	603	200	DCSS	--	N	Y	2	same as 296
302	604	5	605	115	DCSS	--	N	Y	2	same as 296
303	606	90	607	215	DCSS	--	N	Y	2	same as 296

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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
304	608	30	609	215	NNV DCSS RW	--	N	Y	NNV - 2 DCSS - 2 RW - 1	The NNV is located along fencelines and consists of ornamental trees that have overlapping canopies that exceed the 40' canopy mass requirement. The understory is a mix of NNG, native, and non-native shrubs (existing shrub cover is generally 10 to 30 percent). Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Where shrubs remain under tree canopies, limb-up trees to 3 times the shrub height or 6' from the ground, whichever is greater. The area further from the fenceline contains DCSS; existing shrub cover is generally 20 to 40 percent. No thinning of shrubs is needed in this area. 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). Riparian Woodland is present further from the DCSS and is associated with an unnamed drainage. The Riparian Woodland contains 100 percent tree cover (native willow species) and an understory dominated by mule fat and tamarisk. Brush management is not required in wetland habitats; therefore avoid doing work in the area mapped as riparian woodland.
305	610	230	611	70	NNV DCSS RW	--	N	Y	NNV - 2 DCSS - 2 RW - 1	same as 304
306	612	210	613	45	NNV DCSS RW	--	N	Y	NNV - 2 DCSS - 2 RW - 1	same as 304
307	614	220	615	45	NNV DCSS	--	N	Y	2	same as 304
308	616	215	617	50	NNV DCSS	--	N	Y	2	same as 304
309	618	225	619	60	DCSS	--	N	Y	2	same as 296
310	620	220	621	45	DCSS	--	N	Y	2	same as 296
311	622	275	623	50	DCSS	--	N	Y	2	same as 296
312	624	200	625	25	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 (Avenida Playa Cancun). Brush management of this area is not recommended because the presence of the road results in a large Zone 1 area.
313	626	200	627	20	DCSS	--	N	Y	2	same as 312
314	628	200	629	20	DCSS	--	N	Y	2	same as 312
315	630	185	631	350	DCSS	--	N	Y	2	same as 312

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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
316	632	250	633	325	DCSS	--	N	Y	2	In this DCSS area, existing native shrub cover is generally 20 percent (non-native shrubs are absent). Non-native grasses fill the openings between the native shrubs. Several eucalyptus trees are scattered throughout this area. Shrub cover at the far western end of the area exceeds 50 percent and should be reduced to 50 percent using the prioritization lists provided. Eucalyptus 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).
317	634	245	635	65	DCSS	--	N	Y	2	same as 316
318	636	90	637	190	DCSS	--	N	Y	2	same as 296
319	638	20	639	210	DCSS	--	N	Y	2	same as 296
320	640	30	641	225	DCSS	--	N	Y	2	same as 296
321	642	35	643	220	DCSS	--	N	Y	2	same as 296
322	644	150	645	355	DCSS	--	N	Y	2	This DCSS has been previously cleared and portions have been planted with non-native species (prostrate acacia, ornamental shrubs and trees, eucalyptus trees, and Bermuda grass). Existing shrub cover ranges from 10 to 70 percent. Shrubs should be thinned to 50 percent cover using the prioritization lists provided. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Dead shrub material that has been cut and dumped in the area needs to be removed. 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). A patch of 20-foot-tall native willow and cottonwood trees, with a non-native tamarisk tree and non-native Ficus tree, is present at GPS point 324. Non-native trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance (do not remove native willow or cottonwood trees). Trees also need to be limbed up to 3 times the shrub height or to 6' from the ground, whichever is greater.
323	646	175	647	320	DCSS	--	N	Y	2	same as 322
324	648	140	649	10	DCSS	--	N	Y	2	same as 322
325	650	130	651	345	DCSS	--	N	Y	2	same as 322
326	652	160	653	350	DCSS	--	N	Y	2	same as 322

