

## APPENDIX A (Continued)

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### ***JUNCACEAE—RUSH FAMILY***

*Juncus dubius*—questionable rush

*Juncus mexicanus*—Mexican rush

*Juncus xiphioides*—irisleaf rush

### ***LILIACEAE—LILY FAMILY***

*Calochortus splendens*—splendid mariposa lily

*Calochortus* spp. —no common name

### ***MELANTHIACEAE—FALSE HELLEBORE FAMILY***

*Toxicoscordion fremontii*—Fremont's deathcamas

### ***ORCHIDACEAE—ORCHID FAMILY***

*Piperia cooperi*—chaparral rein orchid

### ***POACEAE—GRASS FAMILY***

- \* *Arundo donax*—giant reed
- \* *Avena barbata*—slender oat
- \* *Avena fatua*—wild oat
- \* *Brachypodium distachyon*—purple false brome
- \* *Bromus catharticus*—rescuegrass
- \* *Bromus diandrus*—ripgut brome
- \* *Bromus hordeaceus*—soft brome
- \* *Bromus madritensis* ssp. *madritensis*—compact brome
- \* *Bromus madritensis* ssp. *rubens*—red brome
- \* *Cortaderia selloana*—Uruguayan pampas grass
- \* *Cynodon dactylon*—Bermudagrass
- \* *Ehrharta calycina*—perennial veldtgrass
- \* *Festuca myuros*—rat-tail fescue
- \* *Festuca perennis*—Italian ryegrass
- \* *Hordeum murinum*—mouse barley
- \* *Lamarckia aurea*—goldentop grass
- \* *Paspalum dilatatum*—dallisgrass
- \* *Pennisetum setaceum*—crimson fountaingrass
- \* *Polypogon monspeliensis*—annual rabbitsfoot grass
- \* *Stipa miliacea* var. *miliacea*—smilograss
- Agrostis pallens*—seashore bentgrass
- Melica imperfecta*—smallflower melicgrass
- Muhlenbergia rigens*—deergrass
- Poa secunda*—Sandberg bluegrass

## APPENDIX A (Continued)

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*Stipa coronata*—giant ricegrass

*Stipa lepida*—foothill needlegrass

*Stipa pulchra*—purple needlegrass

\* *Melinis repens*—rose Natal grass

### ***THEMIDACEAE—BRODIAEA FAMILY***

*Dichelostemma capitatum*—bluedicks

*Brodiaea* spp.—no common name

\* Signifies introduced (non-native) species.

# **APPENDIX K**

## ***Off-Site Mitigation Site Memorandum***





## MEMORANDUM

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**To:** Rita Brandin, Newland Sierra LLC  
**From:** Brock Ortega, Dudek  
**Subject:** Newland Sierra Off-Site Mitigation Memo  
**Date:** December 27, 2016  
**cc:** Brian Grover, Dudek  
**Attachment(s):** Figures 1–3

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### INTRODUCTION

The purpose of this memo is to describe an off-site mitigation site in support of the proposed Newland Sierra project. The 211.8-acre mitigation site is located in Ramona, California (Figure 1) and is situated within the Pre-Approved Mitigation Area (PAMA) of the draft North County Multiple Species Conservation Program (MSCP).

The mitigation site is situated in a key natural gap in the adjacent agricultural (ranches, poultry farms) landscape amid cattle ranch lands and open space. The site is topographically diverse, with steep slopes dominated by scrub and chaparral vegetation to low-sloped Engelmann oak savannah grasslands and sycamore riparian woodland drainages. Granitic boulder outcrops occur throughout the site. The site provides for connectivity between segments of the Cleveland National Forest located approximately 2 miles to the east and west, and San Diego County Parks land located approximately 3 miles to the north and south.

### LOCATION

The site (Assessor's Parcel Number 286-041-04) is situated in Township 13 South, Range 2 East, and Section 3 of the U.S. Geological Service 7.5-minute series topographic Ramona quadrangle map (Figure 2). The mitigation site is located approximately 5 miles east of the community of Ramona, and approximately 3.5 miles south of Sutherland Reservoir. State Route 78 runs along the southern boundary of the site, where there is a gate to access the site.

### METHODS

Field surveys were conducted at this property in 1993 by PSBS and in 1990 and 1996 by Merkel & Associates (Merkel & Associates 1999). The vegetation communities were updated by Dudek

*Memorandum*

*Subject: Newland Sierra Off-Site Mitigation Memo*

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biologist Erin Bergman and a general wildlife habitat assessment was conducted by Dudek biologist Brock Ortega in December 2016.

## **VEGETATION COMMUNITIES**

Vegetation communities and acreages within the mitigation site are summarized in Table 1 and shown in Figure 3. Vegetation community classifications follow Oberbauer et al. (2008), which is revised from Holland (1986) specifically for San Diego County.

**Table 1**  
**Vegetation Communities and Land Cover Types**

<b>Vegetation Community / Land Cover Type</b>	<b>Code</b>	<b>Acreage</b>
<i>Scrub and Chaparral Communities</i>		
Diegan Coastal Sage Scrub	37200	106.4
Chamise Chaparral	32500	19.7
<i>Subtotal</i>		126.1
<i>Grassland Communities</i>		
Valley Needlegrass Grassland	42110	8.5
Non-Native Grassland or Annual Grassland	42200	33.8
<i>Subtotal</i>		42.2
<i>Woodland Communities</i>		
Eucalyptus Woodland	79100	3.2
Southern Sycamore-Alder Riparian Woodland	62400	7.9
Open Engelmann Oak Woodland	71181	29.0
<i>Subtotal</i>		40.1
<i>Disturbed or Developed</i>		
Disturbed Habitats	11300	3.3
Urban/Developed	12000	0.1
<i>Subtotal</i>		3.4
<b>Total</b>		<b>211.8</b>

## **Scrub and Chaparral Communities**

### ***Diegan Coastal Sage Scrub***

The majority of the mitigation site consists of Diegan coastal sage scrub (CSS). CSS is composed of low, soft-woody subshrubs, many of which are facultative drought-deciduous. Subshrubs in this community typically reach a height of 1 meter. Soils are rich in clay, allowing for longer-term water storage. CSS is a wide-spread community in coastal Southern California.

Characteristic dominant species found within the CSS community mitigation site include California sagebrush (*Artemisia californica*), eastern Mojave buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), and white sage (*Salvia apiana*). Less common species within the mitigation site include dove weed (*Croton setiger*), soft brome (*Bromus hordeaceus*), shortpod mustard (*Hirschfeldia incana*), redstem stork's bill (*Erodium cicutarium*), longbeak stork's bill (*Erodium botrys*), black sage (*Salvia mellifera*), deerweed (*Acmispon glaber*), common sandaster (*Corethrogyne filaginifolia*), broom snakeweed (*Gutierrezia sarothrae*), wishbone bush (*Mirabilis laevis*), horehound (*Murrubium vulgare*), Menzies' goldenbush (*Isocoma menziesii*), sawtooth goldenbush (*Hazardia squarrosa*), toyon (*Heteromeles arbutifolia*), hollyleaf redberry (*Rhamnus illicifolia*), California brickellbush (*Brickellia californica*), whiteflower currant (*Ribes indecorum*), caterpillar phacelia (*Phacelia cicutaria*), and chaparral yucca (*Hesperoyucca whipplei*). The shrub layer in this community ranges from a continuous canopy and little understory to a more open canopy with widely spaced shrubs and a well-developed understory.

Approximately 106.4 acres of coastal sage scrub was mapped within the mitigation site.

### **Chamise Chaparral**

Chamise chaparral is a vegetation community dominated by chamise (*Adenostoma fasciculatum*). A community of chamise can range anywhere from 1 to 3 meters in height. Within chamise communities, other shrub species cover is generally low. Understories of herbaceous plants are less frequent within chamise when compared to CSS and other chaparral communities.

Characteristic dominant species found within the chamise community mitigation site are chamise, longbeak stork's bill, redstem stork's bill, and maltese star-thistle (*Centaurea melitensis*) along the edges. Understories of the community consisted mostly of bare ground during the winter season.

Approximately 19.7 acres of chamise chaparral was mapped within the mitigation site.

### **Grassland Communities**

#### **Valley Needlegrass Grassland**

A smaller percentage of the mitigation site is characterized as valley needlegrass grassland, which is an assemblage of native grasses and forbs. Valley needlegrass grassland is mid-height (2 feet) grassland that consists mainly of purple needle grass (*Stipa pulchra*). Native and introduced annuals occur between the perennials; these forbs can typically exceed the bunchgrass in cover.

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Within the mitigation site, purple needlegrass dominates the community, comprising more than 70 percent of the community. The mitigation site contains exceedingly intact valley needlegrass grassland. Less commonly occurring species within the mitigation site include western blue-eyed grass (*Sisyrinchium bellum*), soft brome, redstem stork's bill, longbeak stork's bill, eastern Mojave buckwheat, cuman ragweed (*Ambrosia psilostachya*), and deergrass (*Muhlenbergia rigens*).

Approximately 8.5 acres of valley needlegrass grassland was mapped within the mitigation site.

### **Non-Native Grassland or Annual Grassland**

Non-native grassland/annual grassland is dominated by European annual grasses that usually reach up to 0.5 meter in height. This community can be associated with wildflowers, but due to disturbance in the soils, it is assumed that annual grasses will dominate in the future on site. Fine-textured clay soils are often associated with annual grasslands.

Characteristic dominant species found within the non-native grassland habitat of the mitigation site are soft brome, shortpod mustard, redstem stork's bill, longbeak stork's bill, ripgut brome (*Bromus diandrus*), and slender oat (*Avena barbata*). Less common species include cuman ragweed and dove weed.

Approximately 33.8 acres of non-native grassland was mapped within the mitigation site.

### **Woodland Communities**

#### ***Eucalyptus Woodland***

Eucalyptus woodland habitats can be made up of single-species thickets with little or no shrubs in the understory, or can have a well-developed understory. In the majority of eucalyptus woodland communities, species produce dense stands and closed canopies. Eucalyptus will produce a large amount of leaf litter, so few native species grow within eucalyptus canopies. Characteristic species found within the eucalyptus woodland of the mitigation site is red gum (*Eucalyptus camaldulensis*).

Approximately 3.2 acres of eucalyptus woodland were mapped within the mitigation site.

#### ***Southern Sycamore-Alder Riparian Woodland***

Southern sycamore-alder riparian woodland is a tall winter deciduous community that does not form a dense closed-canopy forest. Upland shrub species can be found within the understory, along with Pacific poison oak (*Toxicodendron diversilobum*) and California blackberry (*Rubus*

## *Memorandum*

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*ursinus*). The overstory is almost entirely California sycamore (*Platanus racemosa*) and can contain white alder (*Alnus rhombifolia*).

The characteristic dominant species is California sycamore, as this makes up the majority of this community within the mitigation site. No white alder occurs within the mitigation site, but this vegetation description best fits the community. Less common species include pacific poison oak, California blackberry, California sagebrush, eastern Mojave buckwheat, black sage, deergrass, and common sandaster.

Approximately 7.9 acres of southern sycamore-alder riparian woodland was mapped within the mitigation site.

### ***Open Engelmann Oak Woodland***

Open Engelmann oak woodland is an evergreen community dominated by Engelmann oak (*Quercus engelmannii*). The understory consists of native grassland, sage scrub, or both.

Characteristic dominant species within mitigation site include Engelmann oak and purple needlegrass. Less common species include California sagebrush, white sage, slender oat, eastern Mojave buckwheat, and sacred thorn apple (*Datura wrightii*).

Approximately 29.0 acres of open Engelmann oak woodland was mapped within the mitigation site.

### **Disturbed or Developed**

#### ***Disturbed Habitats***

Disturbed habitat describes areas that have been physically disturbed. This disturbance could be due to previous human activity, with the area no longer recognized as native land. Vegetation consists of non-native weedy species or ornamentals that take advantage of disturbance. Some typical examples include areas that have been graded or repeatedly cleared for fuel management, or the land has been used repeatedly so that it prevents natural revegetation.

Characteristic species found within the disturbed habitat of the mitigation site include olive (*Olea europaea*), common sowthistle (*Sonchus oleraceus*), totalote (*Centaurea melitensis*), and tumbleweed (*Salsola tragus*).

Approximately 3.3 acres of disturbed habitat was mapped within the mitigation site.

## Urban/Developed

Developed habitats are areas where construction has occurred. Native vegetation is no longer supported. Developed land is characterized by permanent structures, and could include pavement or hardscape.

Within the mitigation site, developed land includes parking lots, buildings, and pavement. No native vegetation is present. Approximately 0.1 acre of urban/developed land was mapped within the mitigation site.

## SITE SUMMARY

Field surveys were conducted at this property in 1993 by PSBS and in 1990 and 1996 by Merkel & Associates (Merkel & Associates 1999). These surveys identified 66 bird species, seven mammal species, four reptile species, and a high potential for several additional species to occur on site given the habitat present. In addition, special-status species were observed on site, including southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) and desert woodrat (*Neotoma lepida*), as well as foraging raptors Cooper's hawk (*Accipiter cooperii*), white-tailed kite (*Elanus leucurus*), golden eagle (*Aquila chrysaetos*), and peregrine falcon (*Falco peregrinus anatum*). Observations of southwestern willow flycatcher (*Empidonax traillii extimus*) were presumed migrants based on the time of observation and the unsuitable nesting habitat (Merkel & Associates 1999).

Based on site visits conducted in December 2016 by Dudek biologists Brock Ortega and Erin Bergman, the site includes an array of local species and a diversity of habitat and aspect that encourages use by a wider array of wildlife species. Besides the suite of expected sage scrub and chaparral species that would be expected (e.g., greater roadrunner (*Geococcyx californianus*), southern California rufous-crowned sparrow, Cassin's kingbird (*Tyrannus vociferans*)), oak species (e.g., oak titmouse (*Baeolophus inornatus*) and acorn woodpecker (*Melanerpes formicivorus*)), northern flicker (*Colaptes auratus*), ruby-crowned kinglet (*Regulus calendula*)), and other species indicative of grasslands and riparian areas, the site appears to be heavily used by various mammal species. Abundant mule deer (*Odocoileus hemionus*) tracks, scat, and a few individuals were observed. Coyote (*Canis latrans*), bobcat (*Lynx rufus*), and mountain lion (*Puma concolor*) sign was detected. Additionally, ringtail (*Bassariscus astutus*) scat and desert woodrat middens were observed. Based on the granitic boulder fields, it is expected that several special-status reptile species would occur, including red diamondback rattlesnake (*Crotalus ruber*), granite night lizard (*Xantusia henshawi*), granite spiny lizard (*Sceloporus orcutti*), San Diego ringneck snake (*Diadophis punctatus similis*), rosy boa (*Lichanura trivirgata*), and possibly southern rubber boa (*Charina umbratica*). Other special-status species that would be

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expected include golden eagle (foraging) and American badger (*Taxidea taxus*). Satellite telemetered female golden eagles F001, F002, F004, and F008, and male M007 are known to occasionally occur on the site (Tracey et al. 2016).

The wetland delineation by Merkel & Associates (1999) found non-wetland waters and wetland communities on site (southern sycamore-alder riparian woodland and freshwater marsh). Only southern sycamore-alder riparian woodland was present during the 2016 site visit by Dudek.

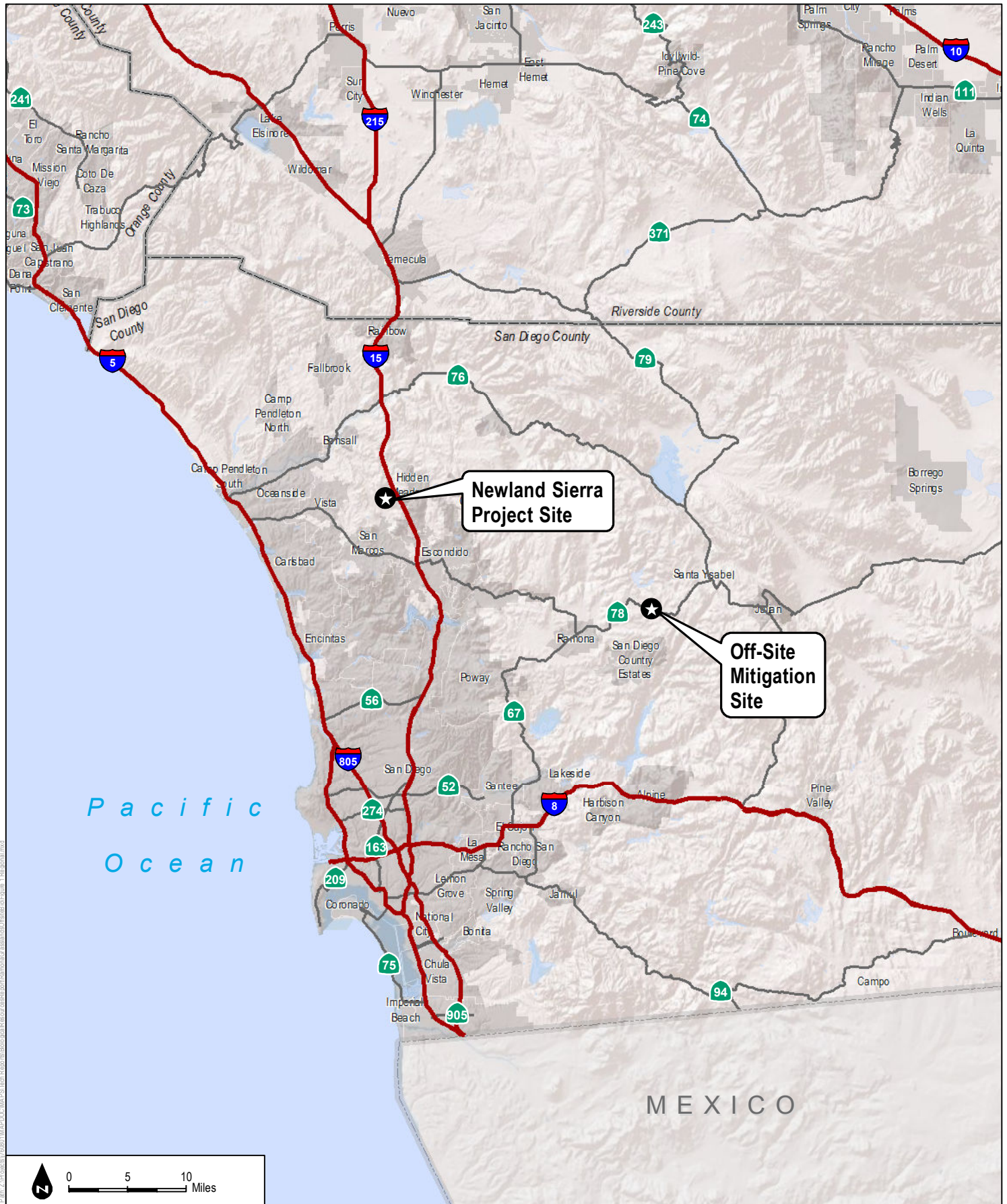
## CONCLUSION

The mitigation site is comparable to or better than the habitat that is being impacted on the Newland Sierra site. The mitigation site includes a variety of topographic relief, a comparable suite of vegetation communities, and rock resources. It provides better golden eagle foraging habitat and better wildlife movement potential than the Newland Sierra site because it connects segments of the Cleveland National Forest and San Diego County Parks properties (Figure 2). This site supports more Engelmann oak resources (100+ trees versus the three on the Newland Sierra site) and other sensitive resources (e.g., ringtail). Preservation of the mitigation site through acquisition would also benefit the PAMA and draft North County MSCP because the site is under real threat of development for agricultural production or residential use (the site has many developable areas and the views are outstanding from many locations). Further, the site could benefit from management, since there is currently easy access to the site and there are wild boar (*Sus scrofa*) concerns.

