

Resource Management Plan for **Simon Preserve** **San Diego County**



June 2010

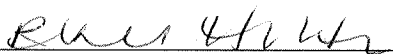


SIMON PRESERVE

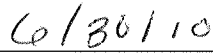
RESOURCE MANAGEMENT PLAN

June 30, 2010

Approved by:



Renee Hilton, Assistant Director
County of San Diego
Department of Parks and Recreation



Date

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1.	Purpose of Management Plan	1
1.1.1	MSCP Background	3
1.1.2	North County MSCP Plan.....	3
1.1.3	Framework Management Plan and Area-Specific Management Directives.....	3
1.2.	Implementation	4
1.2.1	Management Approach	4
1.2.2	Responsible Parties/Designation of Land Manager.....	4
1.2.3	Regulatory Context.....	5
1.2.4	Limitations and Constraints	5
2.0	PROPERTY DESCRIPTION	5
2.1	Legal Description.....	5
2.2	Geographical Setting	5
2.2.1	Site Access.....	7
2.2.2	MSCP Context.....	7
2.3	Physical and Climatic Conditions.....	9
2.3.1	Geology and Soils	9
2.3.2	Climate	12
2.3.3	Hydrology	12
2.3.4	Fire History	12
2.4	Land Use	15
2.4.1	On-Site Land Use	15
2.4.2	Adjacent Properties	15
2.4.3	Easements or Rights	15
2.5	Trails.....	16
3.0	BIOLOGICAL RESOURCES DESCRIPTION.....	18
3.1	Vegetation Communities/Habitat	18
3.2	Plant Species.....	28
3.2.1	Plant Species Present	28
3.2.2	Rare, Threatened, or Endangered Plant Species Present.....	28
3.2.3	Rare, Threatened, or Endangered Plant Species not Observed but with High Potential to Occur	31
3.2.4	Non-native and/or Invasive Plant Species	31
3.3	Wildlife Species	34
3.3.1	Wildlife Species Present.....	34
3.3.2	Rare, Threatened, or Endangered Wildlife Species Present	37
3.3.3	Rare, Threatened or Endangered Wildlife with High Potential to Occur.....	46
3.3.4	Non-native and/or Invasive Wildlife Species.....	48

3.4	Overall Biological and Conservation Value.....	48
3.4.1	Wildlife Linkages and Corridors.....	49
4.0	CULTURAL RESOURCES	49
4.1	Site History.....	50
4.2	Native American Consultation	51
4.3	Cultural Resource Descriptions	52
4.3.1	Prehistoric Archaeological Resources	52
4.3.2	Historic Sites	53
4.3.3	Multi-Component Resources	55
4.4	Resource Significance	57
5.0	RESOURCE MANAGEMENT	59
5.1	Management Goals and Objectives.....	59
5.1.1	County-Specific	59
5.1.2	MSCP-Related	59
5.1.3	Management Directives and Implementation Measures.....	60
5.2	Biological Resources Element (A)	61
5.2.1	Biological Monitoring	61
5.2.2	MSCP Covered Species-Specific Monitoring and Management....	63
5.2.3	Non-Native Invasive Wildlife Species Control.....	68
5.2.4	Future Research.....	69
5.3	Vegetation Management Element (B).....	69
5.3.1	Habitat Restoration.....	70
5.3.2	Non-Native Plant Species Removal and Control	70
5.3.3	Fire prevention, control, and management	71
5.4	Public Use, Trails, and Recreation Element (C)	72
5.4.1	Public Access	72
5.4.2	Fencing and Gates	74
5.4.3	Trail and Access Road Maintenance	74
5.4.4	Signage and Lighting	75
5.5	Operations and Facility Maintenance Element (D)	76
5.5.1	Litter/Trash and Materials Storage	76
5.5.2	Hydrological Management.....	76
5.5.3	Emergency, Safety and Police Services.....	77
5.5.4	Adjacency Management Issues.....	78
5.6	Cultural Resources Element (E)	79
6.0	REFERENCES.....	82
TABLES		
Table 1. Vegetation Communities within the Preserve.....		19
Table 2. Potential Significance of Sites in the Preserve		57

FIGURES

Figure 1. Regional Location	2
Figure 2. Preserve Vicinity Map	6
Figure 3. MSCP Designations and Adjacent Conserved Lands	8
Figure 4. Soils Map	10
Figure 5. Hydrology	13
Figure 6. Fire History	14
Figure 7. Trails, Gates, and Fences	17
Figure 8. Vegetation Communities	20
Figure 9. Special Status Plant Species	30
Figure 10. Non-native Invasive Plant Species	33
Figure 11. Special Status Wildlife Species	38

APPENDICES

Appendix A Baseline Biodiversity Survey for the Simon Preserve

Appendix B Archaeological Survey Report for Simon Preserve, San Diego
County, California

1.0 INTRODUCTION

Simon Preserve (Preserve) consists of approximately 617 acres¹ and is located approximately 5.5 miles southeast of the City of San Diego and six miles northeast of the City of Poway (Figure 1). The County acquired the Preserve in 1995 for inclusion in the North County Multiple Species Conservation Program (North County MSCP) preserve system. The Preserve consists of low to very high value native habitats, as well as areas that have been marginally impacted by human activities including trails and utility access roads that also serve as trails.

1.1. Purpose of Management Plan

This Resource Management Plan (RMP) has been prepared as a guidance document to manage and preserve the biological and cultural resources within the Preserve, and to provide Area-Specific Management Directives (ASMDs) pursuant to the requirements of the Draft North County MSCP Plan (North County MSCP Plan) and Draft Framework Resource Management Plan (Framework RMP) (County 2009). More specifically, this RMP will:

- a) guide the 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;
- b) serve as a guide for appropriate public uses of the property;
- c) provide a descriptive inventory of the vegetation communities/habitats, plant and animal species, and the archaeological and/or historical resources that occur on this property;
- d) establish the baseline conditions from which adaptive management will be determined and success will be measured; and
- e) provide an overview of the operation and maintenance requirements to implement management goals.

Chapter 5 of this RMP includes ASMDs for Simon Preserve.

It is recognized that the County owned land is only a small portion of the MSCP preserve system. The County does ensure management of other lands that are dedicated as a conservation easement for discretionary project mitigation, through requiring land developers to prepare Resource Management Plans. The County will spearhead a larger coordinated effort to ensure that other conserved lands in the

¹ The assessor's parcel data reports the Preserve to be 630 acres; however, calculations generated from the San Diego geographic information system (SanGIS) data show the Preserve as 617 acres. Therefore, this report references the Preserve as 617 acres.



FIGURE 1
Regional Map

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MARCH 2010

Baseline Biodiversity Survey for Simon Preserve

area that make up the MSCP preserve are also being monitored and managed consistent with this RMP and the overall goals of the MSCP Plan and the North County MSCP Plan once it is finalized.