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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
327	654	265	655	65	DCSS	--	N	Y	3	This narrow strip of DCSS has generally 90 percent existing shrub cover, but is separated from houses by a paved road (Callejon Quintana). Brush management of this area is not recommended because the presence of the road results in a large Zone 1 area.
328	656	170	657	75	DCSS	--	N	Y	3	
329	658	120	659	15	DCSS	--	N	Y	3	This narrow strip of DCSS has generally 90 percent existing shrub cover, but is separated from houses by a paved road (Bellardo Drive). Brush management of this area is not recommended because the presence of the road results in a large Zone 1 area.
330	660	0	661	190	DCSS	--	Y	Y	3	Within this DCSS, existing shrub cover is generally 70 percent and portions occur on slopes greater than 50 percent. Portions of the DCSS have been cleared previously and currently contain non-native grasses, sweet clover, and a few native shrubs. Where shrub cover exceeds 50- percent, cover needs to be reduced to 50 percent by removing invasive species first (pampas grass), followed by other non-native species (rosemary and oleander), then flammable native species, and then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. One large pine tree and one large cottonwood tree are present at GPS point 330 and need to be limbed-up to 3 times the understory shrub height or 6', 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).
331	662	55	663	180	DCSS	--	Y	Y	3	same as 330
332	664	90	665	220	DCSS	--	N	Y	3	same as 330
333	666	110	667	295	NNV	--	N	Y	1 and 2	This NNV area has been cleared of native species and planted with non-native grass (associated with a small park along Via Playa Los Santos) and non-native shrubs (prostrate acacia) planted adjacent to homes. The majority of this area is considered to be in compliance because of a lack of shrubs and it appears to be maintained by an HOA. Portions of the NNV contain dense prostrate acacia, which should be thinned to 50 percent cover.
334	668	300	669	210	NNV	--	N	N	1 and 2	same as 333

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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
335	670	55	671	195	DCSS	--	N	Y	2	The majority of this DCSS has been previously cleared and several areas were recently cleared. Existing shrub cover is generally 10 to 20 percent; therefore no thinning of shrubs is needed. 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).
336	672	60	673	260	DCSS	--	N	Y	2	same as 335
337	674	65	675	185	DCSS	--	N	Y	2	same as 335
338	676	205	677	305	DH	--	Y	N	1	This area has been previously cleared of vegetation and is currently bare ground. No fuel management is needed in this area.
339	678	190	679	0	DCSS	--	Y	Y	2	This narrow strip of DCSS has generally 90 percent existing shrub cover, but is separated from houses by a paved road (Corte Playa Catalina), a sidewalk, and a cleared shoulder adjacent to the sidewalk. Brush management of this area is not recommended because of the presence of the road and sidewalk result in a large Zone 1 area.
340	680	200	681	20	DCSS	--	Y	Y	2	same as 339
341	682	195	683	25	DCSS	--	Y	Y	2	same as 339
342	684	185	685	10	DCSS	--	Y	Y	2	same as 339
343	686	190	687	5	DCSS	--	Y	Y	2	same as 339
344	688	180	689	320	DCSS	--	Y	Y	2	This DCSS has been previously cleared and portions have been planted with non-native species (non-native Opuntia, aloe, a magnolia tree, a pepper tree, daisies, and ornamental groundcover). Existing shrub cover is generally 10 to 20 percent and do not need additional thinning. The magnolia tree does not need pruning. The pepper tree at GPS point 345 needs to be limbed up to 6' from the ground. Eucalyptus trees occur along the outer edge of the fuel management polygon at GPS point 347 need to be limbed up to 6' from the ground. 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).
345	690	210	691	30	DCSS	--	Y	Y	2	same as 344
346	692	300	693	65	DCSS	--	N	Y	2	same as 344
347	694	305	695	145	DCSS	--	N	Y	2	same as 344

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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
348	696	100	697	270	DCSS	--	Y	Y	3	<p>Mature DCSS exists within the areas identified by the City for brush management. Existing shrub cover is approximately 60 percent and the majority of this area occurs on slopes greater than 50 percent. To achieve 50 percent shrub cover, remove invasive species first (pampas grass and thistle), then non-native shrub species, then flammable native species, and 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). EW occurs immediately adjacent to GPS point 348, but was not identified as part of the brush management area. The EW occurs on a slope greater than 50 percent with mature trees with large, overlapping canopies. Existing native and non-native shrub cover in the understory ranges is approximately 80 percent.</p> <p>HELIX recommends adding this EW to the brush management area because it would be ineffective fuel modification to thin the DCSS and not the EW because the EW occurs adjacent to homes. Specifically, HELIX recommends that eucalyptus trees be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided. Eucalyptus trees need to be limbed to 6 times the remaining shrub height or to 6' from the ground, whichever is greater.</p>
349	698	35	699	215	DCSS	Fer vir	Y	Y	2	same as 348
350	700	35	701	215	DCSS	--	Y	Y	2	same as 348, except no EW is present
352	704	45	705	215	DCSS	--	Y	Y	2	same as 348, except no EW is present
354	708	310	709	130	DCSS	--	Y	Y	2	same as 348, except no EW is present