## REFERENCES

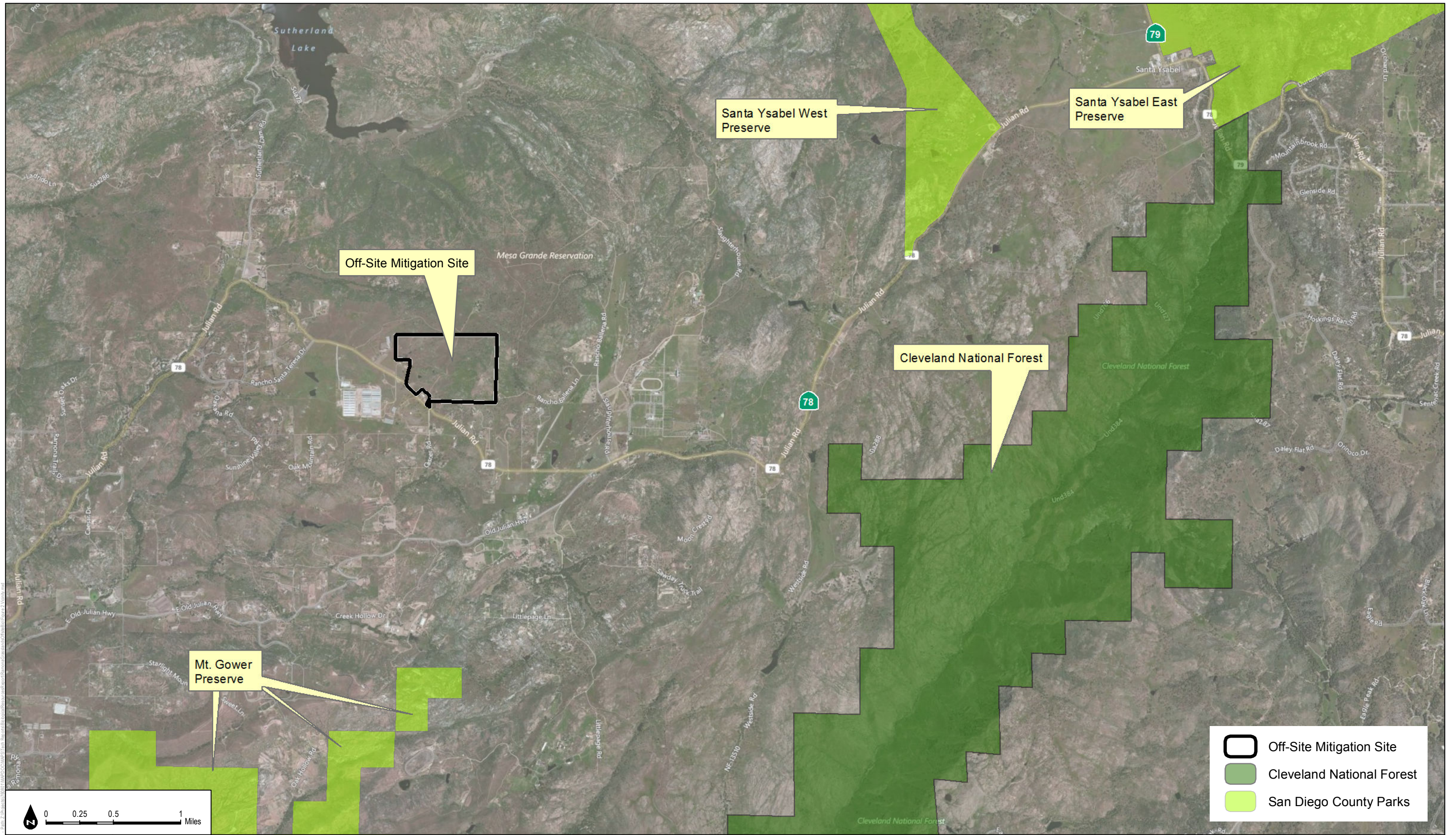
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**FIGURE 1**  
Regional Map





SOURCE: BING MAPS AERIAL, SAN DIEGO COUNTY PARKS

**DUDEK**

Newland Sierra Off-Site Mitigation Memo

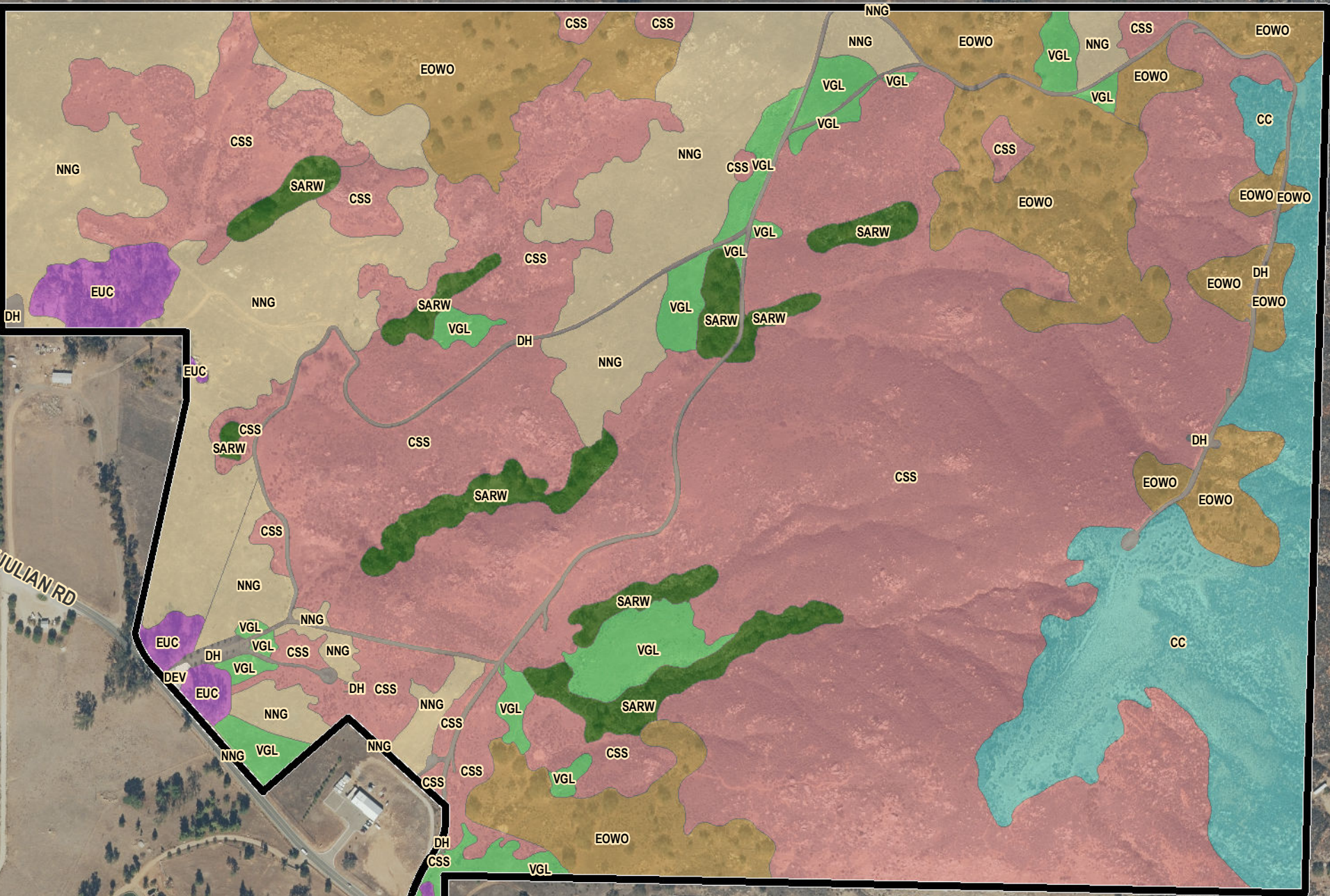
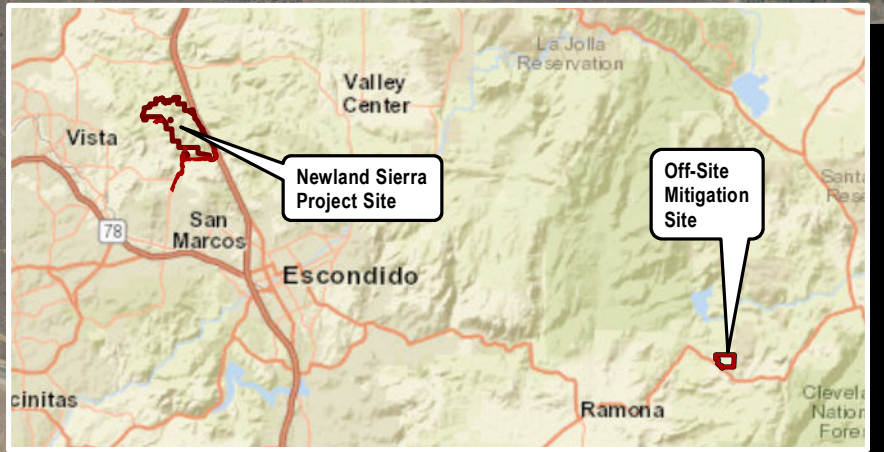
**FIGURE 2**  
Project Vicinity







Document Path: Z:\Projects\760801\WAPDOC\WAP\Tech Reports\BiologicalResources\Report\RamonaGrasslands\OffsiteBio\Figure 3 BioResources.mxd



Off-Site Mitigation Site

**Vegetation Communities/Land Covers:**

CC, Chamise Chaparral

CSS, Diegan Coastal Sage Scrub

DEV, Urban/Developed

DH, Disturbed Habitat

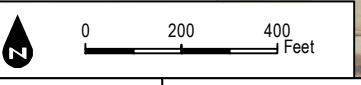
EOWO, Open Engelmann Oak Woodland

EUC, Eucalyptus Woodland

NNG, Non-Native Grassland

SARW, Southern Sycamore-Alder Riparian Woodland

VGL, Valley Needlegrass Grassland







# **APPENDIX L**

## ***On-Site Conceptual Resource Management Plan***



# **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

**Prepared for the County of San Diego**

*Lead Agency:*

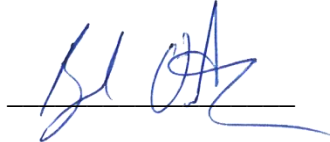
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760.479.4254



**JUNE 2017**





# On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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# On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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## 1 INTRODUCTION

This on-site Conceptual Resource Management Plan (CRMP) has been prepared for the proposed Newland Sierra Project (proposed project) in accordance with the mitigation requirements identified in the draft *Biological Resources Technical Report for the Newland Sierra Project* (Dudek 2016a). This document is consistent with the format and content requirements of the County of San Diego Report Format and Content Requirements: Conceptual Biological Resources Management Plan attachment (County 2010a). This CRMP covers the management of the habitats to remain as part of the on-site biological open space on the project Site.

Approximately 1,209.1 acres of chaparral, riparian, and non-native communities is proposed as on-site open space and additional acreage is proposed as off-site open space as part of the mitigation for the proposed project. The proposed open space design consists of two large continuous blocks of key biological resources (approximately 1,025.0 acres) situated within the northern half, and along the eastern boundary of the project Site, as well as a large third block of open space in the center of the proposed development that connects these blocks of open space to open space located east and south of the project Site and creates a preserve netting 1,209.1 acres. Each of these blocks compares favorably in size and biologic importance to a number of other preserve areas. This CRMP includes a description of management tasks for the 1,209.1 acres of on-site Open Space Preserve. The off-site mitigation area is covered under a separate CRMP.

### 1.1 Purpose of Biological Resources Management Plan

The purpose of this CRMP is to provide guidance to ensure preservation and long-term management of the Open Space Preserve. The objectives of this CRMP are to:

1. Guide management of vegetation communities/habitats, plant and animal species, cultural resources, and programs described herein to protect and, where appropriate, enhance biological and cultural values
2. Serve as a descriptive inventory of vegetation communities, habitats, and plant and animal species that occur on or use this property
3. Serve as a descriptive inventory of archaeological and/or historic resources that occur on this property
4. Establish the baseline conditions from which adaptive management will be determined and success will be measured
5. Provide an overview of the operation, maintenance, administrative, and personnel requirements to implement management goals and serve as a budget planning aid

## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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The details of this CRMP may be modified when the Final RMP is prepared and submitted to the County for approval. The County will review the Final RMP to ensure that it meets the specified purpose and objectives.

A resource analysis is provided in the Biological Resources Technical Report for the proposed project (Dudek 2016a). These reports include (1) a description of the existing biological resources on the project Site, including vegetation communities and land covers, jurisdictional resources, plants, wildlife, and wildlife corridors; (2) a discussion of the potential impacts to biological and cultural resources that would result from development of the property and the biological significance of these impacts in the context of federal, state, and local laws and policies; and (3) recommended mitigation measures for reducing identified significant impacts to biological and cultural resources to less than significant. Mitigation recommendations follow federal, state, and local rules and regulations, including the California Environmental Quality Act (CEQA), the County's Guidelines for Determining Significance and Report Format and Content Requirements (County 2010b), and the County's Resource Protection Ordinance (County 2007).

### **1.1.1 Conditions and/or Mitigation Measures that Require an RMP**

A CRMP is required for projects in the County of San Diego when a planned project proposes open space preservation that would significantly benefit from active management and/or monitoring of biological and/or cultural resources. A CRMP is always required when a project proposes open space totaling more than 50 acres or more, regardless of the presence or absence of sensitive species. In the case of the Newland Sierra open space preserve, both of these parameters apply.

The details of this CRMP may be modified when the Final RMP is prepared and submitted to the County for approval. The County will review the Final RMP to ensure that it meets the specified Purpose and Objectives.

The project would impact approximately 776.0 acres of vegetation communities and land covers; of which impacts to 745.3 acres require mitigation. Additionally, there would be permanent off-site direct impacts to 65.4 acres (Option A), including 13.2 acres that require mitigation. Table 1 shows the impacts and required mitigation based on the County's mitigation ratios (County 2010b, Table 5). A total of 496.1 acres of comparable habitat is required in order to meet the mitigation requirement. The project proposes to meet this mitigation obligation through the preservation of 1,209.1 acres within proposed on-site and 211.8 acres within a proposed off-site Open Space Preserve. A separate CRMP will be prepared for the off-site mitigation requirements.

# On-Site Conceptual Resource Management Plan for the Newland Sierra Project

**Table 1**  
**Summary of Permanent Impacts, Mitigation, and Open Space for**  
**Vegetation Communities and Jurisdictional Areas**

Habitat Types/Vegetation Communities	On-Site Existing Acreage	Total On-Site Impacts <sup>1</sup>	Total Off-Site Impacts <sup>2</sup>	Mitigation Ratio	Mitigation Required	On-Site Open Space <sup>3</sup>	Off-Site Mitigation Area	Mitigation Excess/ (Deficit)
<i>Coastal Scrub</i>								
Diegan coastal sage scrub (including disturbed)*	68.2	45.6	0.5	2:1	92.2	22.6	106.4	36.8
Coastal sage scrub – Baccharis dominated (including disturbed)	2.0	1.5	—	2:1	3.0	0.5	—	(2.5)
Flat-topped buckwheat – disturbed*	1.7	0	—	2:1	0	1.7	—	1.7
Coastal sage – chaparral transition*	7.8	7.4	1.7	2:1	18.2	0.4	—	(17.8)
<i>Subtotal</i>	<i>79.7</i>	<i>54.5</i>	<i>2.2</i>	<i>N/A</i>	<i>113</i>	<i>25.2</i>	<i>106.4</i>	<i>18.2</i>
<i>Chaparral</i>								
Chamise chaparral <sup>4*</sup>	—	—	—	—	—	—	19.7	19.7
Granitic southern mixed chaparral (including disturbed)*	1,700.7	626.9	6.3	0.5:1	316.6	1,073.8	—	757.2
Mafic southern mixed chaparral*	58.8	0.8	—	3:1	2.4	58.0	—	55.6
Scrub oak chaparral*	44.3	39.2	—	0.5:1	19.6	5.1	—	(14.5)
<i>Subtotal</i>	<i>1,803.8</i>	<i>666.9</i>	<i>6.3</i>	<i>N/A</i>	<i>338.6</i>	<i>1,136.9</i>	<i>19.7</i>	<i>818.0</i>
<i>Woodland</i>								
Coast live oak woodland*	9.1	6.5	2.8	3:1	27.9	2.6	—	(25.3)
Engelmann Oak Woodland - Open <sup>4*</sup>	—	—	—	N/A	—	—	29.0	29.0
<i>Subtotal</i>	<i>9.1</i>	<i>6.5</i>	<i>2.8</i>	<i>N/A</i>	<i>27.9</i>	<i>2.6</i>	<i>29.0</i>	<i>3.7</i>
<i>Riparian</i>								
Freshwater marsh*	0.1	—	—	3:1	—	0.1	—	0.1
Southern coast live oak riparian forest*	5.2	1.9	0.8	3:1	8.1	3.3	—	(4.8)
Mulefat scrub*	0.2	0.1	0.03	3:1	0.4	0.1	—	(0.3)
Southern sycamore-alder riparian woodland <sup>4*</sup>	—	—	—	—	—	—	7.9	7.9
Southern willow scrub*	2.5	0.1	0.5	3:1	1.8	2.4	—	0.6
Southern willow scrub/tamarisk scrub*	0.3	—	—	3:1	—	0.3	—	0.3
Arundo-dominated	—	—	0.1	3:1	0.3	—	—	(0.3)

# On-Site Conceptual Resource Management Plan for the Newland Sierra Project

**Table 1**  
**Summary of Permanent Impacts, Mitigation, and Open Space for**  
**Vegetation Communities and Jurisdictional Areas**

Habitat Types/Vegetation Communities	On-Site Existing Acreage	Total On-Site Impacts <sup>1</sup>	Total Off-Site Impacts <sup>2</sup>	Mitigation Ratio	Mitigation Required	On-Site Open Space <sup>3</sup>	Off-Site Mitigation Area	Mitigation Excess/ (Deficit)
riparian								
<i>Subtotal</i>	8.3	2.1	1.4	N/A	10.6	6.2	7.9	3.5
<i>Grassland</i>								
Valley needlegrass grassland <sup>4*</sup>	—	—	—	—	—	—	8.5	8.5
Non-native grassland*	16.1	15.3	2.6	0.5:1	9.0	0.8	33.8	25.7
<i>Subtotal</i>	16.1	15.3	22.6	N/A	9.0	0.8	42.3	34.2
<i>Non-native Communities and Land Covers</i>								
Agriculture	—	—	2.0	None	—	—	—	(2.0)
Eucalyptus woodland	0.5	—	2.0	None	—	0.5	3.2	1.7
Intensive agriculture	<0.0	<0.0	1.4	None	—	—	—	(1.4)
Extensive agriculture	—	—	4.5	None	—	—	—	(4.5)
Orchard and vineyards	2.0	1.0	1.9	None	—	1.0	—	(1.9)
Urban/developed	9.2	9.2	40.8	None	—	—	0.1	(49.9)
Disturbed habitat	57.0	21.0	5.1	None	—	36.0	3.3	13.2
Non-native woodland	—	—	0.2	None	—	—	—	(0.2)
<i>Subtotal</i>	68.7	31.2	57.9	—	0	37.5	6.6	(35.5)
<b>Total<sup>1</sup></b>	<b>1,985.6</b>	<b>776.6</b>	<b>71.7</b>	<b>N/A</b>	<b>497.3</b>	<b>1,209.1</b>	<b>211.8</b>	<b>923.6</b>
<i>Other</i>								
RPO wetland buffer <sup>5</sup>	30.2	8.7	3.2	N/A	N/A	N/A	—	N/A
Oak Root Zone <sup>5</sup>	32.9	11.2	8.4	3:1	58.8	21.7	16.8	-2.1
Non-wetland waters (ephemeral and intermittent) <sup>5</sup>	5.33	1.41	0.15	1:1	1.59	3.92	—	N/A

<sup>1</sup> Totals may not add due to rounding.

<sup>2</sup> This includes impacts for Option A, the preferred project Option, and all other off-site impacts.

<sup>3</sup> The open space acreage includes the on-site temporary impacts since they will be restored and conserved in permanent open space.

<sup>4</sup> These communities occur in the off-site Ramona mitigation site.

<sup>5</sup> These features are overlays to the vegetation community layer and are not counted toward the total existing acreage.

\* Considered special-status by the County (2010b).

3:1 for riparian areas includes a 1:1 creation and 2:1 enhancement requirement.

## 1.1.2 Agency Review and Coordination

This document was written in collaboration with the County of San Diego and Newland Sierra LLC. The management of the Newland Sierra open space, as detailed in this CRMP, does not interfere with mitigation and monitoring requirements mandated by the California Department of Fish and Wildlife (CDFW), the U.S. Fish and Wildlife Service (USFWS), the U.S. Army Corps



# **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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of Engineers (ACOE), the Regional Water Quality Control Board (RWQCB), or by any other permitting agency.

## **1.2 Implementation**

### **1.2.1 Resource Manager Qualifications and Responsible Parties**

A resource manager must be designated to be responsible for the long-term management and maintenance of the Open Space Preserve. The resource manager shall be one of the following:

- Conservancy group
- Natural resource land manager (e.g., Center for Natural Lands Management, San Diego Habitat Conservancy)
- Natural resource consultant
- County Department of Park and Recreation (DPR)
- County Department of Public Works
- Federal or state wildlife agency (USFWS, CDFW)
- Federal land manager, such as Bureau of Land Management (BLM)
- City Land Managers, including but not limited to Departments of Public Utilities, DPR, and Environmental Services.

If the developer desires DPR to manage the land, the following criteria must be met:

- The land must be located inside a Pre-Approved Mitigation Area or proposed Pre-Approved Mitigation Area, or otherwise deemed acceptable by DPR.
- The land must allow for public access.
- The land must allow for passive recreational opportunities such as a trails system.

The resource manager shall be approved in writing by the Director of Planning & Development Services, the Director of Public Works, or the DPR, depending on the resource manager. Any change in the designated resource manager shall also be approved in writing by the approving director. Appropriate qualifications for the resource manager include but are not limited to:

- Ability to carry out habitat monitoring or mitigation activities.
- Fiscal stability including preparation of an operational budget (using an appropriate analysis technique) for the management of this CRMP.

## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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- Have at least one staff member with a biological, ecological, or wildlife management degree from an accredited college or university, or have a Memorandum of Understanding (MOU) with a qualified person with such a degree.
- If cultural sites are present, have a cultural resource professional on staff or an MOU with a cultural consultant.
- Experience with habitat and cultural resource management in southern California.

Potential entities identified as providing the labor under the direction of the resource manager for the Open Space Preserve include the Center of Natural Lands Management, Habitat Restoration Sciences Inc., or Habitat West.

### **Proposed Land Owner**

Fee title of separate open space lots may be held by the land/resource manager or another appropriate land owner (e.g., land trust, conservancy, or public agency), depending on the particular circumstance.

Currently, the land is slated to be owned by a state or federal agency or non-profit corporation. Depending on the circumstances, the applicant may find an alternative fee title holder such as a state or federal agency or non-profit corporation.

### **Proposed Easement Holder**

If the land is transferred in fee title to a non-governmental entity, a Biological Open Space Easement or Conservation Easement must be recorded. This easement should be dedicated to the County, but it may also include other appropriate agencies as a grantee or third-party beneficiary. If the title to the land is transferred to the County or other public conservation entity, no easement is necessary.

### **Restoration Entity**

Management responsibility for the revegetation/restoration area shall remain with the restoration entity until restoration/revegetation has been completed. Upon County/agency acceptance of the revegetated/restored area, management responsibility for the revegetation/restoration area will be transferred to the resource manager.

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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### 1.2.2 Financial Responsibility and Mechanism

Acceptable financial mechanisms include the following:

- **Special District.** Formation of a Lighting and Landscape District or Zone or Community Facility District as determined appropriate by the Director of the Department of Planning & Development Services, Director of Public Works, or DPR
- **Endowment.** A one-time, non-wasting endowment, which is tied to the property and intended to be used by the resource manager to implement the RMP
- **Alternatives.** Other acceptable types of mechanisms including annual fees to be approved by the Director of Planning & Development Services, Director of Public Works, or DPR
- **Transfer.** Transfer of ownership to existing entity for management

The project applicant is responsible for all RMP funding requirements, including direct funds to support the RMP start-up tasks as well as an ongoing funding source for annual tasks, which is tied to the property to fund long-term RMP implementation. Start-up tasks include sign installation around the on-site Open Space Preserve (where appropriate), fencing at select locations in the Open Space Preserve, and database compilation. Long-term tasks involve the management and maintenance of the Open Space Preserve in perpetuity, including habitat monitoring and mapping, exotic species control (if needed), and general monitoring and reporting. These habitat management tasks commence immediately upon initiation of long-term management by the resource manager.

### 1.2.3 Conceptual Cost Estimate

An initial Property Analysis Record (PAR) will be prepared based on the biological resource management tasks identified in this CRMP. Table 2 includes the biological resource management tasks that are planned for the Open Space Preserve. A final PAR and cost estimate will be prepared for the Open Space Preserve when a resource manager has been selected and approved by the County.