1.1.1 MSCP Background

The MSCP is a comprehensive habitat conservation planning program and one of three subregional habitat planning efforts in San Diego County which contribute to preservation of regional biodiversity through coordination with other habitat conservation planning efforts throughout southern California. Agencies participating in the MSCP include the County, other local jurisdictions, the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG). Local jurisdictions and special districts implement their respective portions of the MSCP Plan (City of San Diego 1998) through Subarea plans, which describe specific implementing mechanisms for the MSCP.

The combination of the subregional MSCP Plan and Subarea plans serve as a Multiple Species Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act (FESA), the Natural Community Conservation Planning (NCCP) Program pursuant to the California NCCP Act of 1991 and the California Endangered Species Act (CESA). Simon Preserve is owned and operated by the County and is included within the North County MSCP preserve system.

1.1.2 North County MSCP Plan

The County is preparing the North County MSCP Plan as a habitat conservation planning effort which will expand the County's MSCP into the northwestern unincorporated areas of the County. This North County MSCP Plan will help conserve habitat that benefits numerous species, including the 63 covered species. This North County MSCP Plan will also enhance the region's quality of life by providing the residents of San Diego County with passive recreational and educational opportunities as well as a functioning natural environment in which to live. The North County MSCP Plan area encompasses approximately 489 square miles in and around the unincorporated communities of Bonsall, De Luz, Fallbrook, Harmony Grove, Lilac, Pala, Pauma Valley, Rainbow, Ramona, Rincon Springs, Twin Oaks Valley, and Valley Center.

The North County MSCP Plan goal is to preserve 106,780 acres of natural lands in a network of preserves. The North County MSCP preserve system will be assembled by a variety of means, beginning with the conservation and management of existing public lands.

1.1.3 Framework Management Plan and Area-Specific Management Directives

According to Section 6.3.1 of the MSCP Plan the County is required to prepare a Framework RMP for the portion of the North County MSCP preserve within the North

County MSCP Plan's boundaries. The Framework RMP provides general direction for all preserve management and biological monitoring within the preserve system.

The Framework RMP also incorporates a requirement for the subsequent preparation and implementation of ASMDs to address management and monitoring issues at the site-specific level. ASMDs will be developed in accordance with the Framework RMP using the information gained during the biological and cultural resources baseline surveys. Chapter 5 of this RMP includes ASMDs for Simon Preserve.

1.2. Implementation

1.2.1 Management Approach

A key concept of the MSCP is the use of "Adaptive Management Techniques" directed at the conservation and recovery of individual species. This term refers to modifying management actions when monitoring of the resources indicates that changes are needed. It is particularly useful where there is uncertainty regarding the efficacy of certain management measures and/or the needs of target species. Adaptive management and an associated monitoring program are designed to inform land managers of the status and trends of covered species, natural communities, and landscapes in a manner that provides data to allow informed management actions and decisions.

It is anticipated that the recommended management actions provided in this RMP will be dynamic in nature. Applying adaptive management, the effectiveness and appropriateness of recommended management actions would be determined through review of management goal and objective achievement so that changes can be made to management directives and implementation measures as needed. Adaptive management techniques depend upon the specific issues impacting the resources. Therefore, the techniques herein may be subject to change or revisions when applied. Additionally, the monitoring protocols/requirements for MSCP covered species and habitats will be revisited periodically by participants of the MSCP and are subject to change based on adoption of updated protocols. It is anticipated that this RMP will be revised once every five years, as needed. The RMP may be revised on a shorter time scale if there is a change in circumstance, for example, acquisition of additional Preserve land.

1.2.2 Responsible Parties/Designation of Land Manager

The County is responsible for management, biological monitoring, and meeting the conditions of MSCP coverage on County-owned lands conserved as part of the MSCP Preserve system within the County's jurisdiction, which includes County-owned land. The Preserve is operated, administered, and managed by the County Department of Parks and Recreation (DPR) and the DPR District Park Manager assigned to the Preserve is the land manager. DPR (District Park Manager and staff

of the Resources Management Division) will also be responsible for the implementation and enforcement of the RMP.

The Preserve is located in the management district of one supervising park ranger and two park rangers. The Preserve is patrolled two to four times a week, depending on season and usage. It is expected that many of the implementation measures, especially the maintenance tasks, will be carried out by the rangers who are most familiar with the site and currently patrol the Preserve.

1.2.3 Regulatory Context

The County's park rangers manage County parks and enforce preserve rules and regulations pursuant to San Diego County Code of Regulatory Ordinances Title 4, Division 1, Chapter 1 County Parks and Recreation. In addition, per County Code of Regulatory Ordinance Sec 41.111, 41.112, 41.113, all wildlife, plant, historical artifacts, and geologic features are protected and are not to be damaged or removed. Any person who violates any provision of these sections is guilty of a misdemeanor as provided in Sections 11.116, 11.117, and 11.118 of this Code, punishable by fines up to \$2,500 a day for each day the person violates these sections. The park rangers will contact law enforcement who will cite the offending individual. In addition, if an individual does not comply with signs within a facility and ignores park ranger instructions, the individual could potentially be charged with a misdemeanor by law enforcement.

1.2.4 Limitations and Constraints

Implementation and the timing of many of the management directives will be based on funding in any fiscal year and will be determined through the DPR Operations Division who will prioritize preserve needs in their work plan for the fiscal year based on the priority of the directives in the RMP for each preserve.