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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
355	710	10	711	190	DCSS	--	Y	Y	2	This DCSS occurs adjacent to an apartment complex, is part of a steep slope, and the majority of the habitat has been previously cleared. Existing shrub cover ranges from 10 to 30 percent. Additional thinning of shrubs is not needed. Eucalyptus trees occur between the apartment parking lot and the DCSS. The majority of the area under the trees is devoid of shrubs, but some areas contain native and non-native shrubs in the understory. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance (slope is greater than 50 percent). Trees need to be limbed-up to 6 times the shrub height or to 6' from the ground, whichever is greater. Dead tree branches are present and should be removed. 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).
356	712	10	713	180	DCSS	--	Y	Y	2	same as 355
357	714	340	715	170	DCSS	--	Y	Y	2	same as 355
358	716	55	717	235	DCSS	--	Y	Y	2	same as 355
360	720	55	721	250	DCSS	--	Y	Y	2	same as 355
361	722	55	723	210	DCSS	--	Y	Y	2	same as 355
362	724	65	725	225	DCSS	--	Y	Y	2	same as 355
363	726	60	727	250	DCSS	--	Y	Y	2	same as 355
364	728	25	729	210	DCSS	--	Y	Y	2	same as 355
365	730	20	731	195	EW	--	Y	N	2	Within this EW, eucalyptus trees have overlapping canopies greater than the 40' maximum canopy mass, they occur on a slope greater than 50 percent, and there are several scattered native and non-native shrub species in the understory, including a large stand of non-native succulents north of GPS point 366.. Existing shrub cover in the understory is generally 20 percent. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. Trees should be limbed-up to 6 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). Dead tree branches are present and should be removed.
366	732	20	733	195	EW	--	Y	N	2	same as 366

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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
367	734	355	735	180	DCSS	--	Y	Y	2	This DCSS occurs adjacent to an apartment complex, is part of a steep slope, and the majority of the habitat has been previously cleared. Existing shrub cover is generally 20 percent. Additional thinning of shrubs is not needed. The large non-native shrub at GPS point 367 needs 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).
368	736	35	737	160	DCSS	--	Y	Y	2	same as 367
369	738	20	739	205	DCSS	--	Y	Y	2	same as 367
370	740	5	741	175	DCSS	--	Y	Y	2	same as 367
371	742	20	743	145	EW	--	Y	N	2	Within this EW, eucalyptus trees have overlapping canopies greater than the 40' maximum canopy mass, they occur on a slope greater than 50 percent, but understory shrubs are generally absent. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. Trees should be limbed-up to 6' from the ground. 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). Dead tree branches are present and should be removed.
										This DCSS occurs along a steep slope and the majority of the habitat has been previously cleared. Existing shrub cover ranges from 10 to 70 percent. To achieve 50 percent shrub cover, remove invasive species first (pampas grass, tree tobacco, and thistle), then non-native shrub species, then flammable native species, and then other native species. Remaining shrubs need to be pruned and limbed up to achieve umbrella shaping. Scattered non-native trees (eucalyptus, magnolia, and other ornamental trees) occur throughout the area and most have shrubs occurring underneath. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. Limb- height* can be retained when they are isolated from other fuels and/or when necessa

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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
374	748	175	749	15	DCSS	--	Y	Y	2	same as 373
375	750	195	751	0	DCSS	--	Y	Y	2	same as 373
376	752	100	753	45	DCSS	--	Y	Y	2	same as 373
377	754	180	755	5	DCSS	--	Y	Y	2	same as 373
378	756	215	757	40	DCSS	--	Y	Y	2	same as 373
379	758	200	759	60	DCSS	--	Y	Y	2	same as 373
380	760	125	761	310	DCSS	--	Y	Y	2	same as 373
381	762	185	763	20	DCSS	--	Y	Y	2	same as 373
382	764	255	765	355	DCSS	--	Y	Y	2	same as 373
384	768	225	769	10	DCSS	--	N	Y	2	same as 373
385	770	320	771	160	DCSS	--	Y	Y	2	same as 373
386	772	230	773	20	EW	--	N	N	2	Within this EW, eucalyptus trees have overlapping canopies greater than the 40' maximum canopy mass with 40 percent shrub cover in the understory. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Limb-up eucalyptus trees 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)..
387	774	260	775	80	EW	--	N	N	2	Within this EW, eucalyptus trees have overlapping canopies greater than the 40' maximum canopy mass with 30 percent shrub cover in the understory. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Limb-up eucalyptus trees 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).