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

**Table 2**  
**Resource Management Tasks**

Check if Applies	Tasks	Frequency (times per year)	Hours Required Per Year
<i>Biological Tasks</i>			
	Baseline inventory of resources (if original inventory is over 5 years old)		
✓	Update biological mapping	Once every 5 years	3.2 (16 hours every 5 years)
✓	Update aerial photography	Once every 5 years	Based on PAR
✓	Removal of invasive species	As needed	120
✓	Predator control	As needed	32
	Habitat restoration/installation		
	Habitat restoration/monitoring and management		
	Poaching control		
✓	<b>Species Surveys (include a separate line for each species):</b> 1. Focused protocol surveys for California gnatcatcher ( <i>Poliophtila californica</i> ) 2. Focused rare plant surveys (for known populations only)	1. Once every 5 years 2. Once every 5 years	20 (100 hours every 5 years)
✓	Species Management	As needed	16
	Noise management, if required		
	For lands within the MSCP and outside PAMA, consult Table 3-5 of the MSCP Plan for required biological resource monitoring		
✓	Monitoring	Monthly	96
<i>Operations, Maintenance, and Administration Tasks</i>			
✓	Establish and maintain database and analysis of data	Annually	8
✓	Write and submit annual report to County	Annually	24
✓	Submit review fees for County review of annual report	Annually	Based on PAR
✓	Review and, if necessary, update Management Plan	Every 5 years	4 (20 hours every 5 years)
✓	Construct permanent signs	One time	80
✓	Replace signs	As needed, estimate 5 signs a year	16
✓	Construct permanent fencing/gates	One time	200
✓	Maintain permanent fencing/gates	As needed, estimate 100 feet per year	8
✓	Remove trash and debris	Quarterly	60
✓	Coordinate with Department of Environmental Health (DEH) and Sheriff	As needed	16
	Maintain access road		

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

**Table 2**  
**Resource Management Tasks**

Check if Applies	Tasks	Frequency (times per year)	Hours Required Per Year
	Install stormwater BMPs		
	Maintain stormwater BMPs		
	Restore built structure		
	Maintain built structure		
	Maintain regular office hours		
	Inspect and service heavy equipment and vehicles		
	Inspect and repair buildings, residences, and structures		
	Inspect and maintain fuel tanks		
✓	Coordinate with utility providers and easement holders (Vallecitos Water District, San Diego County Water Authority, SDG&E, Homeowners' Association, and State of California)	Annually	8
	Manage hydrology (as required)		
✓	Coordinate with law enforcement and emergency services (e.g., fire)	Annually	Included in "Coordinate with utility providers and easement holders" task
	Coordinate with adjacent land managers		
✓	Remove graffiti and repair vandalism	As needed	40
<i>Public Use Tasks</i>			
	Construct trail(s)		
	Monitor, maintain/repair trails (unless a trail easement has been granted to the County)		
✓	Control public access	Quarterly	20
✓	Provide ranger patrol	Quarterly	This task is combined with the "Monitoring visits" task
	Manage fishing and/or hunting program (if one is allowed)		
	Provide Neighbor Education – Community Partnership		
	If HOA is funding management, provide annual presentation to HOA		
	Coordinate volunteer services		
	Provide emergency services access/response planning		
<i>Fire Management Tasks</i>			
✓	Coordinate with applicable fire agencies and access (gate keys, etc.) for these agencies	Annually	2
✓	Plan fire evacuation for public use areas		40

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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**Table 2**  
**Resource Management Tasks**

Check if Applies	Tasks	Frequency (times per year)	Hours Required Per Year
✓	Protect areas with high biological importance	Every 5 years	This will be covered with the adaptive management for coastal California gnatcatcher and rare plants.
	Hand-clear vegetation		
	Mow vegetation		
<i>Post-Fire Tasks</i>			
✓	Control post-fire erosion	Every 15 years	Assumes lump sum budget of \$15,000 every 15 years
✓	Remove post-fire sediment	Every 15 years	Included with erosion task
✓	Reseed after fire	Every 15 years	Assumes that there will be a fire every 15 years that will require a response that may include 3 acres of revegetation every 15 years (\$7,500 lump sum)
✓	Replant after fire	Every 15 years	Included with reseed after fire

MSCP = Multiple Species Conservation Program; PAMA = Pre-Approved Mitigation Area; DEH = Department of Environmental Health; BMP = best management practice; HOA = Homeowners' Association  
Hours are estimated and may fluctuate based on on-the-ground conditions.

### 1.2.4 Reporting Requirements

An RMP Annual Report will be submitted to the County (and resource agencies, as applicable), along with the submittal fee to cover County staff review time. The annual report shall discuss the previous year's management and monitoring activities as well as management/monitoring activities anticipated in the upcoming year.

The annual report shall provide a concise but complete summary of management and monitoring methods, identify any new management issues, and address the success or failure of management approaches (based on monitoring). The report shall include a summary of changes from baseline or previous year conditions for species and habitats and address any monitoring and management limitations, including weather (e.g., drought). The report shall also address any management (changes) resulting from previous monitoring results and provide methods for measuring the success of adaptive management.

For new sensitive species observations or significant changes to previously reported species, the annual report shall include copies of completed California Natural Diversity Database forms with evidence that they have been submitted to the state. The report shall also include copies of invasive plant species forms submitted to the state or County.

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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A fee will be collected by Planning & Development Services upon submittal of the annual report for staff's review time. The RMP may also be subject to an ongoing deposit account for staff to address management challenges as they arise. Deposit accounts, if applicable, are replenished to a defined level as necessary.

### 1.2.5 RMP Agreement

The County will require an agreement with the applicant when an RMP is required. The RMP Agreement will be executed when the County accepts the Final RMP. The agreement will obligate the applicant to implement the RMP and provide a source of funding to pay the cost to implement the RMP in perpetuity. The agreement shall also provide a mechanism for the funds to be transferred to the County if the resource manager fails to meet the goals of the RMP.

The agreement will specify that RMP funding or a funding mechanism be established prior to the following milestones:

- For subdivisions, prior to the approval of grading or improvement plans, or prior to approval of the parcel/final map, whichever is first
- For permits, prior to construction or use of the property in reliance on the permit.

*This agreement will be provided once the County approves the final RMP.*

### 1.3 Limitations and Constraints

Specific internal or external management constraints that may affect meeting RMP goals have not been identified for this CRMP. Examples of potential constraints that may be applicable include, but are not limited to, the following:

- Environmental factors such as the influence of local water availability (either surface or subsurface waters), introduction or spread of non-native species, presence of threatened or endangered species, fire, flood, drought, erosion, air pollution, and hazardous waste materials.
- Legal, political, or social factors that influence or mandate certain types of management; special permitting requirements (i.e., ACOE, USFWS, archeological sites, etc.), County Ordinances (e.g., nuisance abatement), MOUs, or other special agreements with private or public entities, water, timber, or mineral rights for the area.

## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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FINANCIAL FACTORS SUCH AS THE SOURCE OF FUNDING TO BE USED FOR OPERATION AND MAINTENANCE, PERSONNEL REQUIREMENTS, AND OVERALL MANAGEMENT OF THE AREA (FUND SOURCE MAY DICTATE MANAGEMENT DIRECTION).

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# On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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## 2 PROPERTY DESCRIPTION

### 2.1 Location

The Newland Sierra Project Site consists of approximately 1,983 acres located within an unincorporated area of the north-central portion of the Merriam Mountains of northern San Diego County, California (Figures 1 and 2). The majority of the project Site is located in the community of Twin Oaks Valley. The project Site is directly west of Interstate 15 (I-15), north of State Route 78 (SR-78), and south of State Route 79 (SR-79). The cities of Escondido and San Marcos are approximately 1 mile south of the site.

The project Site is bounded by I-15 on the east, Deer Springs Road on the south, and Twin Oaks Valley Road on the west, with a small portion of the northwestern edge of the site traversed by Twin Oaks Valley Road. Gopher Canyon Road is located approximately 1.5 miles north of the site's northern boundary, and approximately 2.5 miles north of proposed site development.

The proposed project lies in the San Marcos U.S. Geological Survey (USGS) 7.5-minute quadrangle, Township 11 West, Range 2 and 3 West, and Sections 11, 12, 13, 14, 15, 18, 19, 23, 24, 25, 30, 35, and 36. The latitude and longitude of the approximate center of the site is 33°12'47" N and -117°09'07" W (Figure 2).

### 2.2 Environmental Setting

The following is summarized from the Biological Resources Technical Report for the proposed project (Dudek 2016a). The project Site is located within the northern portion of the Merriam Mountains, a narrow chain of low mountains generally running north-south with a variety of east-west trending ridgelines and scattered peaks. These mountains originate near the northern end of the urban parts of the City of Escondido and are bordered by Gopher Canyon Road to the north, I-15 to the east, and Twin Oaks Valley Road to the west. The Merriam Mountains are approximately 8.5 miles long, and the project Site is situated on approximately 3 miles of the northern portion of the Merriam Mountains. It is in a dry climate with monthly average temperatures near the community of Vista ranging from approximately 44°–83°F. This community generally receives an average annual rainfall of less than 13.10 inches per year (Western Regional Climate Center 2014).

The undeveloped site contains natural features of scenic and biological value including rugged topography and rock outcroppings. Much of the vegetation covering the existing site is mature and well-developed. Elevation of the site ranges widely, from approximately 660 feet above mean sea level (AMSL) along Twin Oaks Valley Road traversing the northwestern portion of the site to 1,750 feet AMSL directly northeast of Twin Oaks Crest Drive. The perimeter of the

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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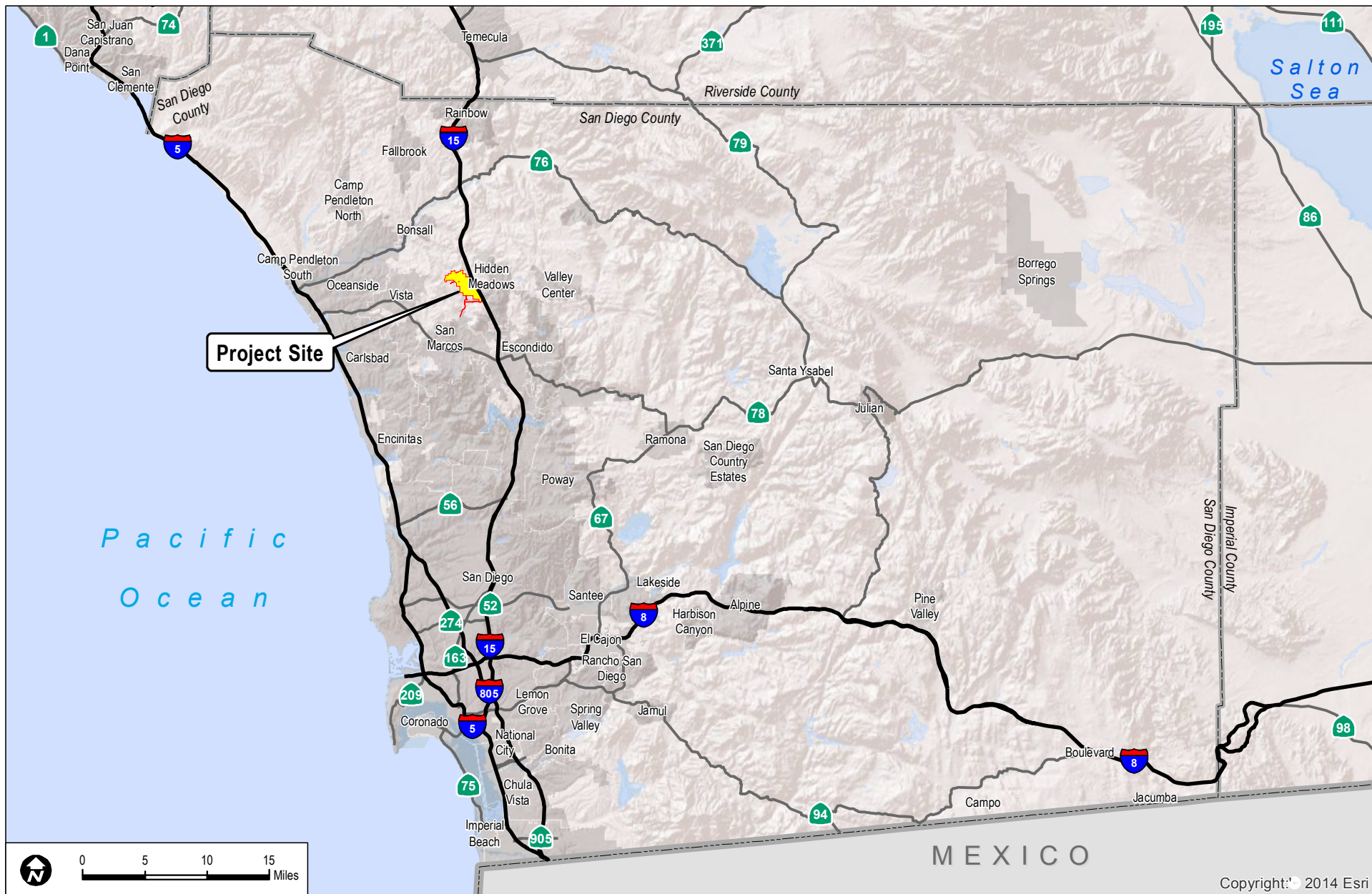
project Site has an overall gentle sloping topography. Within the project Site, the topography is more varied. Overall, there are approximately five locations where elevation is above 1,500 feet AMSL (one in the southern and four in the north–central areas of the project Site). Topography generally increases toward the center of the site, forming a number of ridgelines and some prominent rock outcrops. In some locations the gentle sloping perimeter gradually rises to higher elevations, and in other areas the slopes are more acute.

Eighteen soils types in 10 soil series occur on site, including 78 acres of Los Posas soils. Las Posas soils often support endemic plants that have either evolved to do well on these nutrient-poor soils or can outcompete other plants and thrive on such soils. The Las Posas soils series is the only soil type mapped on site that is known to support mafic conditions, and these soils are thought to occur in the northwestern and southeastern corners of the project Site. In the northwest, the soil occurs to west of and immediately adjacent to Twin Oaks Valley Road. In the southeast, this soil was thought to occur in two small locations directly adjacent to and north of Mesa Rock Road along I-15. However, no mafic soil indicators, or mafic endemic plant species, were observed at the two southeastern locations. Therefore, this area is not considered to support mafic conditions or soils. To date, only one special-status plant species typically associated with mafic conditions, Ramona horkelia (*Horkelia truncata*), has been identified on site, but it was not mapped in Las Posas soils.

The proposed project is located within the unincorporated portion of the County of San Diego within the North County Metropolitan Subregional Plan area. The North County Metropolitan Subregional Plan area is comprised of many non-contiguous "island" areas interspersed among the cities of Escondido, San Diego, San Marcos, Vista, and Oceanside with the most easterly portion adjacent to Valley Center. The North County Metropolitan Subregional Plan area includes the communities of Hidden Meadows and Twin Oaks Valley.

### 2.3 Land Use

Land use within the Open Space Preserve and in the surrounding areas is a mixture of undeveloped lands and rural residential areas. Portions of the site are used consistently for off-road vehicle and mountain biking activities, and there is evidence of homeless encampments and regular day use in some of the flatter, open areas.



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**FIGURE 1**  
**Regional Map**

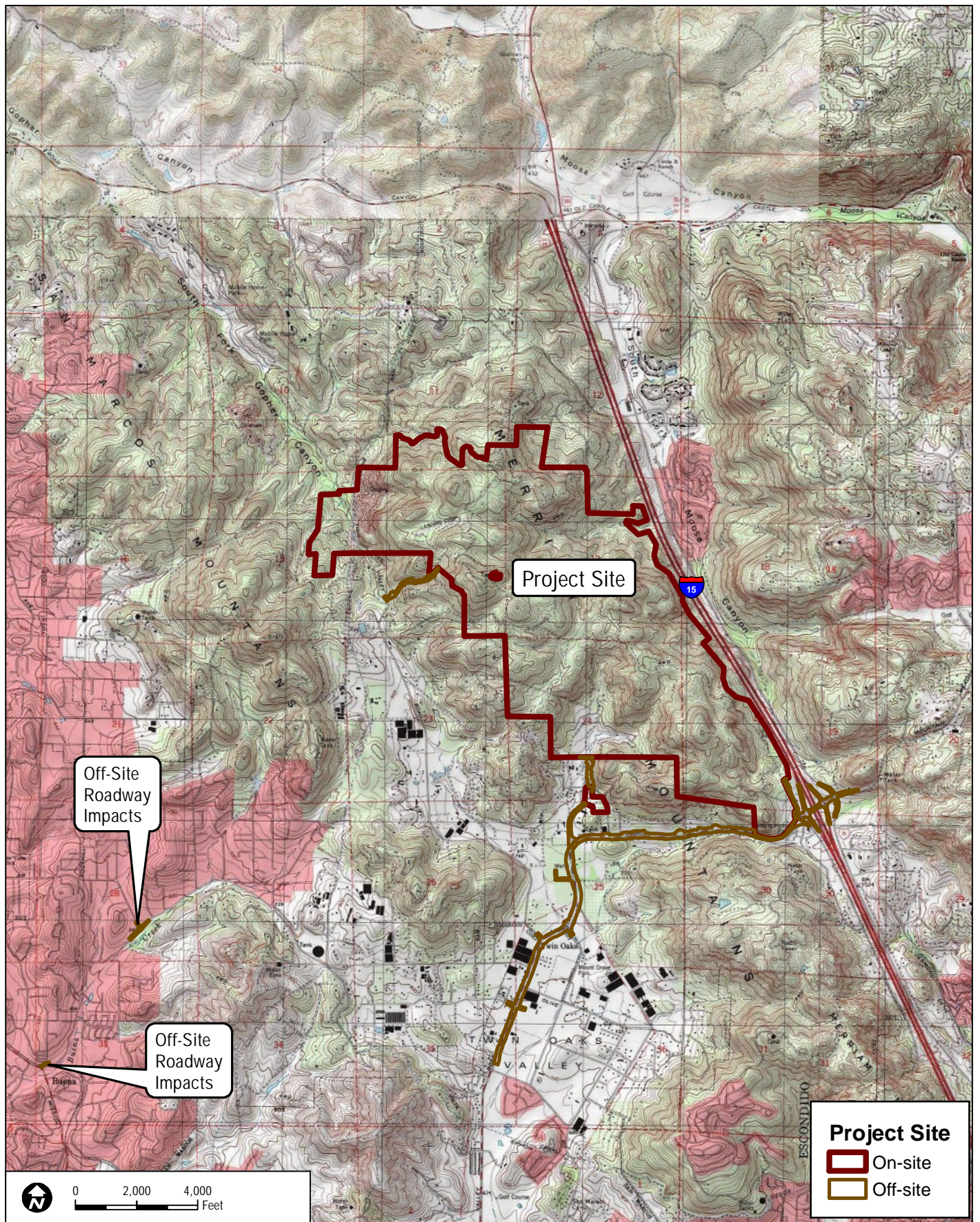
Newland Sierra Project Draft On-Site Conceptual Resource Management Plan

## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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SOURCE: USGS 7.5-Minute Series San Marcos Quadrangle.

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**FIGURE 2**  
**Vicinity Map**

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## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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The landscape character of the development will include the natural terrain and boulder outcroppings. Low-water-use, native, and naturalizing plant materials will make up the landscape plant palette. Low-fuel-volume plant materials will be included in compliance with the Fire Protection Plan. In addition, professionally-managed vineyards will be planted on selective high visibility slopes. Fuel management zones have been identified as Limited Building Zone Easements and range in width from 200 to 250 feet (Figure 3).

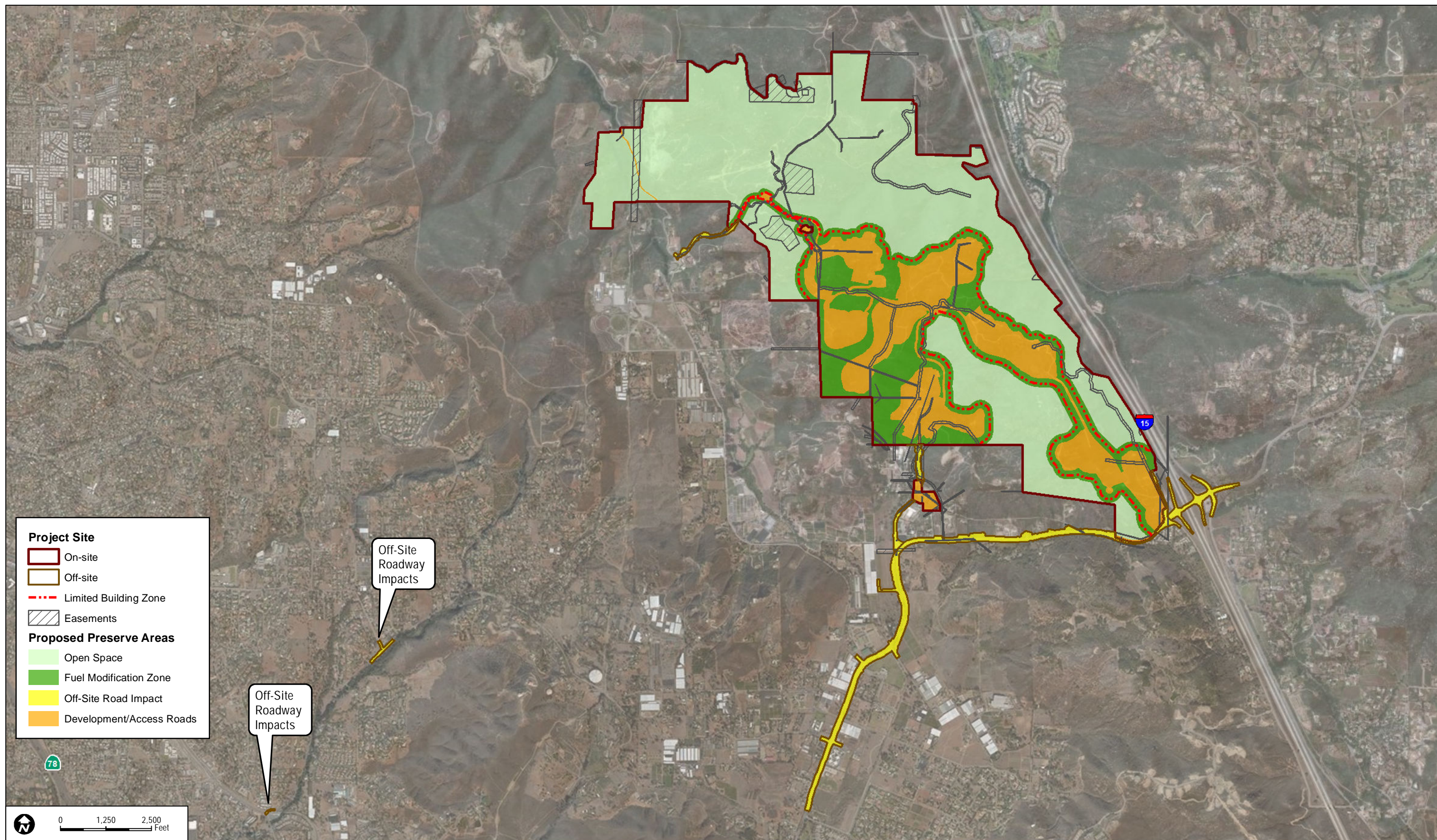
Easements within the proposed open space total 29.9 acres and are held by various agencies, including Vallecitos Water District, San Diego County Water Authority, San Diego Gas & Electric (SDG&E), the Homeowners' Association, and State of California. These easements are primarily for water and other utilities such as sewer and electric.

## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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SOURCE: Bing 2016; Fuscoe Engineering 2016

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Newland Sierra Project Draft On-Site Conceptual Resource Management Plan

**FIGURE 3**  
**Land Use**



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# On-Site Conceptual Resource Management Plan for the Newland Sierra Project

## 3 BIOLOGICAL RESOURCES DESCRIPTION

This section is based on the biological data collected for the project Site, as described in the Biological Resources Technical Report prepared for the proposed project (Dudek 2016a). This section only discusses the areas within the proposed Open Space Preserve.

### 3.1 Vegetation Communities/Habitat Types

Seventeen vegetation communities and land cover types were identified within the Open Space Preserve and include the following general vegetation communities: coastal sage scrub, chaparral, woodland, riparian, non-native areas, and waters (Figure 4, Table 3). The status of vegetation communities was determined using Holland (1986), as modified by Oberbauer et al. (2008), and the County's Guidelines for Determining Significance and Report Format and Content Requirements (County 2010b). Refer to the Biological Resources Technical Report for the proposed project prepared by Dudek (2016a) for a more detailed description of the biological resources on site.