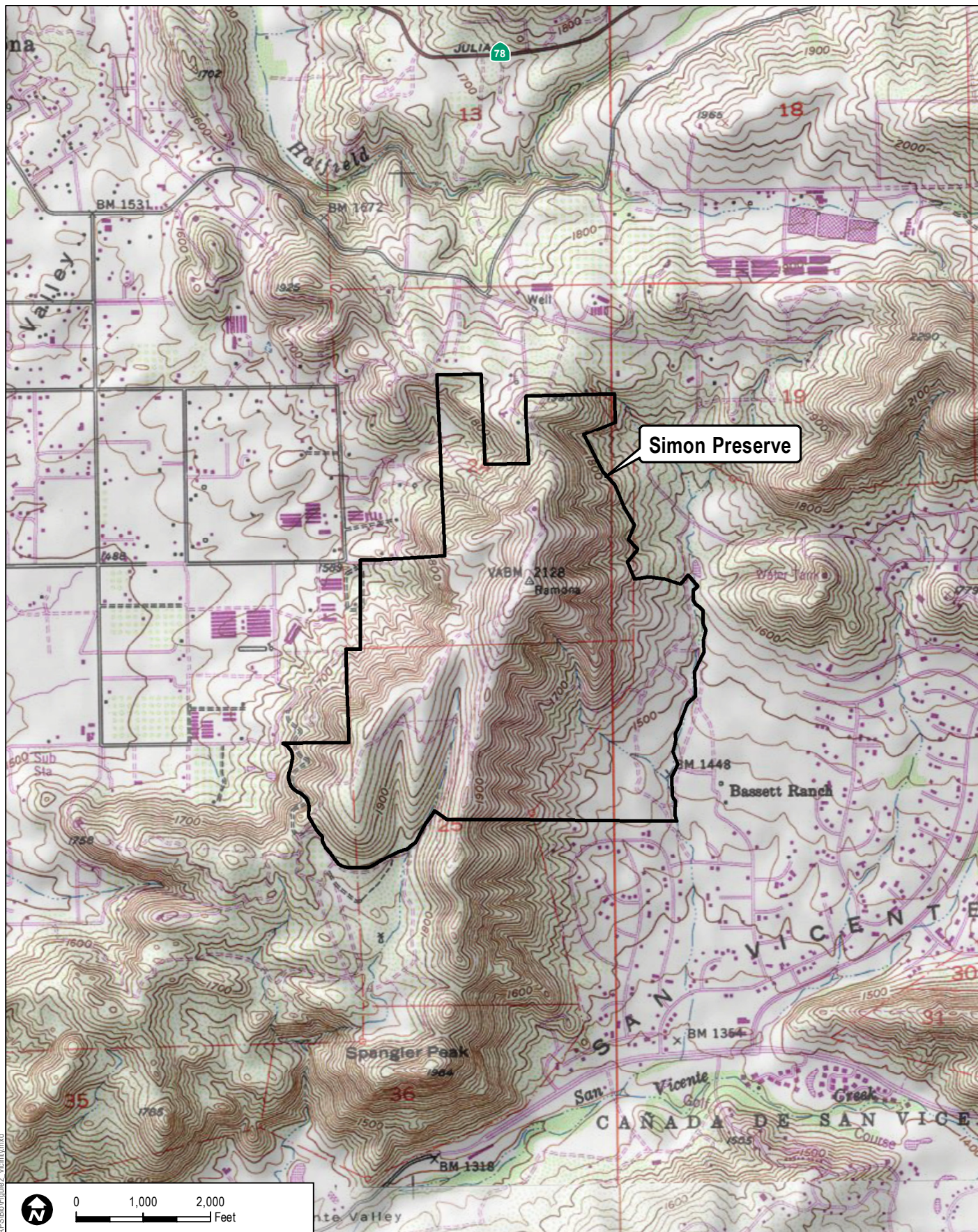
2.0 PROPERTY DESCRIPTION

2.1 Legal Description

The Preserve is mapped on the U.S. Geological Survey (USGS) 7.5-minute Ramona quadrangle, Township 13 South, Ranges 1 and 2 East, located approximately 5.5 miles southeast of the City of San Diego and 6 miles northeast of the City of Poway (Figure 2). The Assessor's Parcel Numbers for the Preserve are 284-070-09; 284-070-80; 284-071-13; 284-071-17; 284-071-19; 284-110-33; 284-110-34; 284-110-36; 284-130-04; 284-130-05; 284-130-07; 284-130-08; 287-071-14; 287-071-16; 288-010-01; and 288-010-16.

2.2 Geographical Setting

The topography of the Preserve is determined primarily by the intersection of two ridgelines in the central portion of the property. Both ridgelines are generally north-south trending and bisect the property. On site elevations range from 1,440 feet



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SOURCE: Preserve Boundary, County of San Diego;
USGS 7.5 Minute Series El Cajon Mountain and Ramona Quadrangles.

Baseline Biodiversity Survey for Simon Preserve

FIGURE 2
Vicinity Map

above mean sea level (amsl) in the southeast corner of the property to a maximum of 2,120 feet amsl at the intersection of both ridgelines. East-facing slopes characterize the eastern portion of the Preserve while west and northwest facing slopes characterize the western portion of the Preserve. Slope gradients in both areas reach up to 35%. The sloped regions on both the east and west sides of the Preserve are also characterized by a series of smaller sub-drainages, gullies, and draws that flow downward away from the prominent ridgelines.

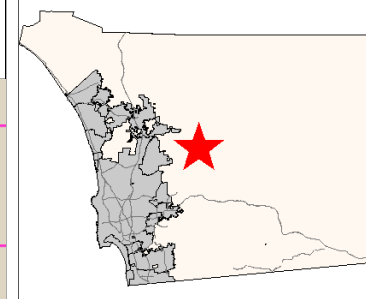
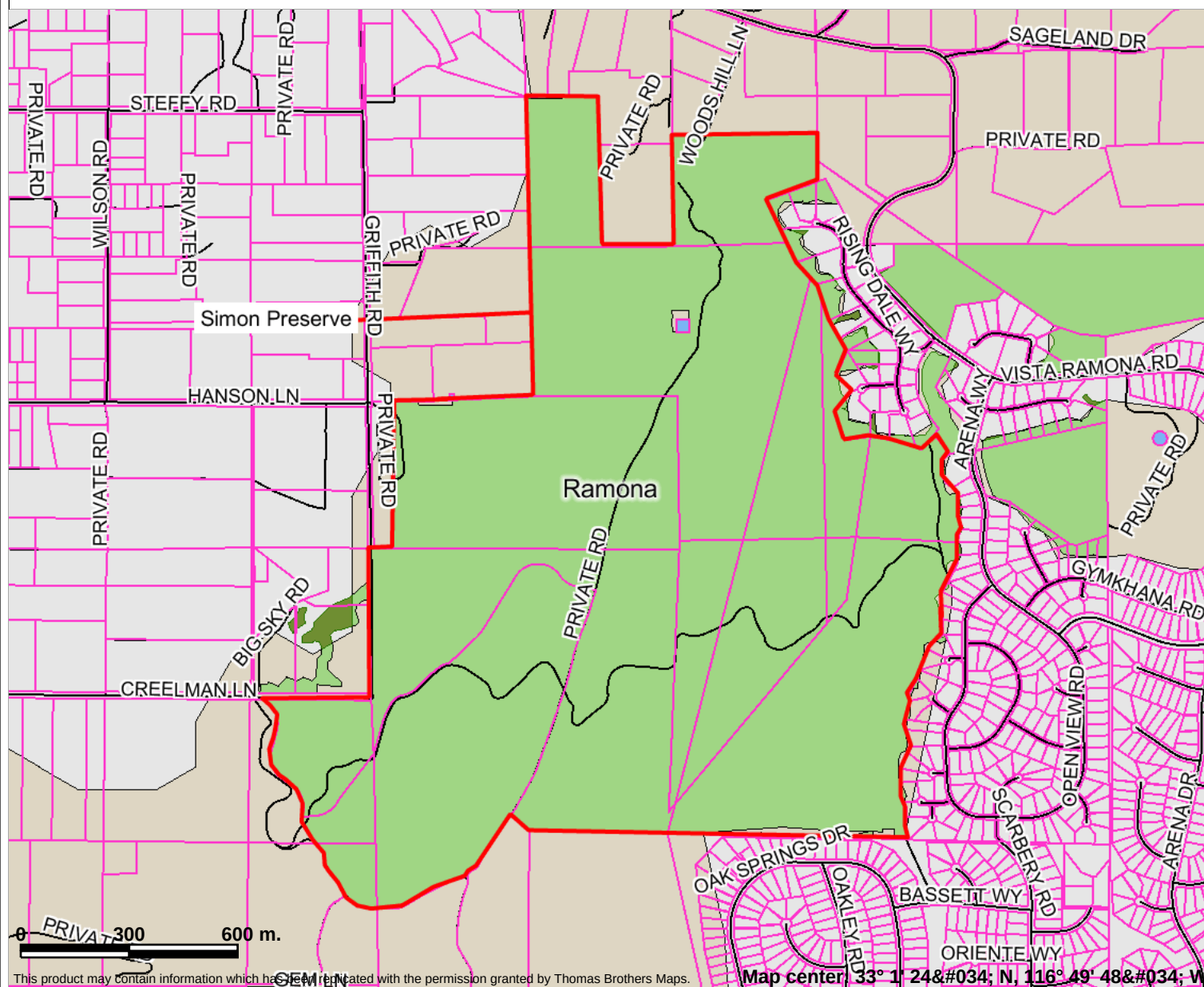
2.2.1 Site Access