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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
388	776	340	777	100	EW	--	N	N	2	Within this EW, eucalyptus trees have overlapping canopies greater than the 40' maximum canopy mass with 60 percent shrub cover in the understory. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided. Eucalyptus trees need to be limbed to 3 times the remaining 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).
389	778	65	779	230	CSCS	--	N	Y	2	same as 252
390	780	190	781	5	CSCS	--	N	Y	2	same as 252
391	782	245	783	75	EW	--	N	N	2	Within this small EW, eucalyptus and pine trees have overlapping canopies greater than the 40' maximum canopy mass with approximately 50 to 60 percent shrub cover in the understory. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided. Eucalyptus trees need to be limbed to 3 times the remaining 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).
392	784	265	785	10	DCSS	Vig lac	Y	Y	2	same as 103

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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
393	786	355	787	205	EW	Vig lac	Y	N	2	Within this EW, eucalyptus trees have overlapping canopies greater than the 40' maximum canopy mass and they occur on a slope greater than 50 percent. Understory shrubs are present in some areas (approximately 20 percent cover) and absent from other areas. Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 30' horizontal separation distance. Trees should be limbed-up to 6 times the height of the shrubs or to 6' from the ground, whichever is greater. Dead tree branches are present and should be removed. 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).
394	788	35	789	225	EW	--	Y	N	2	same as 393
395	790	195	791	40	DCSS	--	N	Y	2	same as 49
396	792	185	793	310	DCSS	--	N	Y	2	same as 49
397	794	85	795	280	DCSS	Vig lac	N	Y	2	same as 80
398	796	30	797	200	DCSS	Vig lac	Y	Y	2	same as 80
399	798	25	799	230	DCSS	Vig lac	Y	Y	2	same as 80
400	800	45	801	205	DCSS	Vig lac	Y	Y	1 and 2	same as 80
401	802	150	803	355	EW	--	N	N	2	same as 101
402	804	135	805	325	DCSS	--	N	Y	2	same as 98
403	806	20	807	295	EW	Raptor nest	N	N	2	Within this small EW area, eucalyptus trees have overlapping canopies greater than the 40' maximum canopy mass and understory shrubs are present (ranging from 20 to 60 percent cover). Trees need to be removed and their canopies trimmed to obtain the required 40' maximum canopy mass with 10' horizontal separation distance. Thin shrubs to 50 percent cover using the prioritization lists provided. Eucalyptus trees need to be limbed to 3 times the remaining 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). At the time of the pre-thinning survey (May 2009), the homeowner was weed whipping the grasses but not the shrubs.
404	808	25	809	245	DCSS	--	N	Y	2	same as 98
405	810	55	811	250	DCSS	Vig lac	N	Y	2	same as 98
406	812	115	813	230	DCSS	--	N	Y	2	same as 98

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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
407	814	210	815	0	EW	--	N	N	2	same as 95
408	816	345	817	205	DCSS	--	N	Y	2	same as 156
409	818	25	819	205	DCSS	--	N	Y	2	same as 156
410	820	5	821	195	DCSS	Vig lac	N	Y	2	same as 156
411	822	300	823	120	DCSS	Vig lac	N	Y	2	same as 156
412	824	295	825	165	DCSS	Vig lac & Fer vir	Y	Y	3	same as 156
413	826	80	827	270	DCSS	--	N	Y	2	same as 156
414	828	5	829	190	NNV	--	N	N	2	same as 156

Habitat Codes

EW = eucalyptus woodland
 DCSS = Diegan coastal sage scrub
 CSCS = coastal sage-chaparral scrub
 NNV = non-native vegetation
 DH = disturbed habitat

Brush Management Compliance Rankings

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

Sensitive Species Codes

Vig lac=Viguiera laciniata
 Que dum=Quercus dumosa
 Fer vir=Ferocactus viridescens

* Compass directions are measured in degrees