**Table 3**  
**Vegetation Communities and Land Cover Types**

General Vegetation Community/Land Cover Type	Code <sup>1</sup>	Acres
<i>Coastal Scrub</i>		
Diegan coastal sage scrub (including disturbed) *	32500	22.6
Coastal sage scrub – Baccharis dominated (including disturbed)	32530	0.5
Flat-topped buckwheat – disturbed*	32800	1.7
Coastal sage – chaparral transition*	37G00	0.4
<i>Subtotal</i>		25.2
<i>Chaparral</i>		
Granitic southern mixed chaparral* (including disturbed)	37121	1,073.8
Mafic southern mixed chaparral*	37122	58.0
Scrub oak chaparral*	37900	5.1
<i>Subtotal</i>		1,136.9
<i>Woodland</i>		
Coast live oak woodland *	71160	2.6
<i>Riparian</i>		
Freshwater marsh*	52400	0.1
Southern coast live oak riparian forest*	61310	3.3
Mulefat scrub*	63310	0.1
Southern willow scrub*	63320	2.4
Southern willow scrub/tamarisk scrub*	63320/63810	0.3
<i>Subtotal</i>		6.2

# On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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**Table 3**  
**Vegetation Communities and Land Cover Types**

General Vegetation Community/Land Cover Type	Code <sup>1</sup>	Acres
<i>Non-native Communities and Land Covers</i>		
Eucalyptus woodland	79100	0.5
Orchard and vineyards	18100	1.0
Disturbed habitat	11300	36.0
Non-native grassland*	42200	0.8
<i>Subtotal</i>		38.3
<i>Other</i>		
Non-wetland waters (ephemeral and intermittent) <sup>3</sup>	42200	3.42
<b>Total <sup>2</sup></b>		<b>1,209.1</b>

**Notes:**

<sup>1</sup> Holland (1986) as modified by Oberbauer et al. (2008)

<sup>2</sup> May not total due to rounding

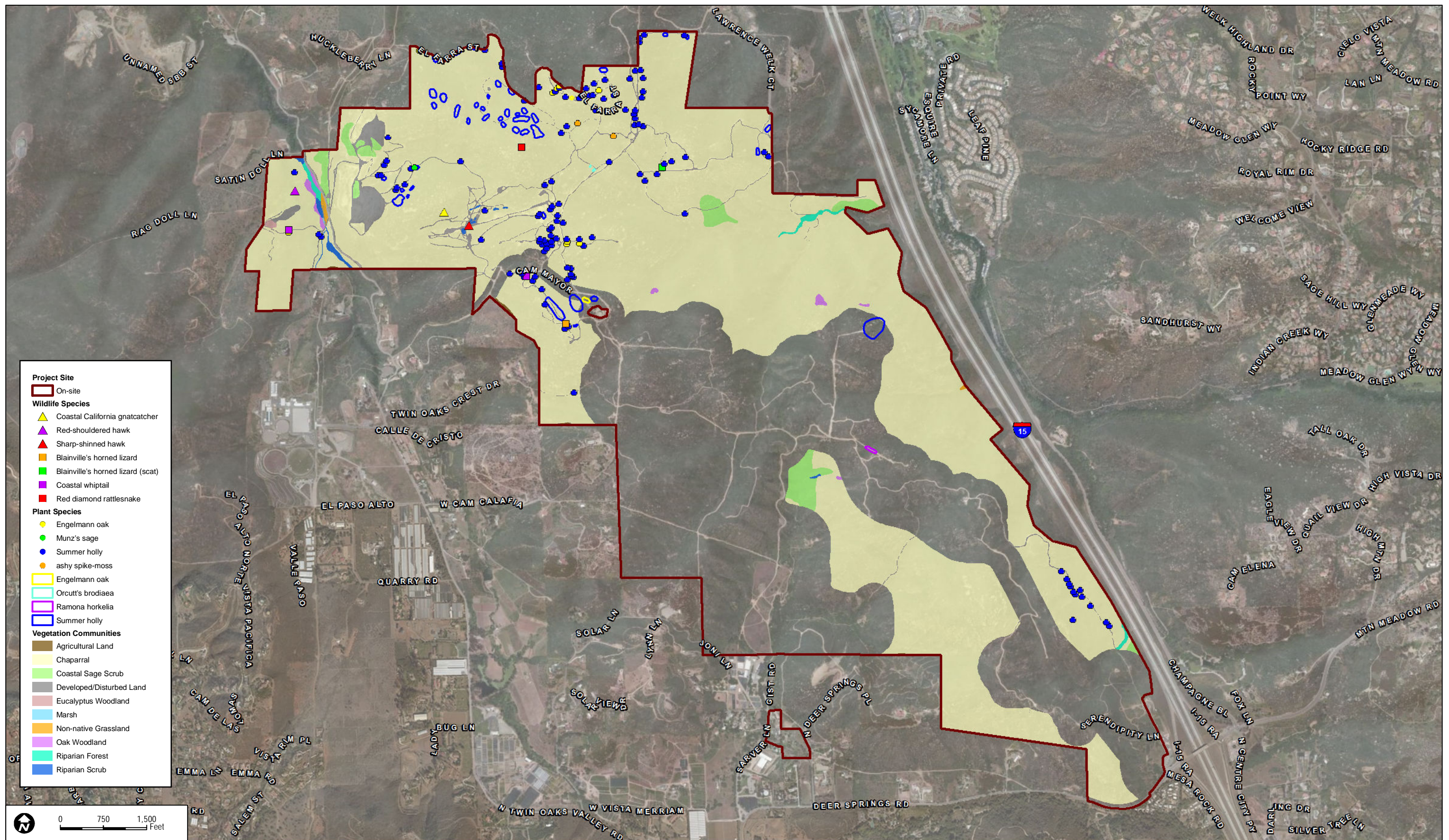
<sup>3</sup> These features are overlays to the vegetation community layer and are not counted toward the total existing acreage.

\* Considered special-status by the County of San Diego (2010a).

### 3.1.1 Diegan Coastal Sage Scrub (32500)

Diegan coastal sage scrub is a widespread coastal sage scrub in coastal southern California from Los Angeles into Baja California (Oberbauer et al. 2008). The community mostly consists of drought deciduous species, such as California sagebrush, Eastern Mojave buckwheat (*Eriogonum fasciculatum*), white sage (*Salvia apiana*), laurel sumac (*Malosma laurina*), and black sage (*Salvia mellifera*). Diegan coastal sage scrub is typical on low moisture-available sites, such as steep, xeric lopes or clay-rich soils that release stored water slowly. This community integrates with types of chaparral at higher elevations. Within the Open Space Preserve, there are five main locations along the length of the project Site: along Gist Road to the east, along North Twin Oaks Valley Road to the east, two patches of habitat along the eastern boundary (west of I-15), and one patch east of the abandoned airstrip (Figure 4). Coastal sage scrub that contains 20 to 50 percent native species by percent cover were mapped as “disturbed” associations. Disturbed Diegan coastal sage scrub occurs in two patches within the old rock quarry (Figure 4).





SOURCE: Bing 2016; Fuscoe Engineering 2016

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Newland Sierra Project Draft On-Site Conceptual Resource Management Plan

FIGURE 4  
On-Site Biological Open Space



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Areas mapped as Diegan coastal sage scrub within the project Site are dominated by California sagebrush. The *Artemisia californica* (California sagebrush scrub) alliance has a rank of G5S5 in CDFW (CDFG 2010) meaning it is globally secure and secure in the state. Diegan coastal sage scrub is not considered special-status by CDFW; however, it requires mitigation per the County Report Format and Content Requirements for Biological Resources (County 2010a).

### 3.1.2 Coastal Sage Scrub–Baccharis (32530)

Diegan coastal sage scrub–Baccharis dominated is similar to Diegan coastal sage scrub but dominated by Baccharis species (desert broom [*B. sarothroides*] and/or coyote brush [*B. pilularis*]) (Oberbauer et al. 2008). This community typically occurs on disturbed sites or those with nutrient-poor soils and often found within other forms of Diegan coastal sage scrub and on upper terraces of river valleys. This community is distributed along coastal and foothills areas in San Diego County. Within the Open Space Preserve, this community is mapped directly north of Mesa Rock Road adjacent to I-15 (Figure 4). Coastal sage scrub–Baccharis that contains 20 to 50 percent native species by percent cover were mapped as “disturbed” associations. A small patch of disturbed Coastal Sage Scrub–Baccharis is located east of North Twin Oaks Valley Road within the old rock quarry.

Areas mapped as coastal sage scrub–Baccharis within the project Site are dominated by California sagebrush and coyote brush. The *Artemisia californica* (California sagebrush scrub) alliance and *Baccharis pilularis* (coyote brush scrub) alliance have a rank of G5S5 by CDFW (CDFG 2010) meaning it is globally secure and secure in the state. Diegan coastal sage scrub–Baccharis dominated is not considered special-status by CDFG or the County (2010b). Based on the County’s criteria, the proposed project is considered a Biological Resource Area because it is mapped as draft PAMA (County 2010a).

### 3.1.3 Flat-topped Buckwheat (32800)

Flat-topped buckwheat is a nearly monoculture community usually resulting from disturbance and transitioning to coastal sage scrub or chaparral Oberbauer et al. 2008. Species characteristic of this community, Eastern Mojave buckwheat and common deerweed (*Acmispon glaber*), appear over time. This community often occurs in disturbed areas in the coastal and foothill areas of San Diego County and often intergrades with Diegan coastal sage scrub. Within the Open Space Preserve, this community is mapped within the old rock quarry east of North Twin Oaks Valley Road (Figure 4).

The area mapped as disturbed flat-topped buckwheat within the project Site are dominated by Eastern Mojave buckwheat (*Eriogonum fasciculatum*), but also is comprised of 20 to 50 percent

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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non-native herbs and grasses. The *Eriogonum fasciculatum* (California buckwheat scrub) alliance has a rank of G5S5 in CDFG (2010) meaning it is globally secure and secure in the state. Flat-topped buckwheat is not considered special-status by CDFW (CDFG 2010); however, mitigation is required by the County (2010b).

### 3.1.4 Coastal Sage–Chaparral Transition (37G00)

Coastal sage–chaparral transition habitats include a mix of sclerophyllous, woody chaparral species and drought-deciduous, malacophyllous sage scrub species (Oberbauer et al. 2008). Chamise and California sagebrush (*Artemisia californica*) are dominant in equal cover. Generally, laurel sumac, black sage, and lemonade sumac (*Rhus integrifolia*) are more common in coastal sage scrub, while *Ceanothus* spp. and mission manzanita (*Xylococcus bicolor*) are more common in chaparrals. Areas mapped as coastal sage–chaparral transition within the project Site are dominated by California sagebrush with some chamise. Within the project Site, there are 0.4 acre mapped east of Gist Road (Figure 4).

The *Artemisia californica* (California sagebrush scrub) alliance has a rank of G5S5 by CDFW (CDFG 2010) meaning it is globally secure and secure in the state. Coastal sage–chaparral transition is not considered special-status by CDFW (CDFG 2010) but requires mitigation per the County (2010c).

### 3.1.5 Granitic Southern Mixed Chaparral (37121), Mafic Southern Mixed Chaparral (37122)

Granitic southern mixed chaparral (37121) is characterized by broad-leaved sclerophyll shrubs ranging from 5 to 10 feet in height (Oberbauer et al. 2008). Granitic southern mixed chaparral is characterized by chamise (*Adenostoma fasciculatum*), manzanita (*Arctostaphylos* spp.), white fairy-lantern (*Calochortus albus*), ceanothus (*Ceanothus* spp.), and other species with patches of bare soil. This habitat often occurs on dry, rocky, often steep slopes with little soil and moderate temperatures.

Mafic southern mixed chaparral (37122) is similar to granitic southern mixed chaparral, but it occurs on mafic (gabbro), metavolcanic, or metasedimentary derived soils (Los Posas and Boomer Soils) in the coastal region. These soils can have a very red or dark brown appearance with an affiliation for sensitive plant species and are rarer than granitic types of chaparral.

Southern mixed chaparral occurs throughout the majority of the Open Space Preserve totaling approximately 1,073.8 acres, including approximately 58 acres of mafic southern mixed chaparral where it occurs on Las Posas series soils within the northeastern most portion of the project Site, surrounding and occurring west of North Twin Oaks Valley Road (Figure 4).



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Disturbed granitic southern mixed chaparral (12 acres) occurs east of Gist Road, along the abandoned airstrip, and within the old rock quarry (Figure 4).

Areas mapped as southern mixed chaparral are dominated by chamise. The *Adenostoma fasciculatum* (chamise) alliance has a rank of G5S5 by CDFW (CDFG 2010) meaning it is globally secure and secure in the state. Southern mixed chaparral (including disturbed) is not considered special-status by CDFW; however, southern mixed chaparral requires mitigation per the County (2010c).

### 3.1.6 Scrub Oak Chaparral (37900)

Scrub oak chaparral habitats are composed of a dense, evergreen chaparral that is typically dominated by scrub oak (*Quercus* spp.) with birchleaf mountain mahogany (*Cercocarpus betuloides*). In San Diego, scrub oak (*Quercus berberidifolia*) is usually the dominant species with over 50 percent vegetation cover usually occurring in small patches within a variety of other vegetation communities (Oberbauer et al. 2008). Within the Open Space Preserve, there are 5.1 acres mapped in two areas along the eastern boundary (west of I-15) and directly north of the water tower southeast of Camino Mayor (Figure 4).

Areas mapped as scrub oak chaparral within the Open Space Preserve are dominated by scrub oak. The *Quercus berberidifolia* (Scrub oak chaparral) alliance has a rank of G4S4 in CDFW (CDFG 2010), meaning it is apparently secure globally and in the state. Scrub oak chaparral is not considered special-status by CDFW; however, it requires mitigation per the County (2010c).

### 3.1.7 Coast Live Oak Woodland (71160)

Coast live oak woodland is dominated by a single evergreen species: coast live oak (*Quercus agrifolia*) with a canopy height reaching 33 to 82 feet in height (Oberbauer et al. 2008). The shrub layer is poorly developed, but may include toyon (*Heteromeles arbutifolia*), gooseberry (*Ribes* spp.), laurel sumac, or dominated blue elderberry (*Sambucus nigra* ssp. *caerulea*). Coast live oak woodland occurs throughout the Open Space Preserve with three areas mapped east of the water tower located southeast of Camino Mayor, west along North Twin Oaks Valley Road, and one location east of Gist Road (Figure 4).

Areas mapped as coast live oak woodland within the project Site are dominated by coast live oak. The *Quercus agrifolia* (coast live oak woodland) alliance has a rank of G5S4 by CDFW (CDFG 2010), meaning it is globally secure and apparently secure in the state. Coast live oak woodland is not considered special-status by CDFW; however, it requires mitigation per the County (2010c).

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### 3.1.8 Freshwater Marsh (52400)

Freshwater marshes are typically dominated by perennial, emergent monocots to 13 to 16 feet tall often forming completely closed canopies. Characteristic species include species such as sedges (*Carex* spp.), flatsedges (*Cyperus* spp.), bulrush (*Scirpus* spp.), cattail (*Typha* spp.), and rushes (*Juncus* spp.). Within the Open Space Preserve, there is one 0.07-acre area mapped west of North Twin Oaks Valley Road (Figure 4).

Areas mapped as freshwater marsh within the project Site are dominated by cattails. The *Typha* (*angustifolia*, *domingensis*, *latifolia*) (cattail marshes) alliance has a rank of G5S5 by CDFW (CDFG 2010) meaning it is globally secure and secure in the state. Freshwater marsh is not considered special-status by CDFW; however, it requires mitigation per the County (2010c).

### 3.1.9 Southern Coast Live Oak Riparian Forest (61310)

Southern coast live oak riparian forests (61310) consists of dense riparian forests dominated by evergreen sclerophyllous trees (e.g., coast live oak) with a closed, or nearly closed, canopy (Oberbauer et al. 2008). This community appears to be richer in herbs and poorer in understory scrubs than other riparian communities and is a homogenous mixture of coast live oak woodland and southern riparian woodland. Southern coast live oak riparian forest includes coast live oak communities found along rivers, creeks, and drainages throughout San Diego County. Southern coast live oak riparian forest is mapped in three locations including west along North Twin Oaks Valley Road, along the northwestern portion of the Open Space Preserve, and along the southeastern boundary (west of I-15) (Figure 4).

Areas mapped as oak riparian forest within the project Site are dominated by coast live oak. The *Quercus agrifolia* (Coast live oak woodland) alliance has a rank of G5S4 by CDFW (CDFG 2010) meaning it is globally secure and apparently secure in the state. Southern coast live oak riparian forest is not considered special-status by CDFW; however, it requires mitigation per the County (2010c).

### 3.1.10 Mulefat Scrub (63310)

Mulefat scrub is a depauperate, tall, herbaceous riparian scrub strongly dominated by mulefat (*Baccharis salicifolia*). This early seral community is maintained by frequent flooding. Site factors include intermittent stream channels with fairly coarse substrate and moderate depth to the water table (Oberbauer et al. 2008). This community type is widely scattered along intermittent streams and near larger rivers. Within the Open Space Preserve, there is one small patch along the abandoned airstrip (Figure 4).

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Areas mapped as mulefat scrub within the project Site are dominated by mulefat. The *Baccharis salicifolia* (mulefat thickets) alliance has a rank of G5S4 by CDFW (CDFG 2010) meaning it is globally secure and apparently secure in the state. Mulefat scrub is not considered special status by the CDFW; however, mitigation is required per the County (2010c).

### 3.1.11 Southern Willow Scrub (63320)

Southern willow scrub is a dense, broad-leaved, winter-deciduous riparian thicket dominated by several willow species (*Salix* spp.), with scattered emergent Fremont's cottonwood (*Populus fremontii*) and western sycamore (*Platanus racemosa*). This community was formerly extensive along the major rivers of coastal southern California, but now much reduced (Oberbauer et al. 2008). Southern willow scrub is mapped throughout the Open Space Preserve along North Twin Oaks Valley Road, north of the abandoned airstrip, and east of Gist Road (Figure 4).

Areas mapped as southern willow scrub within the project Site are dominated by red willow (*Salix laevigata*). The *Salix laevigata* (red willow thickets) alliance has a rank of G3S3 by CDFW (CDFG 2010) meaning it is vulnerable to extirpation or extinction globally and in the state. Southern willow scrub is considered special status by CDFW; however, mitigation is required per the County (2010c).

### 3.1.12 Southern Willow Scrub/Tamarisk Scrub (63320/ 63810)

Southern willow scrub/tamarisk scrub contains characteristics of both southern willow scrub (described above) and tamarisk scrub communities. Tamarisk scrub community is a weedy, virtual monoculture of any of several tamarisk species, usually supplanting native vegetation following major disturbance (Oberbauer et al. 2008). This community type typically occurs on sandy or gravelly braided washes or intermittent streams, often in areas where high evaporation increases the stream's saltiness. Tamarisk is a strong phreatophyte and a prolific seeder which predispose the species to be aggressive competitors in disturbed riparian corridors. This community type is widely scattered and increases its range throughout the drier parts of California. Within the Open Space Preserve, this community is mapped within the abandoned airstrip (Figure 4).

The area mapped as southern willow scrub/tamarisk scrub within the project Site is dominated by both red willow and tamarisk. In addition to the southern willow scrub description above, the *Tamarix* spp. (tamarisk thickets) semi-natural stands does not have a global or state rank and is not considered special status by the CDFW (CDFG 2010); however, both southern willow scrub and tamarisk scrub require mitigation per the County (2010c).

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### 3.1.13 Eucalyptus Woodland (79100)

Eucalyptus habitats range from single species thickets with little or no shrubby understory to scattered trees over a well-developed herbaceous and shrubby understory (Oberbauer et al. 2008). In most cases, eucalyptus forms a dense stand with a closed canopy. Eucalyptus species produces a large amount of leaf and bark litter, the chemical and physical characteristics which limit the growth of other species in the understory. Within the Open Space Preserve, one area is mapped along the northwestern boundary of the project Site, west of North Twin Oaks Valley Road and east of Satin Doll Lane (Figure 4).

The areas mapped as Eucalyptus woodlands within the project Site is dominated by *Eucalyptus* spp. The *Eucalyptus* (*globulus*, *camaldulensis*) (eucalyptus groves) semi-natural stands does not have a global or state rank and not considered special status by CDFW (CDFG 2010); no mitigation is required per the County (2010c).

### 3.1.14 Orchard and Vineyards (18100)

Orchards and vineyards are usually comprised of artificially irrigated habitat dominated by one (or sometimes several) tree or shrub species (Oberbauer et al. 2008). The trees are typically low and bushy with an open understory. Vineyards include single species crops planted in rows that are usually supported by wood and wire trellises. Understory growth of both orchard and vineyard crops often include short grasses and other herbaceous plants between rows. Within the Open Space Preserve, non-commercial orchard crops are mapped in four locations directly along the Open Space Preserve boundary (northeast of Deer Springs Place), north of Camino Califia, east of Camino Mayor, and west of North Twin Oaks Valley Road) (Figure 4). Orchard and vineyards are not considered special status by the CDFW, and no mitigation is required per the County (2010c).

### 3.1.15 Disturbed Habitat (11300)

Disturbed habitats are areas that have been physically disturbed and no longer recognizable as native or naturalized vegetation association (Oberbauer et al. 2008). These areas may continue to retain soil substrate. If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals or ruderal exotic species. Examples of these areas may include graded landscapes or areas, graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, areas repeatedly cleared for fuel management, or repeatedly used areas that prevent revegetation (e.g., parking lots, trails that have persisted for years). There are 36 acres mapped throughout the Open Space Preserve that consist of dirt trails, an abandoned airstrip, the old rock quarry, and other disturbed areas (Figure 4).

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Disturbed habitat is not considered special-status by CDFW (CDFG 2010), and no mitigation is required per the County (2010c).

### 3.1.16 Non-native Grasslands (42200)

Non-native grasslands consists of dense to sparse cover of annual grasses with flowering culms between 0.5 to 3 feet in height (Oberbauer et al. 2008). In San Diego County the presence of (*Avena* spp.), bromes (*Bromus* spp.), stork's bill (*Erodium* spp.), and mustard (*Brassica* spp.) are common indicators. Within the Open Space Preserve, non-native grasslands are mapped along North Twin Oaks Valley Road and along the Open Space Preserve boundary (east of Gist Road) (Figure 4).

Non-native grassland has a rank of G4S4 by CDFW (CDFG 2010), meaning it is apparently secure globally and in the state. Because non-native grassland can provide habitat for a variety of species, the County requires mitigation for impacts to it; therefore, it is considered special-status by the County (2010c).