Existing access points to the Preserve (see Figure 7) include: 1) gate in the northern portion of the Preserve at the terminus of Woods Hill Road; 2) gate located in the southern portion of the Preserve off a dirt trail extending north from Bassett Way; and (3) two gates located in the northeastern portion of the Preserve, the northern gate can be accessed from a dirt trail extending from Vista Ramona Road and the southern gate can be accessed from a dirt trail extending from Arena Way.

2.2.2 MSCP Context

The Preserve is located within the Eastern Ramona Core and is designated under the North County MSCP as "Preserve Areas" (Figure 3). Rural residential property is located directly to the north and west and is designated as PAMA, intensive agricultural lands to the south designated as PAMA, and single family detached properties to the east designated as Outside PAMA.

Figure 3. Draft North County MSCP Subarea Designations



Legend

- Parcels with out labels
- Highways
- Freeways
- Streets
- Water Bodies
- Water Bodies
- Public Version: DRAFT MSCP Designations - North**
- Preserve Areas
- Pre-Approved Mitigation Area (PAMA)
- Open Space Easement outside PAMA
- Pre-negotiated (Hardlined) Take
- Authorized Areas
- Outside Pre-Approved Mitigation Area (PAMA)
- Tribal Lands
- US Forest Service
- Special Districts
- Sponsor Groups
- Sponsor Groups
- Other
- Community Planning Area
- Community Planning Areas



Scale: 1:16,696



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2.3 Physical and Climatic Conditions

2.3.1 Geology and Soils

The Preserve is situated atop three distinct geologic categories: Cretaceous plutonic, Eocene marine and nonmarine, and quaternary alluvium. The Cretaceous plutonic occurs along the western boundary of the Preserve and through the center of the site east of the mapped Eocene marine and nonmarine, which corresponds with the flatter area on site and occurs in a general northeast-southwest direction. The quaternary alluvium occurs on the eastern portion of the site and a small area occurs in the northwest corner.

Several general soil associations are represented within the Preserve: Anderson very gravelly sandy loam, Cienaba rocky coarse sandy loam, Clayey alluvial land, Fallbrook sandy loam, Las Posas stony fine sandy loam, Olivenhain cobbly loam, Placentia sandy loam, and Vista rocky coarse sandy loam (Figure 4) (Bowman 1973).

Anderson series

These soils occur in the southwest corner of the Preserve. Anderson series soils form from stony, cobbly, and gravelly granitic and schist alluvium. The topsoil layer is brown to dark brown very gravelly sandy loam and about 25 inches deep over subsoil that extends to about 60 inches depth. Anderson very gravelly sandy loam, 9% to 45% slopes is mapped on site (Bowman 1973).

Cienaba series

These soils occur in the northern and southern portions of the site. Cienaba soils are excessively drained, very shallow to shallow coarse sandy loams that form in material weathered in place from granitic rock. The topsoil layer is a brown coarse sandy loam about 10 inches deep over weathered granodiorite. Cienaba rocky coarse sandy loam, 9% to 30% slopes is mapped on site (Bowman 1973).

Clayey alluvial land

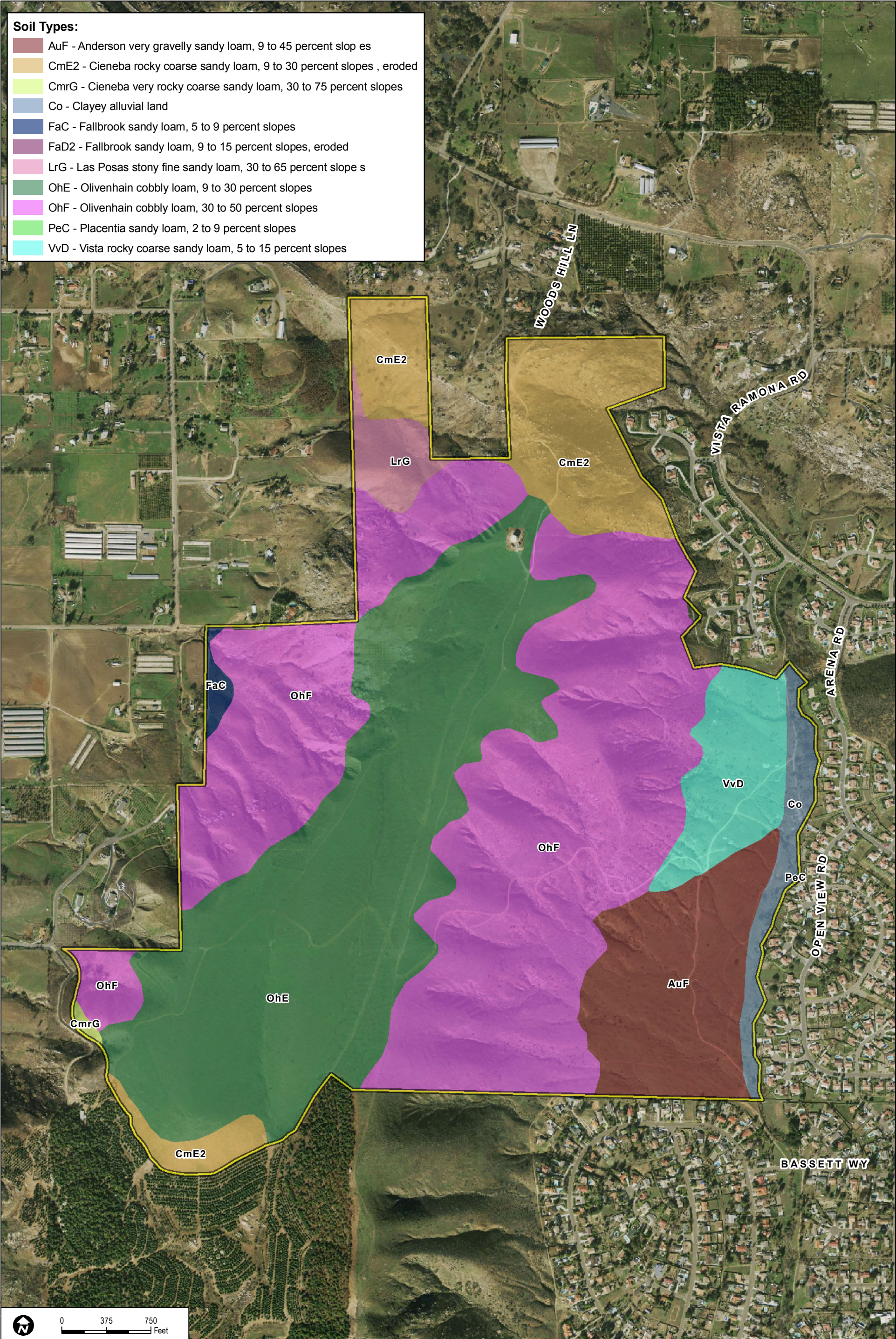
These soils occur along the eastern boundary of the Preserve. Clayey alluvial land soils are moderately well-drained, very deep, and very dark brown to black clay loam or clay. The subsoil is often stratified with lenses of clay to fine sandy loam and the soil material can be calcareous (Bowman 1973).