## 3.2 Jurisdictional Wetlands and Waters

During the 2013 jurisdictional wetlands delineation performed by Dudek, approximately 7.61 acres of potential jurisdictional resources, out of 13.04 total acres within the entire project Site, were identified within the Open Space Preserve. These jurisdictional resources are under the jurisdiction of the ACOE, the RWQCB, CDFW, and the County of San Diego. Specifically, 0.23 acre are under the joint jurisdiction of the above-listed agencies, 5.86 are under jurisdiction of CDFW and the County, while the remaining 1.52 acres are solely under the jurisdiction of CDFW. In addition, 3.42 acres of the 5.33 acres of non-wetland waters within the project Site occur within the Open Space Preserve. These waters are under the jurisdiction of the ACOE, RWQCB, and CDFW. This is based on the preliminary jurisdictional delineation approach described in the Biological Resources Technical Report for the proposed project prepared by Dudek (2017a).

## 3.3 Plant Species

Four special-status plant species were detected within the Open Space Preserve: summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), Munz's sage (*Salvia munzii*), Engelmann oak (*Quercus engelmannii*), and ashy spike-moss (*Selaginella cinerascens*).

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### **Summer Holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), List A**

Summer holly is a California Rare Plant Rank (CRPR) 1B.2 (CNPS 2014) and County List A species (County 2010b). This evergreen shrub blooms from April to June. It occurs in chaparral and cismontane woodlands at elevations of 100–1,800 feet (CNPS 2014). Within the Open Space Preserve, numerous individuals of summer holly were detected within southern mixed chaparral and one occurrence was detected in disturbed southern mixed chaparral (Figure 4).

### **Munz's Sage (*Salvia munzii*), List B**

Munz's sage is a CRPR 2.3 and County List B species. This perennial evergreen shrub typically blooms from February to April. It occurs in chaparral and coastal scrub habitat types, at elevations of 394–3,494 feet (CNPS 2014). One population, consisting of four individuals, was detected within the northern portion of the Open Space Preserve east of North Twin Oaks Valley Road in southern mixed chaparral, but it likely occurs throughout other suitable habitat on site (Figure 4). In addition, fragrant sage (*Salvia clevelandii*) was also observed throughout the project area. This species is not considered special-status and therefore was not mapped during the 2013 focused surveys.

### **Engelmann Oak (*Quercus engelmannii*), List D**

Engelmann oak is a CNPS 4.2 and County List D species. This deciduous tree blooms from March to June. It occurs in chaparral, cismontane, woodland, riparian woodland, and valley and foothill grasslands at elevations of 394–4,265 feet. Within the Open Space Preserve, one occurrence was detected within the northwestern corner and seven individuals were detected within the north-central portion (Figure 4). All occurred within southern mixed chaparral.

### **Ashy Spike-Moss (*Selaginella cinerascens*), List D**

Ashy spike-moss is a CNPS 4.1 and County List D species. This perennial rhizomatous herb occurs in chaparral and coastal scrub at elevations of 66–2,100 feet. Within the Open Space Preserve, two occurrences were detected in the north-central portion within southern mixed chaparral (Figure 4).

## **3.4 Fauna**

The proposed project area supports habitat for common upland and riparian species. Chaparral, coastal scrub, woodland, riparian, and non-native habitats (e.g., eucalyptus and non-native grassland) within the project area provide foraging and nesting habitat for migratory and resident bird species and other wildlife species. Riparian streams or puddles within the rock quarry may provide refuge for amphibian species. Rock outcroppings, chaparral, coastal scrub, and

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woodlands within the project area provide cover and foraging opportunities for wildlife species, including reptiles and mammals.

There were 132 wildlife species observed on the proposed project Site. Species richness in the project area is moderate due to the property size and amount of undeveloped native land. Species richness is generally increased with the presence of more habitat types and ecotones, but the project Site is primarily one habitat type (89 percent is chaparral). Although species richness is moderate, the number of species and the wildlife population levels (i.e., number of individuals) is typical for undeveloped areas in this region, particularly those areas that support the habitat types on site.

Twenty special-status wildlife species were detected within the proposed project Site: western spadefoot (*Spea hammondi*), Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), red-diamondback rattlesnake (*Crotalus ruber*), San Diego ringneck snake (*Diadophis punctatus similis*), Blainville's horned lizard (*Phrynosoma blainvillei*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), Bell's sage sparrow (*Artemisospiza [Amphispiza] belli belli*), red-shouldered hawk (*Buteo lineatus*), turkey vulture (*Cathartes aura*), Nuttall's woodpecker (*Picoides nuttallii*), California gnatcatcher, yellow warbler (*Setophaga petechia*), western bluebird (*Sialia mexicana*), common barn owl (*Tyto alba*), San Diego desert woodrat (*Neotoma lepida intermedia*), mule deer (*Odocoileus hemionus*), and monarch butterfly (*Danaus plexippus*).

### 3.5 Habitat Connectivity and Wildlife Corridors

The proposed project is surrounded by undeveloped portions of the Merriam Mountains and adjacent to and east of another large undeveloped land form, the San Marcos Mountains (Figure 5). The northern and southern Merriam Mountains, along with the adjacent San Marcos Mountains, represent the largest substantial-sized, essentially native blocks of habitat located west of I-15 in central San Diego County. The site is currently undeveloped and is intersected by a number of dirt roads and trails that provide connectivity to surrounding undeveloped landscapes. Based on the existing conditions of the site, wildlife can generally move through the project Site relatively unencumbered. Wildlife movement within the proposed open space design will occur within three large blocks of open space and four corridors located between development (Figure 5). Open space blocks of habitat (Blocks 1, 2, and 3) are internally linked through Corridors A through D as shown on Figure 5. Corridor A includes an approximately 1,000-foot by 400-foot linkage. Corridor B includes an approximate 700-foot by 750-foot area. Corridor C includes an approximately 1,500-foot by 800-foot linkage. Corridor D includes an approximately 2,250-foot by 200-foot linkage. All of these include varying degrees of fuel modification, which should allow for better wildlife mobility than the dense mature chaparral

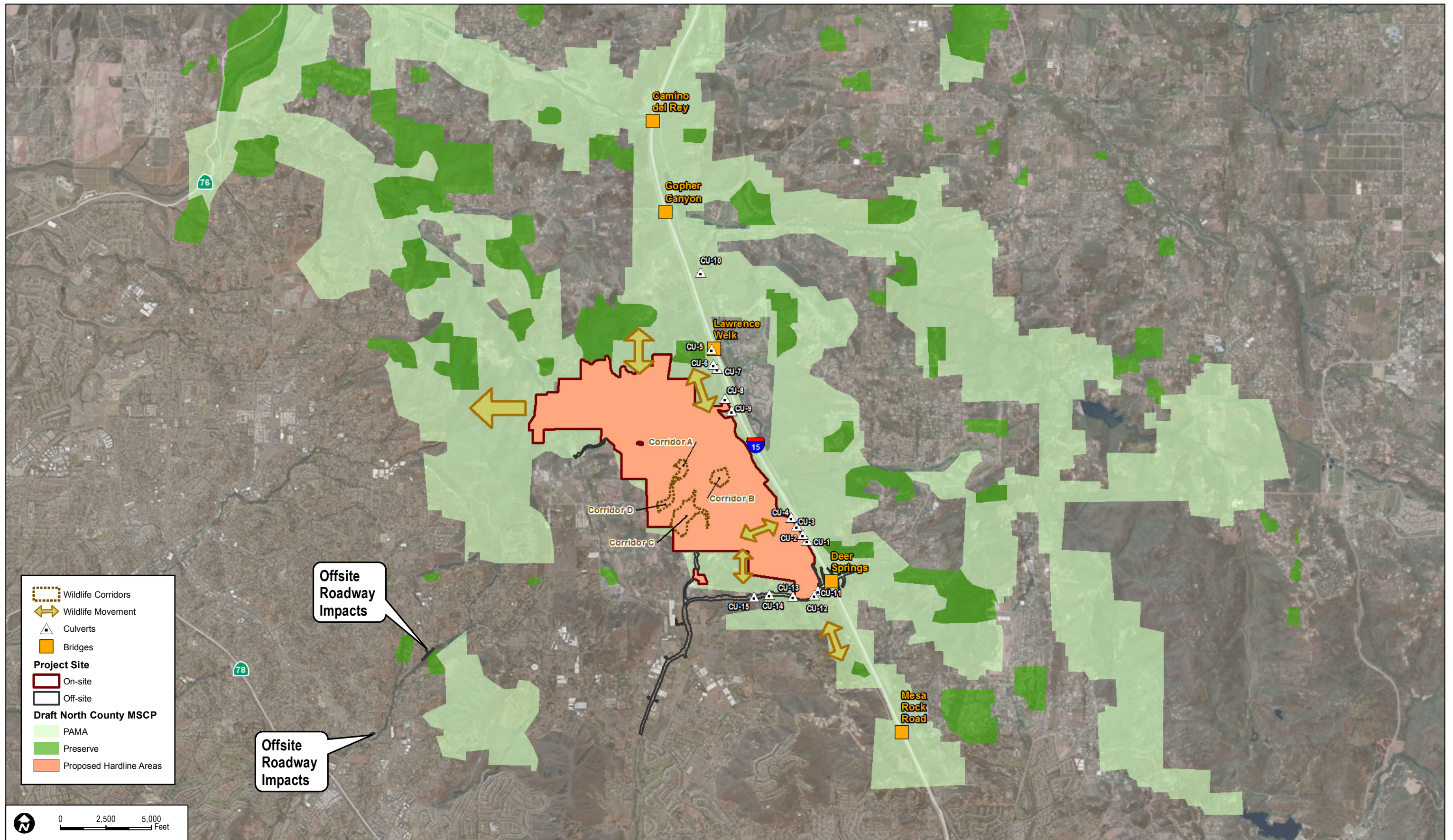
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which covers most of the intact open space. Corridor B connects Block 2 with Block 3 across an internal road. Block 2 is connected to Block 1, without any barriers, along the east side of the project area. Corridor C connects off-site PAMA to Block 3 across an internal road. Corridor A provides a secondary connection to off-site PAMA to the south and west, by allowing wildlife to cross another internal road and Corridor D. Corridors A and D also provide an additional linkage from Block 1 to off-site areas to the southwest.

The open space configuration for the Newland Sierra project will form a centroid of connectivity to the north, south, east, and west: north along the I-15 corridor and then west into the San Luis Rey River area; south along I-15 into Escondido; east across I-15 to the Escondido and other eastern areas; and west through the San Marcos Mountains and then north into the San Luis Rey River area and beyond. Along I-15, there are four bridges under I-15 which might convey wildlife. These occur at (1) Mesa Rock Road, approximately 1.8 miles south of the property; (2) Lawrence Welk Court, adjacent to the northern boundary of the property; (3) Gopher Canyon Road, approximately 1.4 miles north of the property; and (4) Camino Del Rey, approximately 3 miles to the north. All four of these potential crossing areas are bridge structures that pass under I-15 with north and south-bound highway lanes, are insulated from highway noise, are connected to native habitat and PAMA areas, and experience low traffic volumes. An additional crossing structure, in the form of an overpass, is located at the southern end of the property at Deer Springs Road. This is a focal point of activity and likely provides little wildlife movement benefit until the late night and early morning hours when traffic and human activity wanes. In September 2014, Dudek reviewed the entire project boundary with I-15 and Deer Springs road to note the location and diameters of potential undercrossings.





SOURCE: Bing 2016; County of San Diego 2014

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**FIGURE 5**  
**Habitat Connectivity and Wildlife Corridors**



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Additionally, the previously discussed I-15 bridges were documented as were the locations of fencing adjacent to I-15 and culverts. These data are presented within Tables 4 and 5, as well as on Figure 5. Chain-link fencing appears to only occur at the Deer Springs Road, Mesa Rock Road, and Gopher Canyon Road crossing areas. Otherwise, five-strand barbed-wire fencing runs along both sides of I-15. Therefore, it is likely that larger wildlife make frequent at-grade crossings of I-15 during the late-night and early morning periods when traffic volumes are reduced.

**Table 4  
I-15 Bridge Dimensions**

	Total Approximate Bridge Width (East to West)	Total Approximate Bridge Length (North to South)	Total Approximate Opening Distance Between I-15 North and I-15 South (East to West)	Total Approximate Max Height of Bridges (pavement to bridge bottom)	Comments
Camino Del Rey	237 ft	140 ft	63 ft	60 ft	5-strand barbwire fencing installed in the east to west direction, on both the north and south sides of Camino del Rey Road. Fencing terminates at Camino del Rey and Highway 395 intersection.
Gopher Canyon	245 ft	148 ft	95 ft	60 ft	No fencing exists under bridge crossing.
Lawrence Welk Lane	240 ft	110 ft	100 ft	40 ft	5-strand barbwire fencing installed in the east to west direction, on both the north and south sides of Lawrence Welk Road.
Deer Springs Road	180 ft	50 ft	N/A	60 ft	Deer Springs Road bridge crosses over I-15. 6-ft chainlink fence installed in north/south direction on east and west sides of I-15.

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**Table 4**  
**I-15 Bridge Dimensions**

	Total Approximate Bridge Width (East to West)	Total Approximate Bridge Length (North to South)	Total Approximate Opening Distance Between I-15 North and I-15 South (East to West)	Total Approximate Max Height of Bridges (pavement to bridge bottom)	Comments
Mesa Rock Road	212 ft	130 ft	63 ft	50 ft	6-foot chain link fence installed in east/west direction on north and south sides of Mesa Rock Road.

ft = feet

**Table 5**  
**Culvert Dimensions Adjacent to Sierra Project Site**

ID	Location	Type	Width	Height	Length	Substrate
CU-1	I-15	Round concrete culvert	4 ft	4 ft	Est. 350 feet	Concrete
CU-2	I-15	Round concrete culvert	2 ft	2 ft	Est. 350 feet	Concrete
CU-3	I-15	Round corrugated metal culvert	2 ft	2 ft	Est. 350 feet	Metal
CU-4	I-15	Round corrugated metal culvert	4 ft	4 ft	Est. 350 feet	Metal
CU-5	I-15	Round corrugated metal culvert	2 ft	2 ft	Est. 350 feet	metal
CU-6	I-15	Round corrugated metal culvert	2 ft	2 ft	Est. 350 feet	metal
CU-7	I-15	Round corrugated metal culvert	3 ft	3 ft	Est. 350 feet	metal
CU-8	I-15	Round corrugated metal culvert	4 ft	4 ft	Est. 350 feet	metal/leaves/dirt
CU-9	I-15	Round concrete culvert	4 ft	4 ft	Est. 350 feet	concrete
CU-10	Champagne Rd	Half-round concrete culvert	4 ft	4 ft	30 ft	dirt/leaves
CU-11	Deer Springs Rd	Half-round, corrugated metal culvert	1 ft	1 ft	30 ft	
CU-12	Deer Springs Rd	Corrugated metal round	1.5 ft	1.5 ft	30 ft	dirt
CU-13	Deer Springs Rd	Corrugated metal round	2ft	2ft	30 ft	dirt
CU-14	Deer Springs Rd	Corrugated metal round	2.5 ft	2.5 ft	30 ft	dirt
CU-15	Deer Springs Rd	Corrugated metal round	2.5 ft	2.5 ft	30 ft	metal

ft = feet; Est. = estimate

These culverts are located along I-15 and Deer Springs Road and demonstrate that wildlife can move in some areas in an east–west direction, as well as north–south. The areas where wildlife are likely to move through depend on the wildlife species and their preferred habitat and movement patterns. These are discussed in more detail below.

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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The majority of the habitat on site is chaparral, is relatively dense, and can support a variety of chaparral species. Of 37 mammal species known to regularly occur in California chaparral communities (Quinn 1990), ten have a potential to occur in the Open Space Preserve are found primarily in mature chaparral,<sup>1</sup> and are uncommon or absent in other habitat types. These ten species include the brush rabbit (*Sylvilagus bachmani*), Merriam's chipmunk (*Tamias merriami*), California pocket mouse (*Chaetodipus californicus*), California deer mouse (*Peromyscus californicus*), dusky-footed woodrat (*Neotoma fuscipes*), agile kangaroo rat (*Dipodomys agilis*), desert cottontail (*Sylvilagus audubonii*), gray fox (*Urocyon cinereoargenteus*), western spotted skunk (*Spilogale gracilis*), and bobcats (*Lynx rufus*) (Quinn 1990). Of these ten species, four were observed during the PSBS (2003) wildlife corridor study and more recent focused surveys, and include gray fox, brush rabbit, bobcat, and agile kangaroo rat.

Although many species are known to utilize mature chaparral, some chaparral may be very dense and difficult for medium to larger wildlife, such as mule deer, to maneuver through. As such, dirt access roads and trails may serve as a primary route for medium to larger wildlife movement. Research conducted on cougars (i.e., mountain lions; *Puma concolor*) in Southern California have found that cougars consistently used travel paths less rugged than their general surroundings and that dirt roads may even promote cougar movement (Dickson et al. 2005). In addition, the most frequently used travel routes for dispersing cougars in the Santa Ana Mountains was found to be scour zones in stream channels, ridgeline routes, and dirt roads (Beier 1995). A similar result was found in Arizona and Utah where cougars crossed unimproved dirt roads more frequently than improved dirt roads and hard surfaced roads (Van Dyke et al. 1986) suggesting that the intertwining and abundant dirt roads located within the proposed open space would provide great facilitation to wildlife movement, especially those of large mammals, through the dense chaparral that characterizes a large portion of this site. Similar results have been found by Dudek during a number of movement studies conducted in the Santa Ana Mountain foothills, Transverse Ranges, and Sierra Nevada foothills.

Similarly, dirt roads may also facilitate movement of coyotes (*Canis latrans*) (PSBS 2003), gray foxes (PSBS 2003), bobcats (PSBS 2003; Lovallo and Anderson 1996) mule deer, and other species. Dirt roads have also been shown to provide potentially important landscape linkages for smaller wildlife to pass through unsuitable habitat to more suitable habitat (Brock and Kelt 2004). For example, California ground squirrels may use trails and drainage systems to disperse from colonies (Wiggett and Boag 1989). San Diego pocket mice (*Chaetodipus fallax*) and cactus mice (*Peromyscus eremicus*) will utilize low-use dirt trails but avoid low-use paved roads of similar width and rural two-lane highways (Brehme et al. 2013). Brock and Kelt (2004) found that the

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<sup>1</sup> Mature chaparral is characterized by shrubs approximately 3 to 10 feet in height and dense vegetation cover of 50 to 100 percent (Quinn 1990).

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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federally endangered Stephens' kangaroo rat (*Dipodomys stephensi*) used dirt roads extensively to move great distances through otherwise inhospitable habitat to find more suitable habitat.

It should be noted that although mountain lions have been anecdotally reported as occurring on site, as described in the *Merriam Mountains Specific Plan Final EIR* (County 2010c), the dense chaparral and human influence likely reduce their utilization of the site to brief periods of time and at broad intervals. The main prey item for mountain lion is mule deer, which prefers a mix of more open vegetation to forage in with denser habitat to escape in. Since mule deer have only been occasionally recorded within the site, the general lack of suitable prey further reduces the potential for mountain lions to utilize the site.

### 3.6 Overall Biological Value

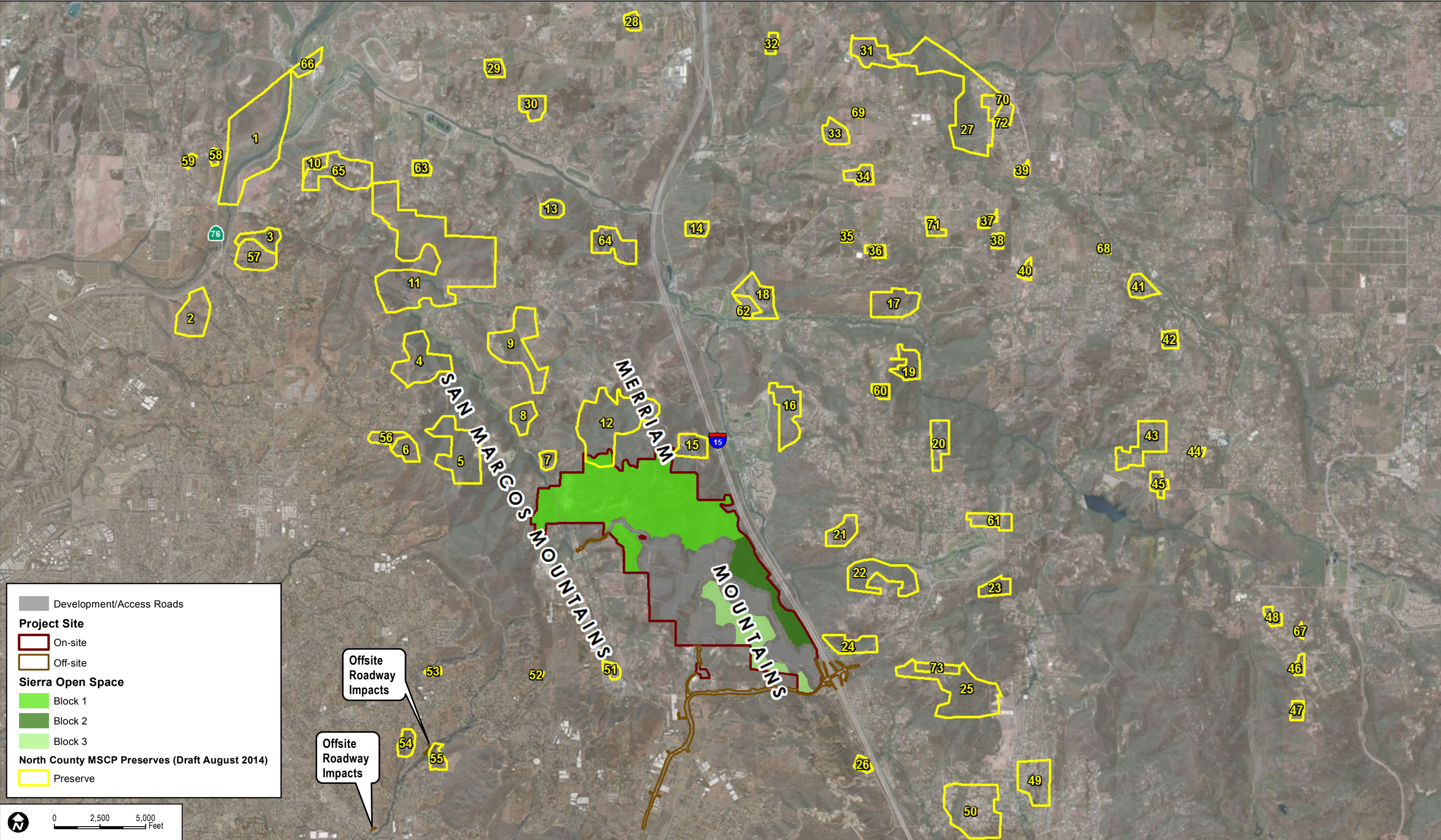
As described in the above sections, the on-site Open Space Preserve supports a variety of native vegetation communities, non-wetland ephemeral waters, rare plants, special-status wildlife species, and wildlife movement. It is adjacent to contiguous areas of undeveloped habitat, providing habitat connectivity to PAMA areas (Figure 6).