Fallbrook series

These soils cover a small area along the western boundary of the Preserve. Fallbrook series soils are well-drained, moderately deep to deep sandy loams formed from material weathered in place from granodiorite. The topsoil layer is

Soil Types:

- AuF - Anderson very gravelly sandy loam, 9 to 45 percent slopes
- CmE2 - Cieneba rocky coarse sandy loam, 9 to 30 percent slopes , eroded
- CmrG - Cieneba very rocky coarse sandy loam, 30 to 75 percent slopes
- Co - Clayey alluvial land
- FaC - Fallbrook sandy loam, 5 to 9 percent slopes
- FaD2 - Fallbrook sandy loam, 9 to 15 percent slopes, eroded
- LrG - Las Posas stony fine sandy loam, 30 to 65 percent slopes
- OhE - Olivenhain cobbly loam, 9 to 30 percent slopes
- OhF - Olivenhain cobbly loam, 30 to 50 percent slopes
- PeC - Placentia sandy loam, 2 to 9 percent slopes
- VvD - Vista rocky coarse sandy loam, 5 to 15 percent slopes



brown, slightly acid sandy loam about 6 inches deep over sandy clay loam and loam subsoil. Fallbrook sandy loam, 5% to 9% slopes, eroded is mapped on site (Bowman 1973).

Las Posas series

These soils occur in the northern portion of the site. Las Posas series soils are well-drained, moderately deep stony fine sandy loams formed in material weathered from basic igneous rocks. The topsoil layer is reddish-brown, stony fine sandy loam about 4 inches deep over clay loam and clay subsoil with a gabbro substratum. Las Posas stony fine sandy loam, 30% to 65% slopes is mapped on site (Bowman 1973).

Olivenhain series

These soils cover a large area in the center of the site. Olivenhain series soils form from gravelly and cobbly alluvium on dissected marine terraces. The topsoil layer is brown to reddish-brown and about 10 inches deep over subsoil that extends to about 60 inches depth. Small areas of Huerhuero, Diablo, and Linne soils may be included in areas mapped as Olivenhain soils. Olivenhain cobbly loam, 9% to 30% slopes and Olivenhain cobbly loam, 30% to 50% slopes are mapped on site (Bowman 1973). Olivenhain soils are substrates associated with sensitive plant species (Vanderwier 2002).

Placentia series

A small area of these soils occurs along the eastern boundary of the Preserve. Placentia series soils are moderately well-drained sandy loams formed in granitic alluvium. The surface layer is brown sandy loam about 13 inches deep with a sandy clay and sandy clay loam subsoil Placentia sandy loam, 2% to 9% slopes is mapped on site (Bowman 1973).

Vista series

These soils occur in the eastern portion of the Preserve. Vista series soils are well-drained, moderately deep and deep coarse sandy loams formed from granodiorite or quartz diorite. The surface layer is dark grayish-brown and dark-brown with a sandy loam subsoil formed over weathered granitic rock Vista rocky coarse sandy loam, 5% to 15% slopes is mapped on site (Bowman 1973).

Las Posas Stony Fine Sandy Loam and Olivenhain Cobbly Loam

The soil profiles of Las Posas stony fine sandy loam and Olivenhain cobbly loam include clays that are generally associated with sensitive plant taxa. Small inclusions of Las Posas soils may occur within the Cieneba and Fallbrook soil units on site. Huerhuero and Diablo soils, also associated with sensitive plant taxa, may occur as minor inclusions in the Olivenhain soil units on site (Vanderwier 2002).

2.3.2 Climate

As with most of Southern California, the regional climate in the vicinity of the Preserve is influenced by the Pacific Ocean and is frequently under the influence of a seasonal, migratory subtropical high-pressure cell known as the Pacific High. Wet winters and dry summers, with mild seasonal changes, generally characterize the Southern California climate. This climate pattern is occasionally interrupted by extreme periods of hot weather; winter storms; or dry, easterly Santa Ana winds.