### 3.7 Enhancement and Restoration Opportunities

Revegetation is proposed in areas that will be temporarily impacted by the proposed project, but which will remain within the Open Space Preserve. The Conceptual On-Site Mitigation Restoration Plan for the Newland Sierra Project (Dudek 2017b) provides details regarding the restoration of 7.5 acres of temporary impacts to coastal sage scrub, southern mixed chaparral and disturbed habitat. Preliminary estimates indicate that there are approximately 1.45 acres of upland disturbed coastal sage scrub restoration and approximately 6.05 acre of southern mixed chaparral restoration that could be achieved within the temporary disturbance and disturbed habitat areas on site. Thus, overall there would be a total of approximately 7.5 acres of mitigation restoration/revegetation acreage that will be provided within the entire biological open space area on site. The remainder of the upland mitigation requirement would be satisfied through off-site habitat acquisition, preservation, and revegetation as required.

In addition, the restoration plan contains a Horkelia Relocation Plan for proposed direct impacts to 62 Ramona Horkelia (*Horkelia truncata*) individuals. Impacts to the 62 individual Ramona horkelia plants will be mitigated for through salvaging, relocation and associated revegetation activities, as part of the on-site mitigation program (Dudek 2016b). Mitigation for this species will also include additional seeding and container planting, as a component of the revegetation of an abandoned roadway within the southeastern portion of the project open space. This mitigation location is in proximity to the location of the southerly two occurrences of this species. This location was chosen for compatibility with similar soils type, exposure and growing conditions for this species.





SOURCE: Bing 2016; County of San Diego 2014

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FIGURE 6  
Proposed Open Space Design and MSCP Preserves



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# On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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## 4 BIOLOGICAL RESOURCE MANAGEMENT

This CRMP identifies activities to manage and preserve the sensitive biological resources within the Open Space Preserve. The main goal is to preserve the 1,209.1 acres of on-site open space described, including the sensitive plant and animal species they support.

### 4.1 Management Goals

**Goal: To preserve and manage lands to the benefit of the flora, fauna, and native ecosystem functions reflected in the natural communities occurring within the Open Space Preserve.**

A baseline inventory has been collected during the evaluation of the Project under CEQA. As such, ongoing species and habitat monitoring shall occur in accordance with County and regional standards. These standards typically include vegetation mapping every 5 years. Habitat maintenance may be required if vegetation mapping indicates habitat conversion that is detrimental to the preservation of native ecosystem functions. Specific management tasks are described in the following section, 4.2 Biological Management Tasks.

### 4.2 Biological Management Tasks

The biological management tasks associated with the Open Space Preserve are outlined in Table 2 of this report. This section includes a description of each of the tasks required for management of the open space.

#### 4.2.1 Update Biological Mapping and Aerial Photography

Every 5 years, the Resource Manager will update the vegetation map on a current aerial photograph of the site. This task includes mapping vegetation over the entire open space and updating the aerial photography.

#### 4.2.2 Removal of Invasive Species

The Resource Manager will map occurrences of perennial, non-native species that have a rating of moderate or high by the California Invasive Plant Council. Weed control measures will be implemented, as necessary, to prevent expansion of existing or establishment of new exotic species in the Open Space Preserve.

If the use of herbicide is deemed necessary, application should be minimal and may only occur in compliance with all federal and state laws. Use of chemical herbicides should be determined in coordination with the County Department of Environmental Health (DEH). All herbicide use

## On-Site Conceptual Resource Management Plan for the Newland Sierra Project

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will be applied by backpack sprayers or stump painting directly on target weeds and will involve short-duration, biodegradable chemicals.

### 4.2.3 Predator/Pest Control

The Resource Manager will evaluate the need for predator/pest control and identify appropriate measures (e.g., pesticides, traps) to reduce/eliminate the problem. In general, predator control will be conducted as needed based on adaptive measures for special-status species (described in Section 4.3). If significant predator/pest eradication actions are determined to be necessary, the Resource Manager will notify the appropriate regulatory oversight agencies. This task includes annual evaluation and set up of traps, if necessary, for feral cats and/or other predators that are determined by the Resource Manager to have a detrimental effect on managed species.

### 4.2.4 Species Surveys

Several special-status species were documented throughout the project Site, including in the Open Space Preserve. Special-status plant populations documented within the Open Space Preserve include summer holly, Munz's sage, Engelmann oak, and ashy spike-moss. Numerous special-status wildlife species were documented in the project area and are listed in Section 3.4.

Protective measures to monitor and manage these species should be implemented, as necessary, to help ensure the persistence of preserved biological resources in the open space. The following surveys shall be conducted every 5 years for special-status plant and wildlife species.

- **California gnatcatcher.** Surveys shall follow the USFWS California gnatcatcher 1997 presence/absence survey protocol (USFWS 1997), or the most current protocol available. A minimum of three surveys are required within suitable habitat.
- **Rare plant surveys.** Rare plant surveys shall be conducted within open space, with emphasis on surveying the known locations of rare plants. Additional locations of plants that are state- or federally listed, have a CRPR 1B and 2, and/or are County lists A–D will be recorded. All special-status species locations will be mapped and the population estimated.

### 4.2.5 Species Management

Based on the species surveys described earlier, management tasks for the rare plant populations and special-status wildlife species may be required. This includes weed control and predator control. Predator control is not anticipated at this time; however, if predators such as feral cats, raccoons, or other species cause nest failure or other detrimental effects on wildlife species, trapping or other predator control methods may be used.

## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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### **4.2.6 Monitoring**

This plan includes monthly monitoring of the open space preserve. The County requires monthly monitoring of the open space. The Resource Manager shall visit the open space each month in order to monitor the overall conditions of the open space and determine if any management tasks are required.

### **4.3 Adaptive Management**

The resource manager is responsible for interpreting the results of site monitoring to determine the ongoing success of the RMP. If it is necessary to modify the plan between regularly scheduled updates, plan changes shall be submitted to the County and wildlife agencies for approval, as required.

### **4.4 Operations, Maintenance, and Administrative Tasks**

Table 2 and Section 4.2 describe a list of tasks such as baseline inventory, vegetation mapping, and regular visits to be conducted by the resource manager. Regular visits will occur monthly and annually.

#### **4.4.1 Goals**

**Goal: To manage, maintain, and administer the proposed project in an ongoing setting to ensure the integrity of the preserved Open Space Preserve.**

#### **4.4.2 Tasks**

The general operations, maintenance, and administrative tasks to be conducted by the resource manager will include the following tasks:

##### **4.4.2.1 Annual Monitoring Reports**

A letter report will be submitted to the County that will summarize the overall condition of vegetation communities and sensitive species in the Open Space Preserve, outline proposed management tasks for the following year, and provide results of management activities proposed in the previous report. Submitted annually by the end of January, this letter report will compare the most recent data with those collected in previous years, evaluate sensitive species status and local wildlife corridor use, and outline appropriate remedial measures, per County guidelines. The report will also address any adaptive management (changes) resulting from previous monitoring results, and provide a methodology for measuring the success of adaptive management. Copies of California Natural Diversity Database forms submitted to the State for

## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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any new sensitive species observations or significant changes to species previously reported will be included, as will copies of invasive plant species forms submitted to the State or County. Fees for County review will also be included with submittal of the annual report.

The results of all updated vegetation mapping (every 5th year) and sensitive species monitoring will be included in the appropriate annual letter reports.

### **4.4.2.2 Management Plan Review**

This RMP will be reviewed every 5 years to determine the need for revisions or updates. Due to changing conditions within the Open Space Preserve, it may be necessary to revise the tasks outlined in this plan to ensure continued success of the stated goals.

### **4.4.2.3 Access Control**

To prevent human-induced degradation of the Open Space Preserve due to illegal occupancy, trespassing (especially off-highway vehicle [OHV] activity), removal of resources, or dumping of trash or debris, the resource manager will restrict public access to the Open Space Preserve. Permanent signage will be posted consistent with California Penal Code requirements at locations of unauthorized trails entering the Open Space Preserve and shall be maintained by the resource manager. Open space signage shall be installed where open space is adjacent to roadways and recreational areas and shall be corrosion resistant, a minimum of 6 inches by 9 inches, on posts not less than 3 feet in height from the ground surface, and must state the following:

#### **Sensitive Environmental Resources**

##### **Area Restricted by Easement**

Entry without express written permission from the County of San Diego is prohibited. To report a violation or for more information about easement restrictions and exceptions, contact the County of San Diego,  
Planning & Development Services  
Reference: (PDS2015-ER-15-08-001)

Proposed sign locations are shown in Figure 7.

### **4.4.2.4 Fencing/Barriers**

Because the Open Space Preserve parcels are located adjacent to other undeveloped land, perimeter fencing around the Open Space Preserve is not planned. However, some barriers will be constructed at select areas along the preserve boundary and within the Open Space Preserve in



## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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order to prevent access to certain areas of the Open Space Preserve (Figure 7). These barriers may consist of large boulders, K-Rail, fencing, or similar material that will prevent OHV use.

### **4.4.2.5 *Illegal Occupancy***

There is some illegal use of the proposed project Site. The resource manager will survey the Open Space Preserve for evidence of illegal access concurrently with other site management activities and file a report with the local sheriff and/or Border Protection, if necessary, to ensure the Open Space Preserve remains free of human occupancy.

### **4.4.2.6 *Removal of Resources***

Removal of any plants, animals, rocks, minerals, or other natural resources from the Open Space Preserve is prohibited unless determined to be beneficial to the management of the Open Space Preserve and allowed by the wildlife agencies. No archaeological artifacts shall be removed from the Open Space Preserve, and no archaeological resources shall be damaged during removal of plants or habitat remediation without formal significance evaluation and mitigation, if necessary prior to the undertaking. The resource manager will maintain a log of illegal collecting and may report individuals caught removing natural resources from the Open Space Preserve to the USFWS, CDFW, County, and/or sheriff's office. The resource manager may allow and supervise seed collection and plant cuttings as part of revegetation efforts within the Open Space Preserve and/or in nearby areas. Any such collected plant materials should be limited to such that is necessary and in accordance with state law to ensure successful revegetation while not adversely affecting local plant populations.

### **4.4.2.7 *Trash Removal and Vandalism Repair***

The resource manager will also conduct general trash removal within the Open Space Preserve during regular management site visits. Additionally, damage caused by vandalism will be repaired. Trash removal and vandalism repair will occur as needed during regular site visits every other month. Upon initiation of the Open Space Preserve, existing trash will be removed to provide for a clean baseline.

### **4.4.2.8 *Flood Management***

As a component of general monitoring responsibilities, and especially following severe storms, fires, floods or other significant disturbance events, the Resource Manager shall inspect the preserve for erosion problems. For the purposes of this CRMP, significant unnatural erosion is erosion that affects an area that is greater than 100 square feet and over 6 inches in depth, and/or erosion that may affect water quality and wetland resources or lead to instability of slopes or the

## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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loss/conversion of habitat. Should significant erosion be detected, the Resource Manager will evaluate the need for repair; the Resource Manager's investigation will include an attempt to identify the cause(s) and means by which the damage has occurred. The PAR provides a lump sum budget to address potential post-fire erosion issues in the event of a wildfire. In the event of severe erosion with potentially costly remedies not anticipated by the RMP or PAR, funding to implement erosion control will not be derived from annual management funds. In this case, the Resource Manager will consult with the County to determine a plan of action that will include the identification of funding sources. Minor incidents of erosion (e.g., the formation of rivulets through upland areas) shall be left untreated unless it is perceived that the erosion will cause the loss of sensitive habitat and/or create a hazardous situation that would constitute a threat to human health and safety.

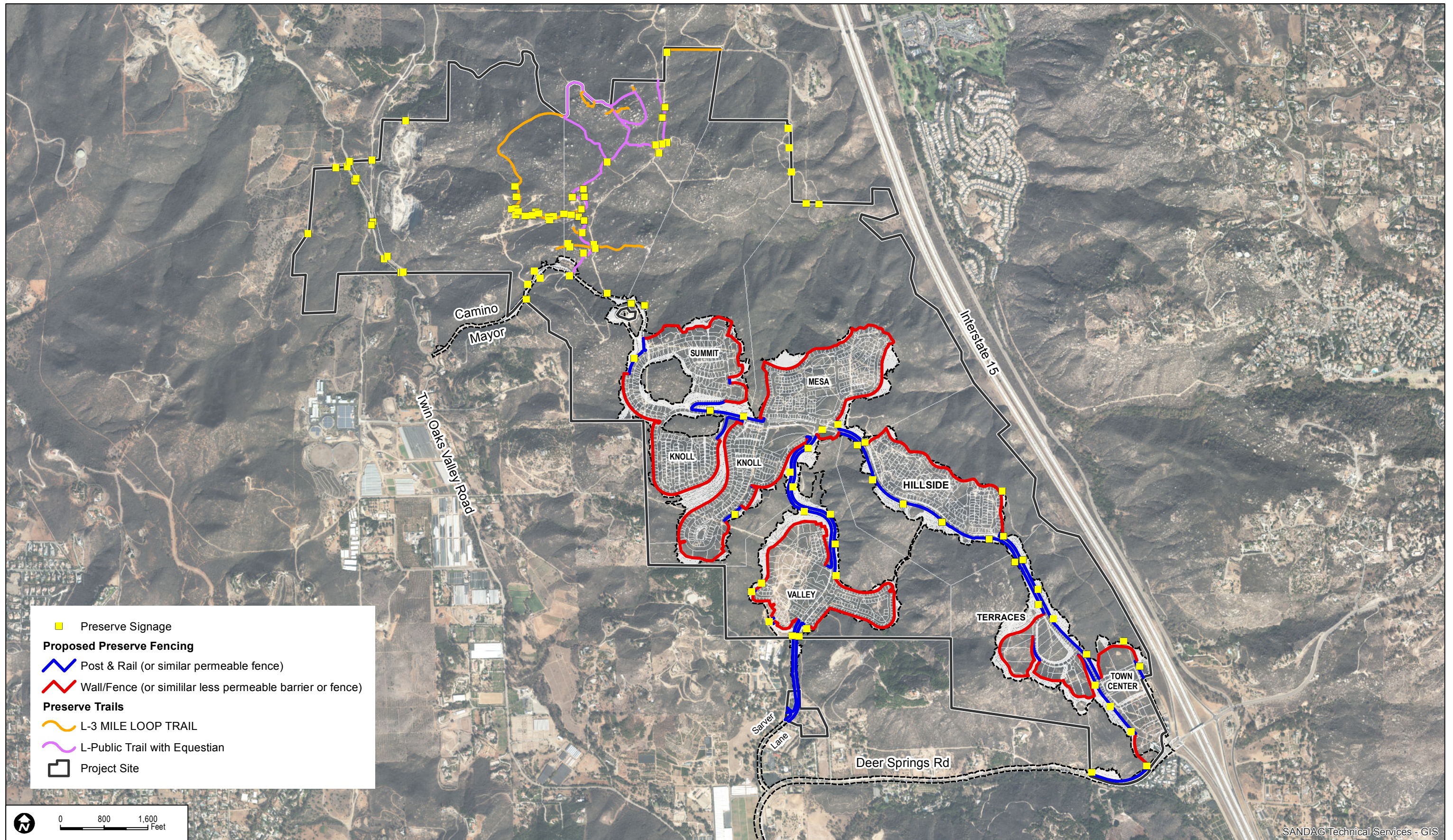
The degree of urgency to remediate erosion problems within the preserve will depend on the severity of the erosion, how quickly it is progressing, and what will happen until it is remediated. Erosion that undercuts riparian vegetation will need to be addressed as soon as possible, that is, soon enough to prevent the problem from worsening and under no circumstances later than 60 days from identification.

In the event that erosion becomes a recurring problem or periodic but severe, the Resource Manager will develop an erosion control plan. The plan will address (1) erosion causes and (2) the type and placement of physical features to counteract or stem erosive forces, and (3) may include preparation of a conceptual plan to revegetate affected areas with native seed. If the source of an erosion problem within the preserve lies outside of the preserve, the cause shall be identified and the responsible party or parties made accountable.

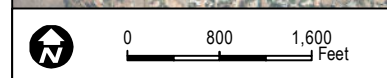
### **4.5 Public Use Tasks**

The Open Space Preserve will have public trails located along pre-existing dirt roads and trails; there will be no facilities (Figure 8). The Open Space Preserve is intended to serve primarily as a habitat preserve and as such is not compatible with most activities.





SANDAG Technical Services - GIS



SOURCE: Bing 2016; Fuscoe Engineering 2016

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**FIGURE 7**

**Proposed Biological Open Space/Conceptual Signage and Fencing**



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Activities that will be specifically prohibited include:

- Use of herbicides (except to remove non-native species, as necessary), pesticides, rodenticides, biocides, fertilizers, or other agricultural chemicals
- Use of OHVs and any other motorized vehicles except in the execution of management duties
- Grazing or other agricultural activity of any kind
- Recreational activities including, but not limited to, horseback riding would only be acceptable on specified multi-use trails, biking, target shooting, hunting, or fishing
- Commercial or industrial uses
- Construction, reconstruction, or placement of any building or other improvement, billboard, or sign
- Depositing or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other material
- Planting, introduction, or dispersal of non-native or exotic plant or animal species
- Altering the general topography of the Open Space Preserve, including but not limited to building of roads and flood control work
- Removing, destroying, or cutting of trees, shrubs, or other vegetation, except as required by federal, state, or local law or by governmental order for (1) emergency fire breaks, (2) maintenance of existing roads, (3) prevention or treatment of disease, or (4) required mitigation programs
- Manipulating, impounding, or altering any natural watercourse, body of water, or water circulation on the open space, except as specified for restoration activities, and activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or subsurface waters.

### 4.6 Fire Management Element

Fire is a natural ecological component of the Mediterranean-type climate of San Diego County. The Resource Manager will coordinate with the fire department on an annual basis to plan for fire prevention and control. The Resource Manager could implement prescribed burning if it is part of a regional effort coordinated with the California Department of Forestry and Fire Protection and the future NC MSCP or San Diego Management and Monitoring Programs. If areas within the preserve burn, there will be no initial reseeding of areas, but there will be careful monitoring for the need for weed or erosion controls. The Resource Manager will decide if reseeding is necessary if the natural revegetation process is deemed unsatisfactory. During the vegetation recovery period, the burned areas will be monitored by preserve management staff to

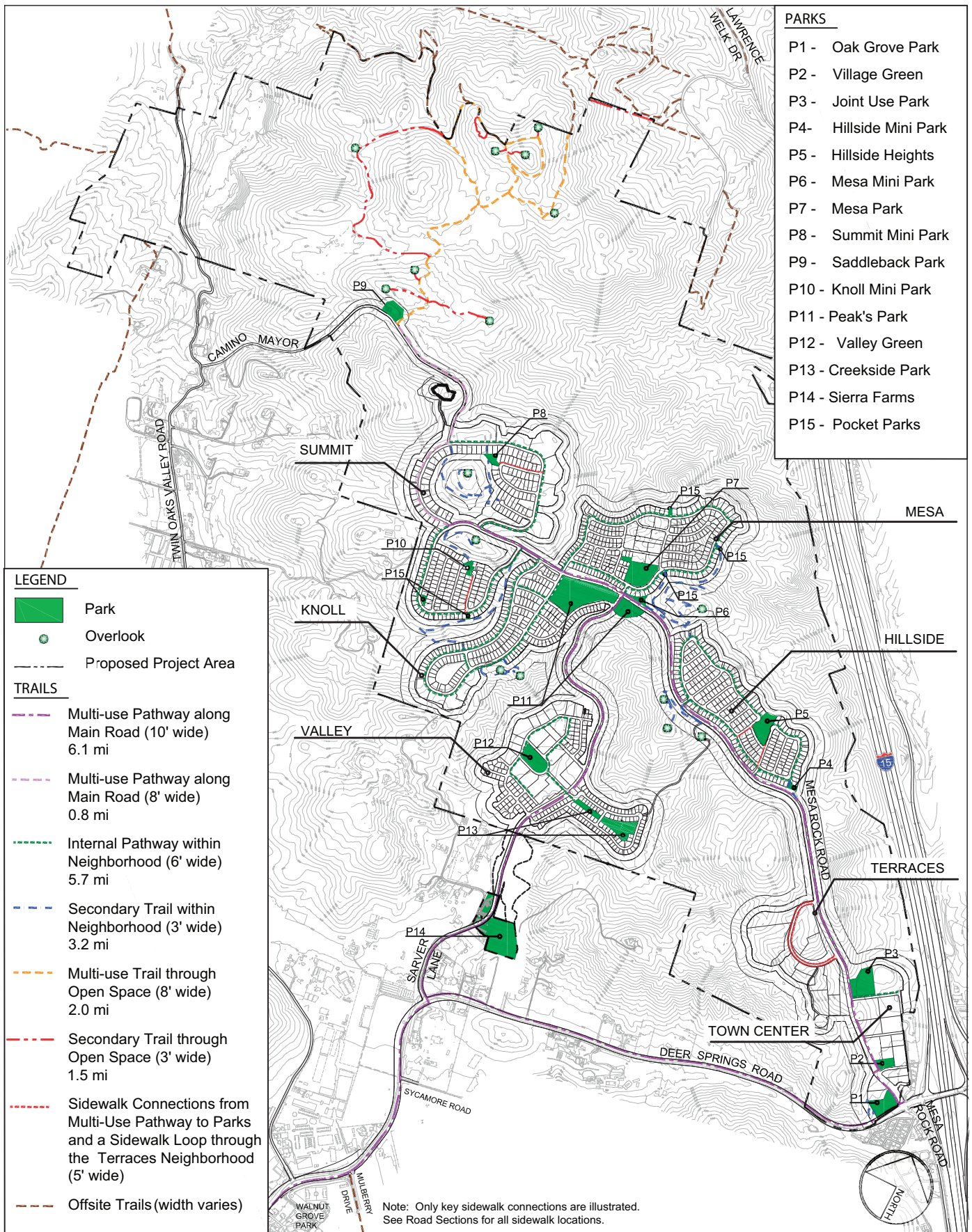
## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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control non-native invasive weed species. Weed control measures will be initiated as necessary to prevent these species from replacing native vegetation.

This task includes post-fire erosion and sediment removal activities and revegetation in the event that these activities are necessary. If reseeding of areas is required, the Resource Manager will coordinate and perform this activity. The post-fire tasks are limited to a sum of \$15,000 every 15 years for erosion control and sediment removal, and \$7,500 every 15 years for revegetation. These sums are based on the assumption that a fire that requires erosion control and sediment removal and approximately 3 acres of revegetation would occur once every 15 years.





SOURCE: SCHMIDT DESIGN 2016

**FIGURE 8**  
**Park and Trail Plan**

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## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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### **5 MANAGEMENT CONSTRAINTS**

This CRMP has been written to satisfy the requirements of the County and attempts to identify possible issues in the future; however, unforeseeable changes may occur that are out of the control of the resource manager. For example, changes in rainfall patterns may affect the populations of sensitive plant and animal species within the Open Space Preserve. Likewise, changes in other environmental factors such as air pollution, hazardous waste runoff, and erosion could have detrimental effects on the habitat within the management areas. An adaptive management approach will be taken to provide the flexibility to address unforeseen conditions.