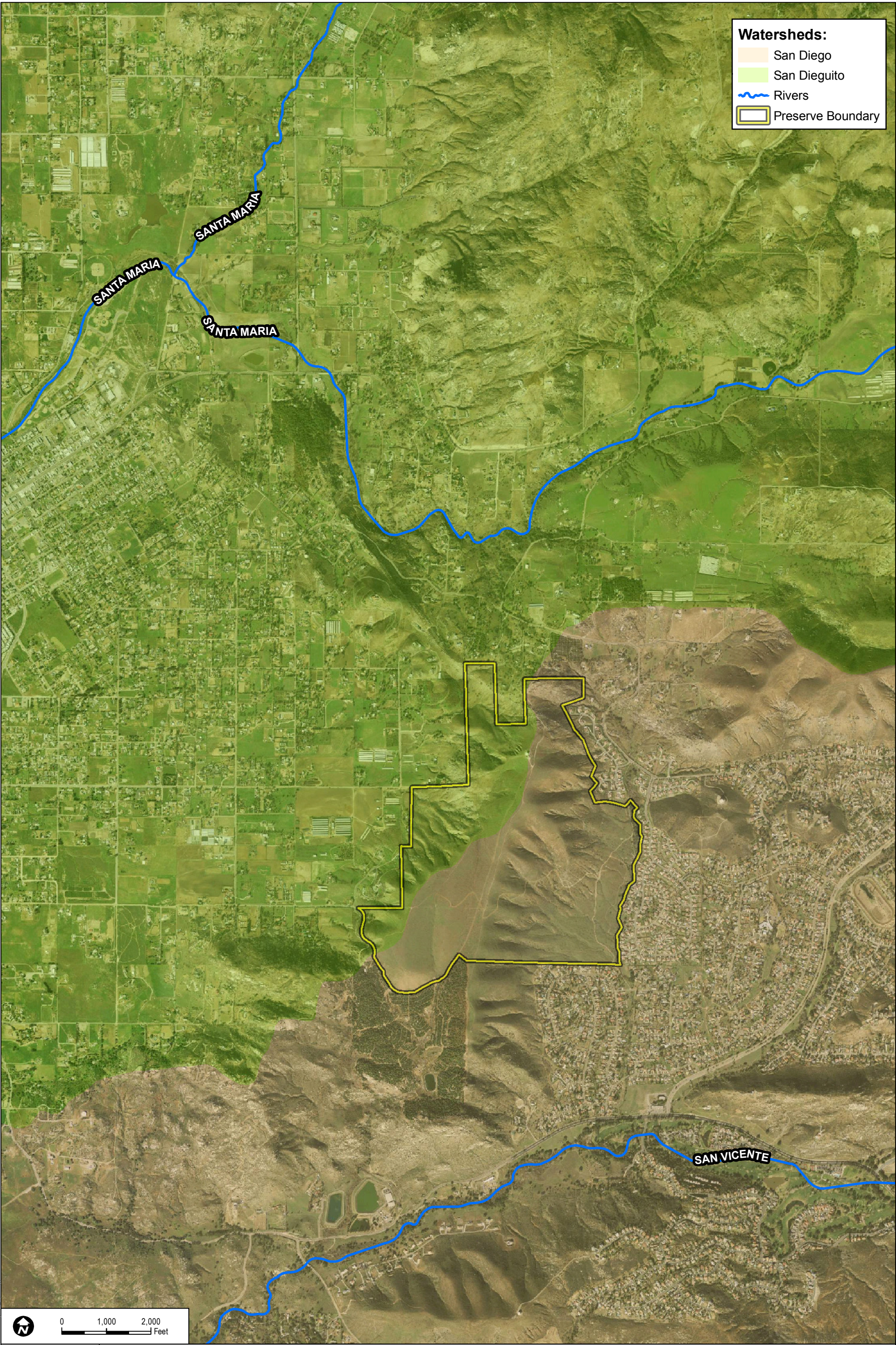
However, there is some local variance to the typical Southern California climate. The inland location of the Preserve affects the degree of influence of the Pacific Ocean, resulting in less-regulated temperatures. The average high temperature calculated over the past 9 years for this area is approximately 87.7° Fahrenheit (F), with higher temperatures in summer and early fall (July through October) reaching up to 112°F (Goose Valley Remote Automated Weather Station [RAWS], Western Regional Climate Center 2009). The mean precipitation for the area is 11.7 inches per year, with the majority of rainfall concentrated in the months of December (1.86 inches), January (2.35 inches), February (3.19 inches), and March (1.76 inches) (Western Regional Climate Center 2009).

2.3.3 Hydrology

The western portion of the Preserve is within the San Dieguito Watershed and the remaining area is within the San Diego River Watershed (Figure 5). The western portion of the Preserve generally drains to the northwest via small sub-drainages, gullies, and draws towards adjacent rural residential areas within the eastern portion of the community of Ramona. Santa Maria Creek is the nearest named receiving water body and is located approximately 2.5 miles to the northwest of the Preserve. Santa Maria Creek is a tributary to the San Pasqual River, located approximately 10 miles to the northwest of the Preserve. The eastern portion of the Preserve generally drains to the southeast into a natural stream channel on site that flows from north to south along the eastern boundary of the Preserve. The drainage is an unnamed tributary to San Vicente Creek, located approximately 0.8 mile to the south of the Preserve along the south side of San Vicente Road. San Vicente Creek drains into the San Vicente Reservoir before continuing in a generally southwest direction towards its confluence with the San Diego River near the community of Lakeside.

2.3.4 Fire History

Based on historical fire perimeter data (FRAP 2009) the entire Preserve has burned at least once during the recorded data period, with the vast majority of the site having burned over three times between 1928 and 2007 (Figure 6). The average interval between wildfires on the Preserve was calculated to be 15.8 years with intervals ranging between 3 and 25 years. However, this average includes two short intervals of 3 and 4 years, so an evaluation of the median interval between fires is calculated at 23 years. Based on this analysis, it is expected that the Preserve



Watersheds:

- San Diego
- San Dieguito
- Rivers
- Preserve Boundary

0 1,000 2,000 Feet

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SOURCE: Preserve Boundary, County of San Diego;
Watersheds (SanGIS 2008); DigitalGlobe, 2008