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## **On-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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# **APPENDIX M**

## ***Off-Site Conceptual Resource Management Plan***





**OFF-SITE CONCEPTUAL RESOURCE MANAGEMENT PLAN**  
**for the**  
**Newland Sierra Project**  
**San Diego County, California**

*Prepared For:*

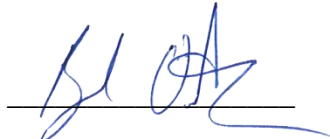
**County of San Diego**  
**Planning & Development Services**  
5510 Overland Avenue  
San Diego, California 92123  
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A handwritten signature in blue ink, appearing to read 'B. Ortega', is written over a horizontal line.

**JUNE 2017**



# Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

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# Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

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## 1 INTRODUCTION

This off-site Conceptual Resource Management Plan (CRMP) was prepared for the proposed Newland Sierra Project (project) in accordance with the mitigation requirements identified in the Biological Resources Report for the Newland Sierra Project (Dudek 2016). This document is consistent with the format and content requirements of the County of San Diego Report Format and Content Requirements – Biological Resources (County of San Diego 2010a). This CRMP covers the management of the habitats within the off-site Open Space Preserve lands.

Approximately 1,209.1 acres of chaparral, riparian, and non-native communities is proposed as on-site open space and approximately 211.8 acres of Diegan coastal sage scrub, chamise chaparral, valley needlegrass grassland, non-native grassland, Engelmann oak woodland, eucalyptus woodland, southern sycamore-alder riparian woodland, disturbed habitat, and urban/developed is proposed as off-site open space as part of the mitigation for the proposed project. This CRMP includes a description of management tasks for the off-site open space. The on-site mitigation area is covered under a separate CRMP.

### 1.1 Purpose of Biological Resources Management Plan

The purpose of this RMP is to provide guidance to ensure preservation and long-term management of the off-site Open Space Preserve. The objectives of this RMP are as follows:

1. Guide management of vegetation communities/habitats, plant and animal species, cultural resources, and programs described herein to protect and, where appropriate, enhance biological and cultural values
2. Serve as a descriptive inventory of vegetation communities, habitats, and plant and animal species that occur on or use this property
3. Serve as a descriptive inventory of archaeological and/or historic resources that occur on this property
4. Establish the baseline conditions from which adaptive management will be determined and success will be measured
5. Provide an overview of the operation, maintenance, administrative, and personnel requirements to implement management goals and serve as a budget planning aid

The details of this CRMP may be modified when the Final RMP is prepared and submitted to the County of San Diego (County) for approval. The County will review the Final RMP to ensure that it meets the specified purpose and objectives.



## **Off-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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A resource analysis is provided in the Biological Resources Report for the proposed project (Dudek 2016). This report includes (1) a description of the existing biological resources on the project Site, including vegetation communities and land covers, jurisdictional resources, plants, wildlife, and wildlife corridors; (2) a discussion of the potential impacts to biological resources that would result from development of the property and the biological significance of these impacts in the context of federal, state, and local laws and policies; and (3) recommended mitigation measures for reducing identified significant impacts to biological and cultural resources to less than significant. Mitigation recommendations follow federal, state, and local rules and regulations, including the California Environmental Quality Act (CEQA), the County's Guidelines for Determining Significance and Report Format and Content Requirements (County of San Diego 2010b), and the County's Resource Protection Ordinance (County of San Diego 2007).

### **1.1.1 Conditions and/or Mitigation Measures that Require an RMP**

A CRMP is required for projects in the County of San Diego when a planned project proposes open space preservation that would significantly benefit from active management and/or monitoring of biological and/or cultural resources. A CRMP is always required when a project proposes open space totaling more than 50 acres or more, regardless of the presence or absence of sensitive species. In the case of the Newland Sierra Open Space Preserve, both of these parameters apply.

The details of this off-site CRMP may be modified when the Final RMP is prepared and submitted to the County for approval. The County will review the Final RMP to ensure that it meets the specified Purpose and Objectives.

The project would impact approximately 776.6 acres of vegetation communities and land covers, of which impacts to 758.5 acres require mitigation. Additionally, are permanent off-site direct impacts to 47.5 acres (Option A), including 5.7 acres that require mitigation. Table 1 shows the impacts and required mitigation based on the County's mitigation ratios (County of San Diego 2010b, Table 5). A total of 496.1 acres of comparable habitat is required to meet the mitigation requirement. The project proposes to meet this mitigation obligation through the preservation of 1,209.1 acres within the proposed on-site and an additional 211.8 acres in the off-site Open Space Preserve.

# Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

**Table 1**  
**Summary of Permanent Impacts, Mitigation, and Open Space for**  
**Vegetation Communities and Jurisdictional Areas (Acres)**

Habitat Types/Vegetation Communities	On-Site Existing Acreage	Total On-Site Impacts <sup>1</sup>	Total Off-Site Impacts <sup>2</sup>	Mitigation Ratio	Mitigation Required	On-Site Open Space <sup>3</sup>	Off-Site Mitigation Area	Mitigation Excess/ (Deficit)
<i>Coastal Scrub</i>								
Diegan coastal sage scrub (including disturbed)*	68.2	45.6	0.5	2:1	92.2	22.6	106.4	36.8
Coastal sage scrub – Baccharis dominated (including disturbed)	2.0	1.5	—	2:1	3.0	0.5	—	(2.5)
Flat-topped buckwheat – disturbed*	1.7	0	—	2:1	0	1.7	—	1.7
Coastal sage – chaparral transition*	7.8	7.4	1.7	2:1	18.2	0.4	—	(17.8)
<i>Subtotal</i>	<i>79.7</i>	<i>54.5</i>	<i>2.2</i>	<i>n/a</i>	<i>113</i>	<i>25.2</i>	<i>106.4</i>	<i>18.2</i>
<i>Chaparral</i>								
Chamise chaparral <sup>4*</sup>	—	—	—	—	—	—	19.7	19.7
Granitic southern mixed chaparral (including disturbed)*	1,700.7	626.9	6.3	0.5:1	316.6	1,073.8	—	757.2
Mafic southern mixed chaparral*	58.8	0.8	—	3:1	2.4	58.0	—	55.6
Scrub oak chaparral*	44.3	39.2	—	0.5:1	19.6	5.1	—	(14.5)
<i>Subtotal</i>	<i>1,803.8</i>	<i>666.9</i>	<i>6.3</i>	<i>n/a</i>	<i>338.3</i>	<i>1,136.9</i>	<i>19.7</i>	<i>818.0</i>
<i>Woodland</i>								
Coast live oak woodland*	9.1	6.5	2.8	3:1	27.9	2.6	—	(25.3)
Engelmann Oak Woodland - Open <sup>4*</sup>	—	—	—	n/a	—	—	29.0	29.0
<i>Subtotal</i>	<i>9.1</i>	<i>6.5</i>	<i>2.8</i>	<i>n/a</i>	<i>26.1</i>	<i>2.6</i>	<i>29.0</i>	<i>3.7</i>
<i>Riparian</i>								
Freshwater marsh*	0.1	—	—	3:1	—	0.1	—	0.1
Southern coast live oak riparian forest*	5.2	1.9	0.8	3:1	8.1	3.3	—	(4.8)
Mulefat scrub*	0.2	0.1	0.03	3:1	0.4	0.1	—	(0.3)
Southern sycamore-alder riparian woodland <sup>4*</sup>	—	—	—	—	—	—	7.9	7.9
Southern willow scrub*	2.5	0.1	0.5	3:1	1.8	2.4	—	0.6
Southern willow scrub/tamarisk scrub*	0.3	—	—	3:1	—	0.3	—	0.3
Arundo-dominated	—	—	0.1	3:1	0.3	—	—	(0.3)

# Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

**Table 1**  
**Summary of Permanent Impacts, Mitigation, and Open Space for**  
**Vegetation Communities and Jurisdictional Areas (Acres)**

Habitat Types/Vegetation Communities	On-Site Existing Acreage	Total On-Site Impacts <sup>1</sup>	Total Off-Site Impacts <sup>2</sup>	Mitigation Ratio	Mitigation Required	On-Site Open Space <sup>3</sup>	Off-Site Mitigation Area	Mitigation Excess/ (Deficit)
riparian								
<i>Subtotal</i>	8.3	2.1	1.4	n/a	10.3	6.2	7.9	3.5
<i>Grassland</i>								
Valley needlegrass grassland <sup>4*</sup>	—	—	—	—	—	—	8.5	8.5
Non-native grassland*	16.1	15.3	2.6	0.5:1	9.0	0.8	33.8	25.7
<i>Subtotal</i>	16.1	15.3	2.6	n/a	9.0	0.8	42.3	34.2
<i>Non-native Communities and Land Covers</i>								
Agriculture	—	—	2.0	None	—	—	—	(2.0)
Eucalyptus woodland	0.5	—	2.0	None	—	0.5	3.2	1.7
Intensive agriculture	<0.0	<0.0	1.4	None	—	—	—	(1.4)
Extensive agriculture	—	—	4.5	None	—	—	—	(4.5)
Orchard and vineyards	2.0	1.0	1.9	None	—	1.0	—	(1.9)
Urban/developed	9.2	9.2	40.8	None	—	—	0.1	(49.9)
Disturbed habitat	57.0	21.0	5.1	None	—	36.0	3.3	13.2
Non-native woodland	—	—	0.2	None	—	—	—	(0.2)
<i>Subtotal</i>	68.7	31.2	57.9	—	0	37.5	6.6	(35.5)
<b>Total<sup>1</sup></b>	<b>1,985.6</b>	<b>776.6</b>	<b>71.7</b>	<b>n/a</b>	<b>497.3</b>	<b>1,209.1</b>	<b>211.8</b>	<b>923.6</b>
<i>Other</i>								
RPO wetland buffer <sup>5</sup>	30.2	8.7	3.9	n/a	n/a	n/a	—	n/a
Oak Root Zone <sup>5</sup>	32.9	11.2	8.4	3:1	58.8	21.7	16.8	-2.1
Non-wetland waters (ephemeral and intermittent) <sup>5</sup>	5.33	1.41	0.16	1:1	1.59	3.92	—	n/a

<sup>1</sup> Totals may not add due to rounding.

<sup>2</sup> This includes impacts for Deer Springs Road Option B and all other off-site impacts.

<sup>3</sup> The open space acreage includes the on-site temporary impacts since they would be restored and conserved in permanent open space.

<sup>4</sup> These communities occur in the off-site Ramona mitigation site.

<sup>5</sup> These features are overlays to the vegetation community layer and are not counted toward the total existing acreage.

\* Considered special-status by the County (2010b).

3:1 for riparian areas includes a 1:1 creation and 2:1 enhancement requirement.

## 1.1.2 Agency Review and Coordination

This document was written in collaboration with the County of San Diego and Newland Sierra LLC. The management of the off-site open space, as detailed in this CRMP, does not interfere with mitigation and monitoring requirements mandated by the California Department of Fish and Wildlife (CDFW), the U.S. Fish and Wildlife Service (USFWS), the U.S. Army Corps of

# Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

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Engineers (ACOE), the Regional Water Quality Control Board (RWQCB), or by any other permitting agency.

## 1.2 Implementation

### 1.2.1 Resource Manager Qualifications and Responsible Parties

A resource manager must be designated to be responsible for the long-term management and maintenance of the off-site Open Space Preserve. The resource manager will be one of the following:

- Conservancy group
- Natural resource land manager (e.g., Center for Natural Lands Management, San Diego Habitat Conservancy)
- Natural resource consultant
- County Department of Park and Recreation (DPR)
- County Department of Public Works
- Federal or state wildlife agency (USFWS, CDFW)
- Federal land manager, such as Bureau of Land Management (BLM)
- City Land Managers, including but not limited to Departments of Public Utilities, DPR, and Environmental Services

If the developer desires DPR to manage the land, the following criteria must be met:

- The land must be located inside a Pre-Approved Mitigation Area or proposed Pre-Approved Mitigation Area, or otherwise deemed acceptable by DPR.
- The land must allow for public access.
- The land must allow for passive recreational opportunities such as a trails system.

The resource manager will be approved in writing by the Director of Planning & Development Services, the Director of Public Works, or the DPR, depending on the resource manager. Any change in the designated resource manager will also be approved in writing by the approving director. Appropriate qualifications for the resource manager include the following:

- Ability to carry out habitat monitoring or mitigation activities.
- Fiscal stability including preparation of an operational budget (using an appropriate analysis technique) for the management of this CRMP.



## **Off-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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- Have at least one staff member with a biological, ecological, or wildlife management degree from an accredited college or university, or have a Memorandum of Understanding (MOU) with a qualified person with such a degree.
- If cultural sites are present, have a cultural resource professional on staff or an MOU with a cultural consultant.
- Experience with habitat and cultural resource management in southern California.

Potential entities identified as providing the labor under the direction of the resource manager for the Open Space Preserve include the Center of Natural Lands Management, Habitat Restoration Sciences Inc., or Habitat West.

### **Proposed Land Owner**

Fee title of separate open space lots may be held by the land/resource manager or another appropriate land owner (e.g., land trust, conservancy, or public agency), depending on the particular circumstance.

Currently, the land is slated to be owned by a state or federal agency or non-profit corporation. Depending on the circumstances, the applicant may find an alternative fee title holder such as a state or federal agency or non-profit corporation.

### **Proposed Easement Holder**

If the land is transferred in fee title to a non-governmental entity, a Biological Open Space Easement or Conservation Easement must be recorded. This easement should be dedicated to the County, but it may also include other appropriate agencies as a grantee or third-party beneficiary. If the title to the land is transferred to the County or other public conservation entity, no easement is necessary.

### **Restoration Entity**

Management responsibility for the revegetation/restoration area will remain with the restoration entity until restoration/revegetation has been completed. Upon County/agency acceptance of the revegetated/restored area, management responsibility for the revegetation/restoration area will be transferred to the resource manager.

# Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

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## 1.2.2 Financial Responsibility and Mechanism

Acceptable financial mechanisms include the following:

- **Special District.** Formation of a Lighting and Landscape District or Zone or Community Facility District as determined appropriate by the Director of the Department of Planning & Development Services, Director of Public Works, or DPR
- **Endowment.** A one-time, non-wasting endowment, which is tied to the property and intended to be used by the resource manager to implement the RMP
- **Alternatives.** Other acceptable types of mechanisms including annual fees to be approved by the Director of Planning & Development Services, Director of Public Works, or DPR
- **Transfer.** Transfer of ownership to existing entity for management

The project applicant is responsible for all RMP funding requirements, including direct funds to support the RMP start-up tasks and an ongoing funding source for annual tasks, which is tied to the property to fund long-term RMP implementation. Start-up tasks include sign installation around the off-site Open Space Preserve (where appropriate), fencing at select locations in the Open Space Preserve, and database compilation. Long-term tasks involve the management and maintenance of the Open Space Preserve in perpetuity, including habitat monitoring and mapping, exotic species control (if needed), and general monitoring and reporting. These habitat management tasks commence immediately upon initiation of long-term management by the resource manager.

## 1.2.3 Conceptual Cost Estimate

An initial Property Analysis Record (PAR) will be prepared based on the biological resource management tasks identified in this RMP once the off-site preservation area is identified. Table 2 includes the biological resource management tasks that are planned for the Open Space Preserve. A final PAR and cost estimate will be prepared for the Open Space Preserve when a resource manager has been selected and approved by the County.

## Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

**Table 2**  
**Biological Resource Management Tasks**

Check if Applies	Tasks	Frequency (times per year)	Hours Required Per Year
<i>Biological Tasks</i>			
	Baseline inventory of resources (if original inventory is over 5 years old)		
✓	Update biological mapping	Once every 5 years	1.6 (8 hours every 5 years)
✓	Update aerial photography	Once every 5 years	Based on PAR
✓	Removal of invasive species	As needed	18
✓	Predator control	As needed	5
✓	Habitat restoration/installation	TBD	
✓	Habitat restoration/monitoring and management	TBD	
	Poaching control		
✓	Species surveys	TBD	
	Species management		
	Noise management, if required		
	For lands within the MSCP and outside PAMA, consult Table 3-5 of the MSCP Plan for required biological resource monitoring		
✓	Monitoring visits	Quarterly	16
<i>Operations, Maintenance, and Administration Tasks</i>			
✓	Establish and maintain database and analysis of data	Annually	4
✓	Write and submit annual report to County	Annually	12
✓	Review fees for County review of annual report	Annually	Based on PAR
✓	Review and, if necessary, update Management Plan	Every 5 years	4 (20 hours every 5 years)
✓	Construct permanent signs	One time	40
✓	Replace signs	As needed, estimate 2 signs per year	6
✓	Construct permanent fencing/gates	One time	40
✓	Maintain permanent fencing/gates	As needed, estimate 100 feet per year	8
✓	Remove trash and debris	Quarterly	30
✓	Coordinate with Department of Environmental Health (DEH) and Sheriff	As needed	6
	Maintain access road		
	Install stormwater BMPs		
	Maintain stormwater BMPs		
	Restore built structure		
	Maintain built structure		

## Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

**Table 2**  
**Biological Resource Management Tasks**

Check if Applies	Tasks	Frequency (times per year)	Hours Required Per Year
	Maintain regular office hours		
	Inspect and service heavy equipment and vehicles		
	Inspect and repair buildings, residences, and structures		
	Inspect and maintain fuel tanks		
	Coordinate with utility providers and easement holders (there are other easement holders)		
	Manage hydrology (as required)		
✓	Coordinate with law enforcement and emergency services (e.g., fire)	Annually	4
✓	Coordinate with adjacent land managers	As needed	4
✓	Remove graffiti and repair vandalism	As needed	8
<i>Public Use Tasks</i>			
	Construct trail(s)		
	Monitor, maintain/repair trails (unless a trail easement has been granted to the County)		
✓	Control public access	Quarterly	8
✓	Provide ranger patrol	Quarterly	This task is combined with the "Monitoring visits" task
	Manage fishing and/or hunting program (if one is allowed)		
	Provide Neighbor Education – Community Partnership		
	If HOA is funding management, provide annual presentation to HOA		
	Coordinate volunteer services		
	Provide emergency services access/response planning		
<i>Fire Management Tasks</i>			
✓	Coordinate with applicable fire agencies and access (gate keys, etc.) for these agencies	Annually	2
	Plan fire evacuation for public use areas		
✓	Protect areas with high biological importance	Every 5 years	8
	Hand-clear vegetation		
	Mow vegetation		
<i>Post-Fire Tasks</i>			
✓	Control post-fire erosion	Every 15 years	Assumes lump sum budget of \$7,500 every 15 years



## Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

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**Table 2**  
**Biological Resource Management Tasks**

Check if Applies	Tasks	Frequency (times per year)	Hours Required Per Year
✓	Remove post-fire sediment	Every 15 years	Included with erosion task
✓	Reseed after fire	Every 15 years	Assumes that there will be a fire every 15 years that will require a response that may include 3 acres of revegetation every 15 years (\$7,500 lump sum)
✓	Replant after fire	Every 15 years	Included with reseed after fire

MSCP = Multiple Species Conservation Program; PAMA = Pre-Approved Mitigation Area; DEH = Department of Environmental Health; BMP = best management practice; HOA = Homeowner's Association

### 1.2.4 Reporting Requirements

An RMP Annual Report will be submitted to the County (and resource agencies, as applicable), along with the submittal fee to cover County staff review time. The annual report will discuss the previous year's management and monitoring activities, as well as management/monitoring activities anticipated in the upcoming year.

The annual report will provide a concise but complete summary of management and monitoring methods, identify any new management issues, and address the success or failure of management approaches (based on monitoring). The report will include a summary of changes from baseline or previous year conditions for species and habitats and address any monitoring and management limitations, including weather (e.g., drought). The report will also address any management (changes) resulting from previous monitoring results and provide methods for measuring the success of adaptive management.

For new sensitive species observations or significant changes to previously reported species, the annual report will include copies of completed California Natural Diversity Database forms with evidence that they have been submitted to the state. The report will also include copies of invasive plant species forms submitted to the state or County.

A fee will be collected by Planning & Development Services upon submittal of the annual report for staff's review time. The RMP may also be subject to an ongoing deposit account for staff to

## **Off-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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address management challenges as they arise. Deposit accounts, if applicable, are replenished to a defined level as necessary.

### **1.2.5 RMP Agreement**

The County will require an agreement with the applicant when an RMP is required. The RMP Agreement will be executed when the County accepts the Final RMP. The agreement will obligate the applicant to implement the RMP and provide a source of funding to pay the cost to implement the RMP in perpetuity. The agreement will also provide a mechanism for the funds to be transferred to the County if the resource manager fails to meet the goals of the RMP.

The agreement will specify that RMP funding or funding mechanism be established prior to construction or use of the property in reliance on the permit.

### **1.3 Limitations and Constraints**

Specific internal or external management constraints that may affect meeting RMP goals have not been identified for this CRMP. Examples of potential constraints that may be applicable include the following:

- Environmental factors such as the influence of local water availability (either surface or subsurface waters), introduction or spread of non-native species, presence of threatened or endangered species, fire, flood, drought, erosion, air pollution, and hazardous waste materials.
- Legal, political, or social factors that influence or mandate certain types of management; special permitting requirements (e.g., ACOE, USFWS, archeological sites); County ordinances (e.g., nuisance abatement); MOUs; or other special agreements with private or public entities, water, timber, or mineral rights for the area.
- Financial factors such as the source of funding to be used for operation and maintenance, personnel requirements, and overall management of the area (fund source may dictate management direction).

## **Off-Site Conceptual Resource Management Plan for the Newland Sierra Project**

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# Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

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## **2 PROPERTY DESCRIPTION**

### **2.1 Location**

The off-site mitigation site is located in Ramona, California (Figure 1) and is situated within the Pre-Approved Mitigation Area (PAMA) of the draft North County Multiple Species Conservation Program (Figure 2).

The site (Assessor's Parcel Number 286-041-04) is situated in Township 13 South, Range 2 East, and Section 3 of the U.S. Geological Service 7.5-minute series topographic Ramona quadrangle map (Figure 2). The mitigation site is located approximately 5 miles east of the community of Ramona, and approximately 3.5 miles south of Sutherland Reservoir. State Route 78 runs along the southern boundary of the site, where there is a gate to access the site.

### **2.2 Environmental Setting**

The site is situated on the western side of Whale Mountain near the community of Ramona. It is topographically diverse, with ridgelines and steep slopes dominated by scrub and chaparral vegetation to low-sloped Engelmann oak savannah grasslands and sycamore riparian woodland drainages. Granitic boulder outcrops occur throughout the site. The elevation ranges from approximately 2,540 feet above mean sea level to 3,040 feet above mean sea level. The site provides for connectivity between segments of the Cleveland National Forest, located approximately 2 miles to the east and west, and San Diego County Parks land, located approximately 3 miles to the north and south.

The soils onsite include Cienega coarse sandy loam, 5 to 15 percent slopes, eroded; Cienega very rocky coarse sandy loam, 30 to 75 percent slopes; Fallbrook sandy loam, 15 to 30 percent slopes, eroded; Fallbrook sandy loam, 5 to 9 percent slopes; Fallbrook sandy loam, 9 to 15 percent slopes, eroded; Las Posas fine sandy loam, 5 to 9 percent slopes; loamy alluvial land; and Vista coarse sandy loam, 9 to 15 percent slopes.

The proposed project is located within the unincorporated portion of the County of San Diego within the Draft North County Multiple Species Conservation Program (NCMSCP) area in a Pre-Approved Mitigation Area (PAMA)-designated area.

### **2.3 Land Use**

The site is currently undeveloped. It is situated in a key natural gap in the adjacent agricultural (ranches, poultry farms) landscape amid cattle ranch lands and open space. There is a fire station along the south side of the site.

## Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

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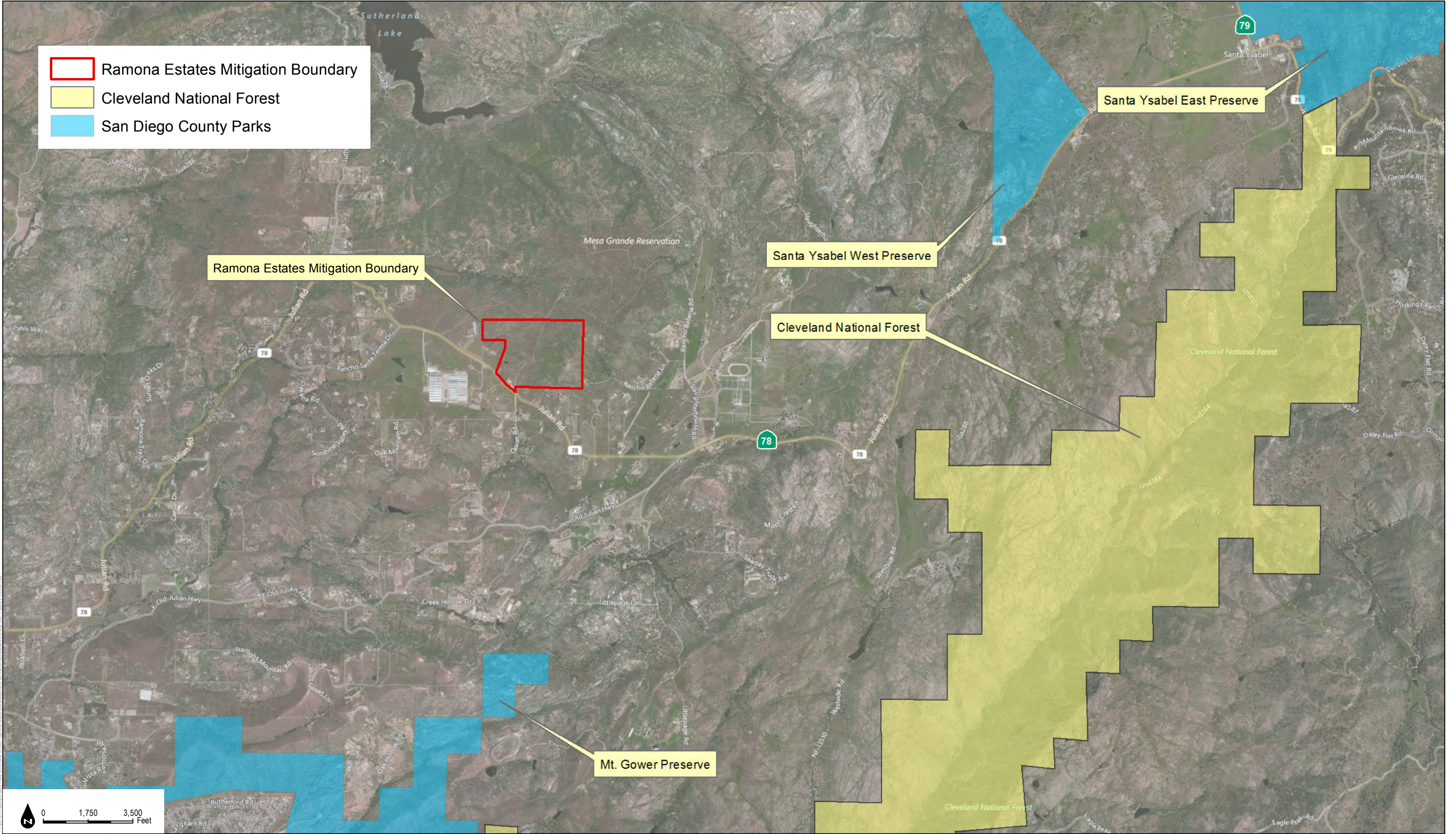


## Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

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**FIGURE 2**  
Vicinity Map



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# Off-Site Conceptual Resource Management Plan for the Newland Sierra Project

## 3 BIOLOGICAL RESOURCES DESCRIPTION

This section is based on the biological data collected for the proposed mitigation site. Field surveys were conducted at this property in 1993 by PSBS and in 1990 and 1996 by Merkel & Associates (Merkel & Associates 1999). The vegetation communities were updated by Dudek biologist Erin Bergman and a general wildlife habitat assessment was conducted by Dudek biologist Brock Ortega in December 2016.

### 3.1 Vegetation Communities/Habitat Types

Nine vegetation communities and land cover types were identified within the Off-Site Open Space Preserve. The vegetation communities and acreages within this site are summarized in Table 3 and shown in Figure 3. Vegetation community classifications follow Oberbauer et al. (2008), which is revised from Holland (1986) specifically for San Diego County.

**Table 3**  
**Vegetation Communities and Land Cover Types**

Vegetation Community / Land Cover Type	Code	Acreage
<i>Scrub and Chaparral Communities</i>		
Diegan Coastal Sage Scrub	37200	106.4
Chamise Chaparral	32500	19.7
<i>Subtotal</i>		126.1
<i>Grassland Communities</i>		
Valley Needlegrass Grassland	42110	8.5
Non-Native Grassland	42200	33.8
<i>Subtotal</i>		42.2
<i>Woodland Communities</i>		
Eucalyptus Woodland	79100	3.2
Southern Sycamore-Alder Riparian Woodland	62400	7.9
Open Engelmann Oak Woodland	71181	29.0
<i>Subtotal</i>		40.1
<i>Disturbed or Developed</i>		
Disturbed Habitats	11300	3.3
Urban/Developed	12000	0.1
<i>Subtotal</i>		3.4
<b>Total<sup>1</sup></b>		<b>211.8</b>

<sup>1</sup> Totals may not add due to rounding.



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## 3.1.1 Scrub and Chaparral Communities

### Diegan Coastal Sage Scrub

The majority of the mitigation site consists of Diegan coastal sage scrub. Coastal sage scrub is composed of low, soft-woody subshrubs, many of which are facultative drought-deciduous. Subshrubs in this community typically reach a height of 1 meter. Soils are rich in clay, allowing for longer-term water storage. Coastal sage scrub is a wide-spread community in coastal Southern California.

Characteristic dominant species found within the coastal sage scrub community mitigation site include California sagebrush (*Artemisia californica*), eastern Mojave buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), and white sage (*Salvia apiana*). Less common species within the mitigation site include dove weed (*Croton setiger*), soft brome (*Bromus hordeaceus*), shortpod mustard (*Hirschfeldia incana*), redstem stork's bill (*Erodium cicutarium*), longbeak stork's bill (*Erodium botrys*), black sage (*Salvia mellifera*), deerweed (*Acmispon glaber*), common sandaster (*Corethrogyne filaginifolia*), broom snakeweed (*Gutierrezia sarothrae*), wishbone bush (*Mirabilis laevis*), horehound (*Murrubium vulgare*), Menzies' goldenbush (*Isocoma menziesii*), sawtooth goldenbush (*Hazardia squarrosa*), toyon (*Heteromeles arbutifolia*), hollyleaf redberry (*Rhamnus illicifolia*), California brickellbush (*Brickellia californica*), whiteflower currant (*Ribes indecorum*), caterpillar phacelia (*Phacelia cicutaria*), and chaparral yucca (*Hesperoyucca whipplei*). The shrub layer in this community ranges from a continuous canopy and little understory to a more open canopy with widely spaced shrubs and a well-developed understory.

Approximately 106.4 acres of coastal sage scrub was mapped within the mitigation site.

### Chamise Chaparral

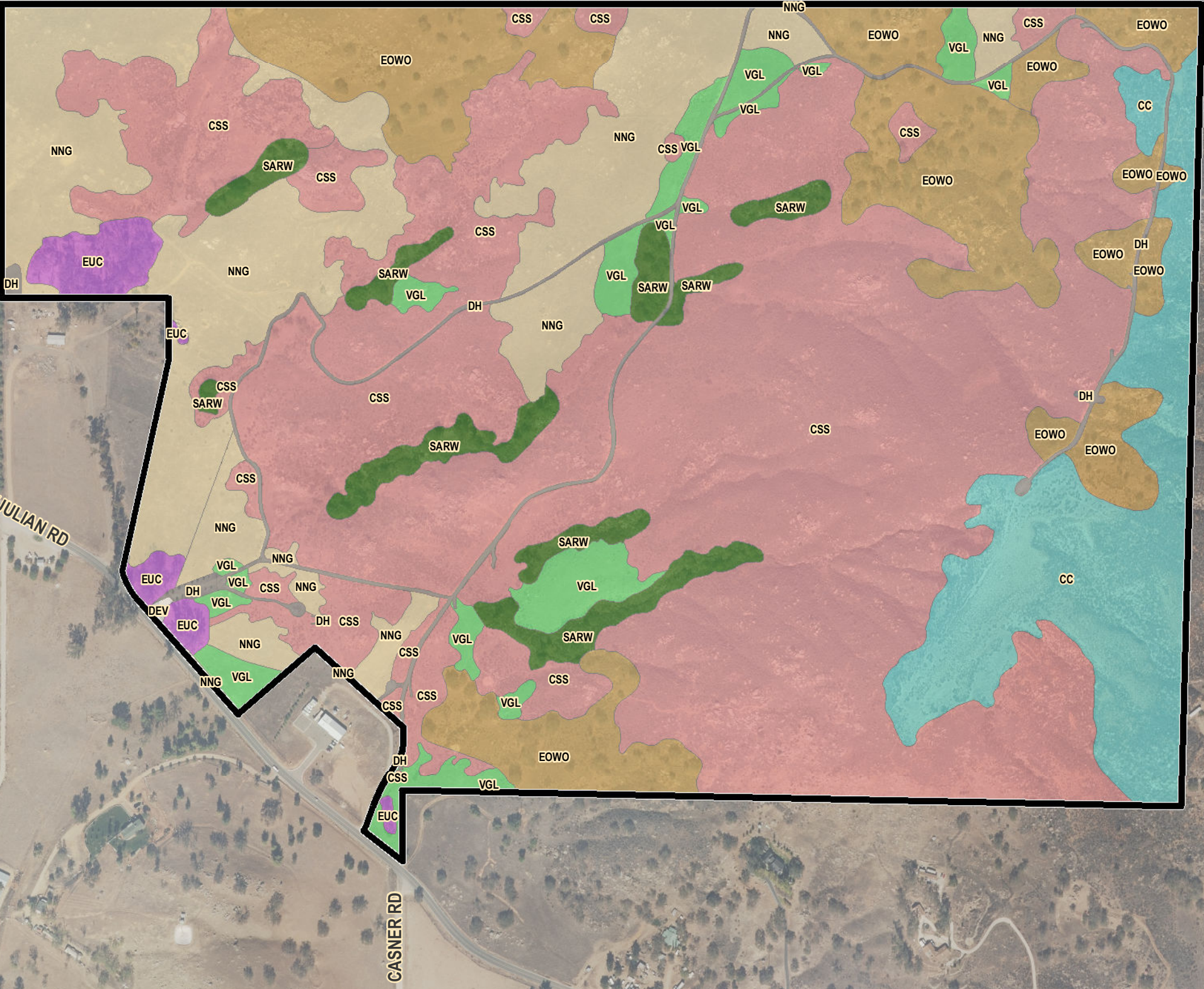
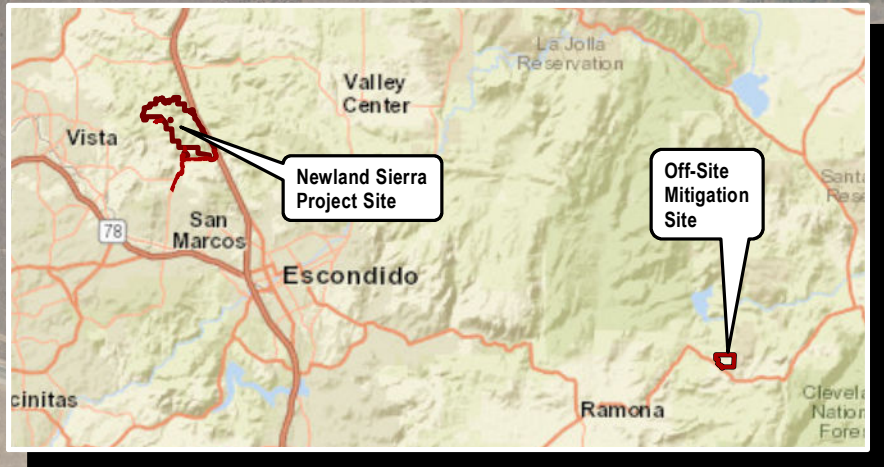
Chamise chaparral is a vegetation community dominated by chamise (*Adenostoma fasciculatum*). A community of chamise can range anywhere from 1 to 3 meters in height. Within chamise communities other shrub species cover is generally low. Understories of herbaceous plants are less frequent within chamise when compared to coastal sage scrub and other chaparral communities.


Characteristic dominant species found within the chamise community mitigation site include chamise, longbeak stork's bill, redstem stork's bill, and maltese star-thistle (*Centaurea melitensis*) along the edges. Understories of the community consisted mostly of bare ground during the winter season.

Approximately 19.7 acres of chamise chaparral was mapped within the mitigation site.





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 Off-Site Mitigation Site


**Vegetation Communities/Land Covers:**


 CC, Chamise Chaparral


 CSS, Diegan Coastal Sage Scrub


 DEV, Urban/Developed


 DH, Disturbed Habitat


 EOWO, Open Engelmann Oak Woodland

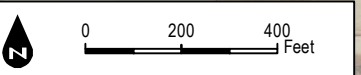
 EUC, Eucalyptus Woodland

 NNG, Non-Native Grassland

 SARW, Southern Sycamore-Alder Riparian Woodland

 VGL, Valley Needlegrass Grassland

 World Shaded Relief



**DUDEK**

AERIAL SOURCE: SANDAG IMAGERY 2014

Newland Sierra Project Draft Off-Site Conceptual Resource Management Plan

**FIGURE 3**  
**On-Site Biological Open Space**



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### 3.1.2 Grassland Communities

#### Valley Needlegrass Grassland

A smaller percentage of the mitigation site is characterized as valley needlegrass grassland, which is an assemblage of native grasses and forbs. Valley needlegrass grassland is mid-height (2 feet) grassland that consists mainly of purple needle grass (*Stipa pulchra*). Native and introduced annuals occur between the perennials; these forbs can typically exceed the bunchgrass in cover.

Within the mitigation site, purple needlegrass dominates the community, comprising more than 70 percent of the community. The mitigation site contains exceedingly intact valley needlegrass grassland. Less commonly occurring species within the mitigation site include western blue-eyed grass (*Sisyrinchium bellum*), soft brome, redstem stork's bill, longbeak stork's bill, eastern Mojave buckwheat, cuman ragweed (*Ambrosia psilostachya*), and deergrass (*Muhlenbergia rigens*).

Approximately 8.5 acres of valley needlegrass grassland was mapped within the mitigation site.

#### Non-Native Grassland or Annual Grassland

Non-native grassland/annual grassland is dominated by European annual grasses that usually reach up to 0.5 meter in height. This community can be associated with wildflowers but due to disturbance in the soils, it is assumed that annual grasses will dominate in the future on site. Fine-textured clay soils are often associated with annual grasslands.

Characteristic dominant species found within the non-native grassland habitat of the mitigation site include soft brome, shortpod mustard, redstem stork's bill, longbeak stork's bill, ripgut brome (*Bromus diandrus*), and slender oat (*Avena barbata*). Less common species include cuman ragweed and dove weed.

Approximately 33.8 acres of non-native grassland was mapped within the mitigation site.

### 3.1.3 Woodland Communities

#### Eucalyptus Woodland

Eucalyptus woodland habitats can be made up of single-species thickets with little or no shrubs in the understory, or can have a well-developed understory. In the majority of eucalyptus woodland communities, species produce dense stands and closed canopies. Eucalyptus will produce a large amount of leaf litter, so few native species grow within eucalyptus canopies.

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Characteristic species found within the eucalyptus woodland of the mitigation site is red gum (*Eucalyptus camaldulensis*).

Approximately 3.2 acre of eucalyptus woodland was mapped within the mitigation site.

### **Southern Sycamore–Alder Riparian Woodland**

Southern sycamore woodland is a tall winter deciduous community that does not form a dense closed-canopy forest. Upland shrub species can be found within the understory, along with Pacific poison oak (*Toxicodendron diversilobum*) and California blackberry (*Rubus ursinus*). The overstory is almost entirely California sycamore (*Platanus racemosa*) and can contain white alder (*Alnus rhombifolia*).

The characteristic dominant species is California sycamore, as this makes up the majority of this community within the mitigation site. No white alder occurs within the mitigation site, but this vegetation description best fits the community. Less common species include Pacific poison oak, California blackberry, California sagebrush, eastern Mojave buckwheat, black sage, deergrass, and common sandaster.

Approximately 7.9 acres of southern sycamore woodland was mapped within the mitigation site.

### **Open Engelmann Oak Woodland**

Open Engelmann oak woodland is an evergreen community dominated by Engelmann oak (*Quercus engelmannii*). The understory consists of native grassland, sage scrub, or both.

Characteristic dominant species within mitigation site include Engelmann oak and purple needlegrass. Less common species include California sagebrush, white sage, slender oat, eastern Mojave buckwheat, and sacred thorn apple (*Datura wrightii*).

Approximately 29.0 acres of open Engelmann oak woodland was mapped within the mitigation site.

## **3.1.4 Disturbed or Developed**

### **Disturbed Habitats**

Disturbed habitat describes areas that have been physically disturbed. This disturbance could be due to previous human activity, with the area no longer recognized as native land. Vegetation consists of non-native weedy species or ornamentals that take advantage of disturbance. Some typical examples include areas that have been graded or repeatedly cleared for fuel management, or the land has been used repeatedly so that it prevents natural revegetation.



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Characteristic species found within the disturbed habitat of the mitigation site include olive (*Olea europaea*), common sowthistle (*Sonchus oleraceus*), tocalote (*Centaurea melitensis*), and tumbleweed (*Salsola tragus*).

Approximately 3.3 acres of disturbed habitat was mapped within the mitigation site.

### Urban/Developed

Developed habitats are areas where construction has occurred. Native vegetation is no longer supported. Developed land is characterized by permanent structures, and could include pavement or hardscape.

Within the mitigation site, developed land includes parking lots, buildings, and pavement. No native vegetation is present. Approximately 0.1 acre of urban/developed land was mapped within the mitigation site.

## 3.2 Jurisdictional Wetlands and Waters

The wetland delineation by Merkel & Associates (1999) found non-wetland waters and wetland communities on site (southern sycamore-alder riparian woodland and freshwater marsh). Only southern sycamore-alder riparian woodland was present during the 2016 site visit by Dudek.

## 3.3 Regional Context

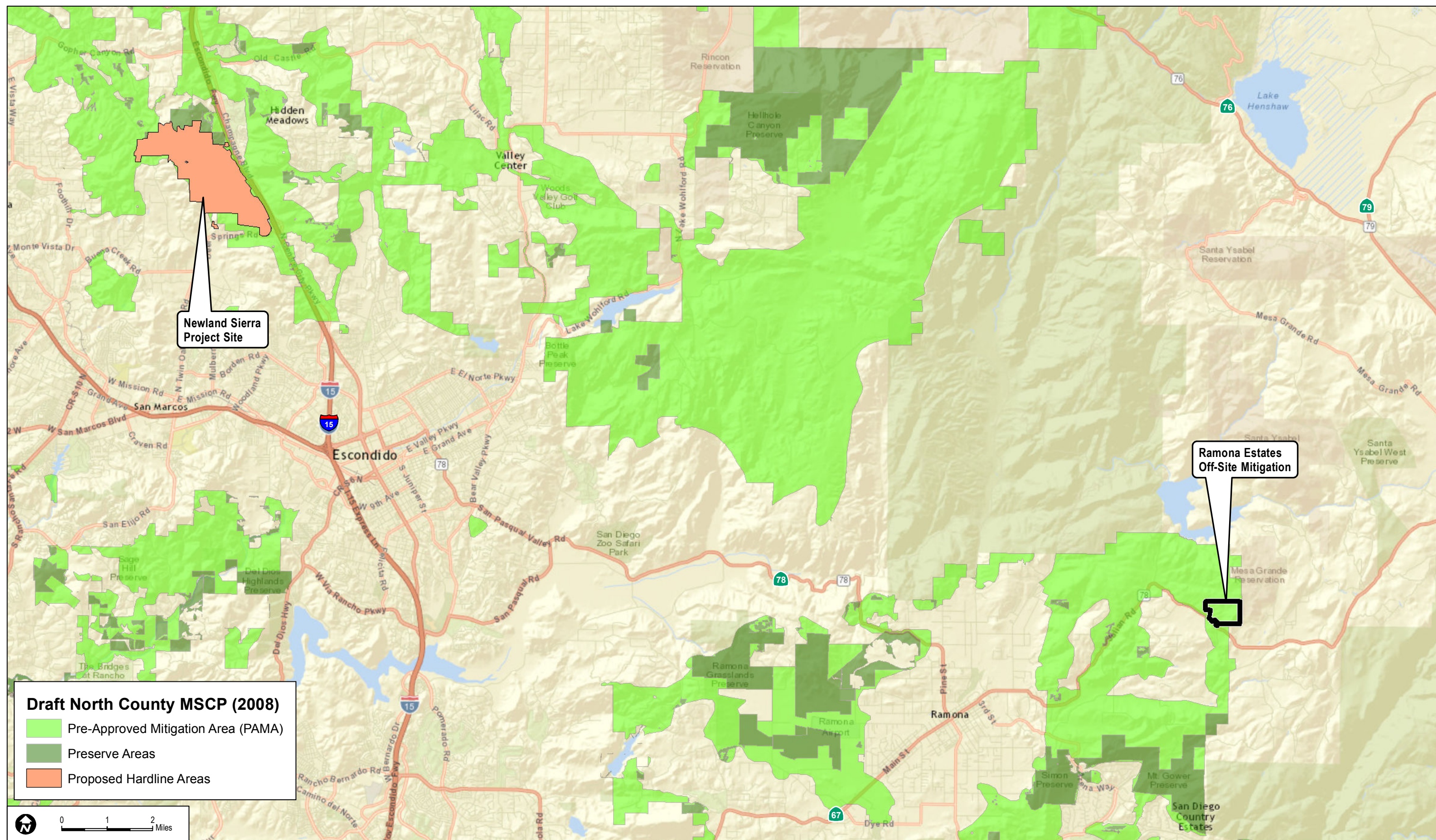
The entire site is located within the NCMSCP boundary in a PAMA-designated area (Figure 4). The majority of the site is within “Very High” quality habitat based on the NCMSCP composite Habitat Evaluation Model (Figure 5). The “Very High” ranked areas typically consist of riparian, oak woodland, grassland, wetland habitats, and coastal sage scrub (AMEC 2001).

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