FIGURE 5
Hydrology Map

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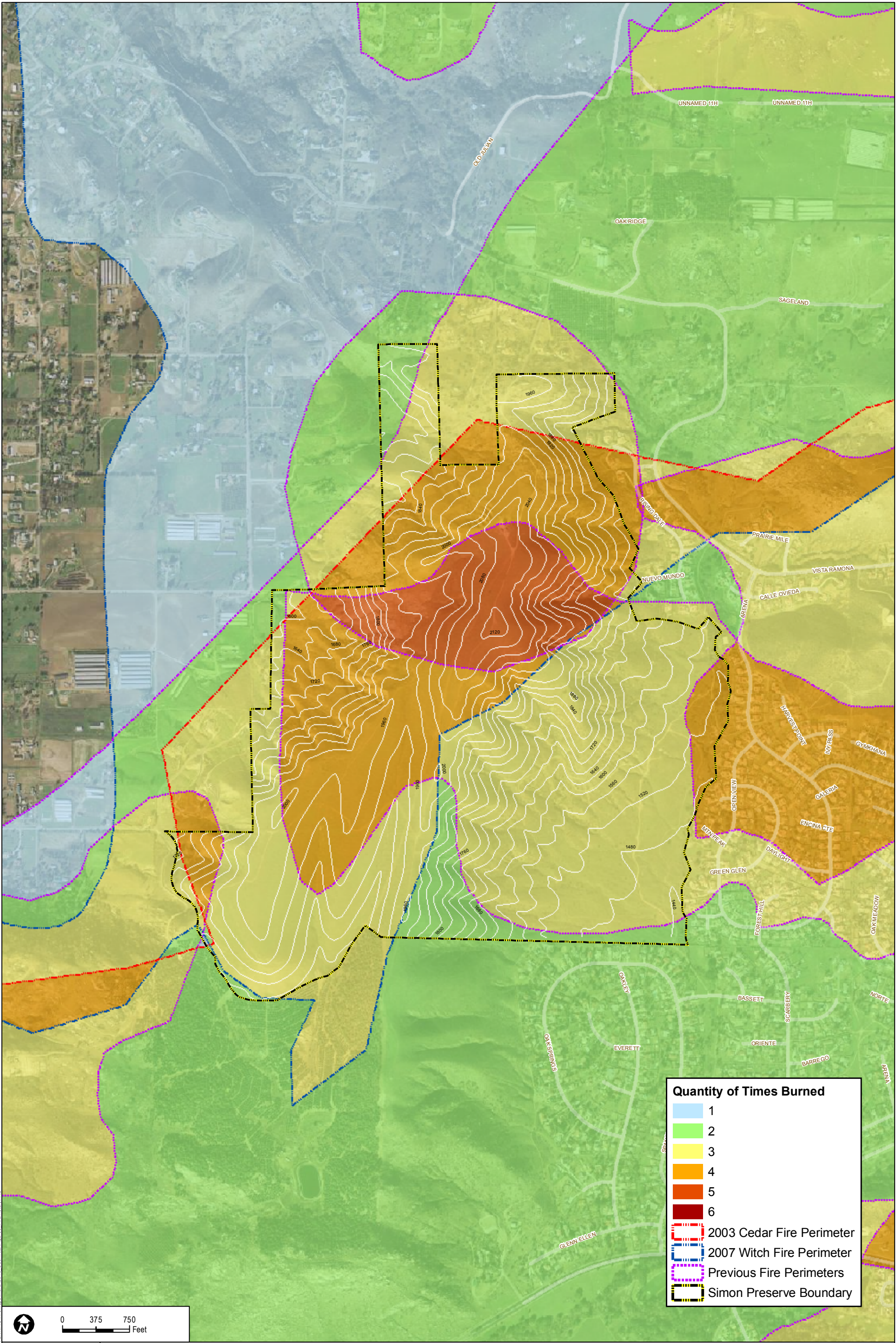


FIGURE 6
Fire History - Simon Preserve Vegetation Management Plan

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would be subject to wildfire occurrence every 23 years, with the realistic possibility of short interval occurrences.

The Preserve is located within the jurisdiction of the California Department of Forestry and Fire Protection (CalFire) and the Ramona Fire Protection District. The Preserve is also located in a wildfire-prone area and has been mapped by CalFire as a "Very High Fire Severity Zone".

2.4 Land Use

2.4.1 On-Site Land Use

The Preserve consists of native habitat and is open to the public for passive recreational use. Utility maintenance roads and designated trails cross the Preserve north to south and east to west. In addition, a water reservoir is located in the northern portion of the Preserve.

2.4.2 Adjacent Properties

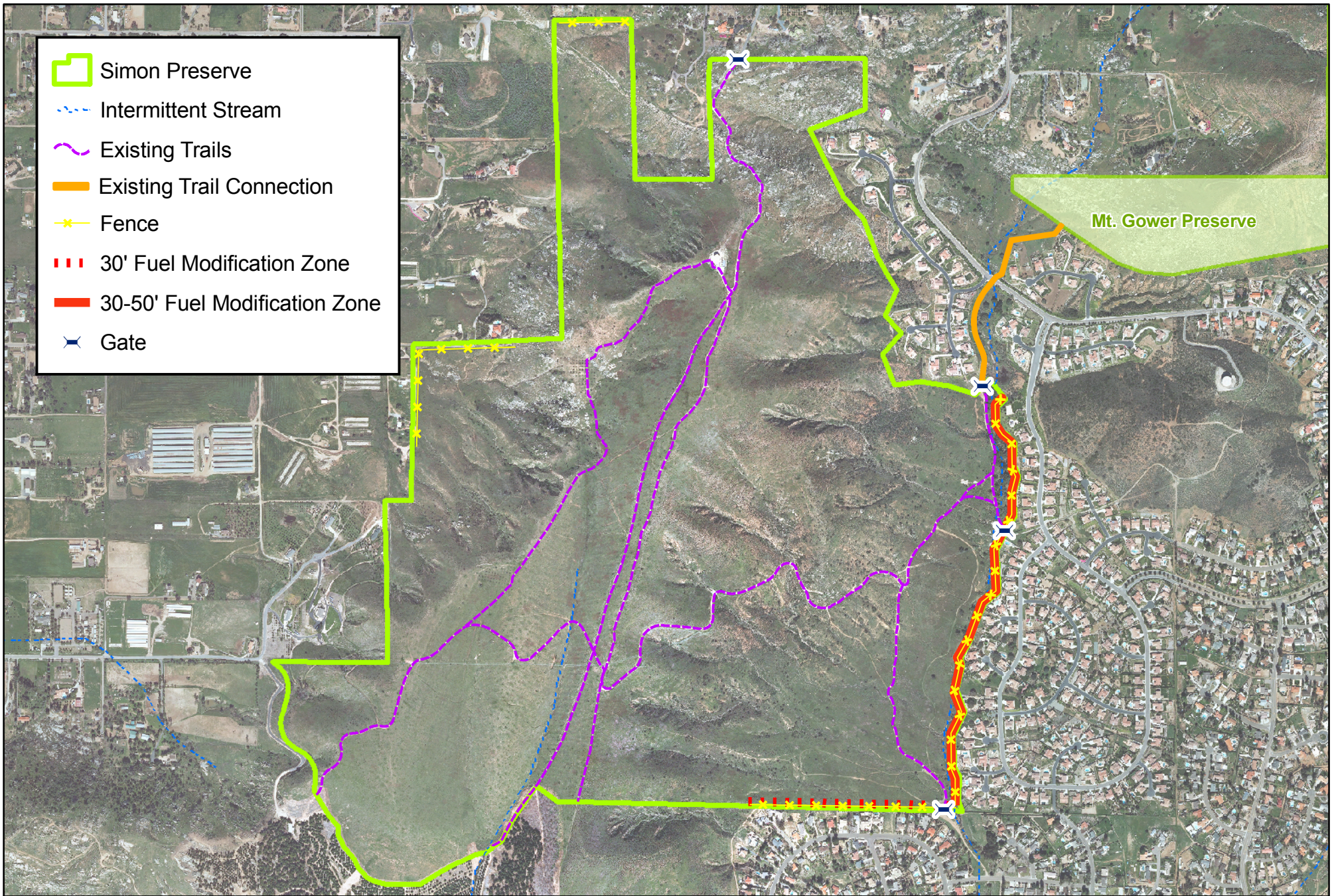
Sparse rural residential development is located to the north and west of the Preserve, orchards to the southwest, vacant land to the north and south, and residential communities to the east and southeast. The vacant land is privately owned. Open space associated with the residential community to the east of the Preserve is owned by the Rancho San Vicente Association. The open space associated with the residential community to the south of the Preserve is owned by the San Diego Country Estates Association.

2.4.3 Easements or Rights

Several easements are present within the Preserve operated by San Diego Gas & Electric (SDG&E). SDG&E retains four distribution easements and one transmission easement within the Preserve. Segments of distribution line easements are located in the northern and western areas of the Preserve. In addition, a distribution line easement traverses the southern area of the Preserve east to west. A transmission line easement also follows the distribution line easement in the southern area of the Preserve. SDG&E conducts operation and maintenance activities for their facilities consistent with the SDG&E Subregional Natural Community Conservation Planning (NCCP) (SDG&E 1995). The SDG&E NCCP was approved by the wildlife agencies and is compatible with this RMP. Ramona Municipal Water District owns 0.3 acres within the northern area of the Preserve and operates a water reservoir.

2.5 Trails

There are approximately 6.5 miles of trails and utility maintenance roads on the Preserve (Figure 7). The utility maintenance roads are accessible via gates at Woods Hill Lane and Calle Andrea, and are associated with transmission lines that traverse the southern portion of the Preserve generally from east to west, and with the water reservoir located in the northern portion of the Preserve. All 3.2 miles of utility maintenance roads within the Preserve are unpaved except for approximately 2,270 feet extending from the Woods Hill Lane access gate to the water reservoir on site. The remaining 3.3 miles of trails in the Preserve are maintained by DPR (County of San Diego 2009a). The trails mainly traverse annual grassland, coastal sage scrub, chamise chaparral, and southern mixed chaparral. The trails are used by hikers, mountain bikers, and equestrians. Two gates provide access to the Preserve. One gate is located in the northern portion of the Preserve at the terminus of Woods Hill Lane. A second gate is located in the southern portion of the Preserve and off Bassett Road. There is also trail access northeast of the Preserve from Calle Andrea.



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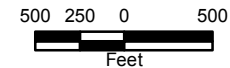


Figure 7
Trails, Fencing and Gates
Simon Preserve

3.0 BIOLOGICAL RESOURCES DESCRIPTION

In 2009 Dudek conducted baseline biological resources surveys of the Preserve. The results of these surveys can be found in the biological resources report entitled, *Baseline Biodiversity Survey for the Simon Preserve*, dated March 2010, and attached as Appendix A. The survey results were used in the preparation of this RMP.

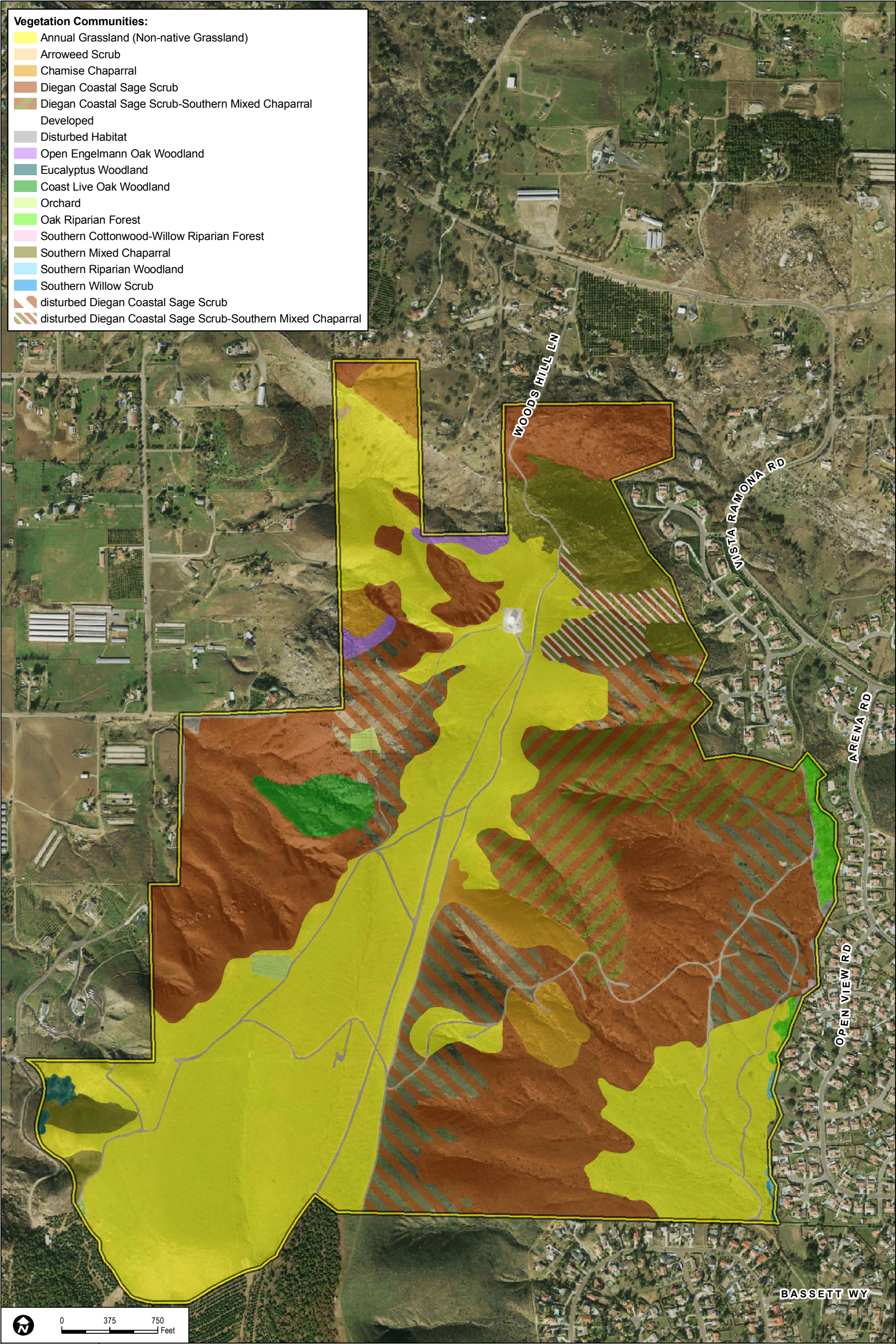
The surveys documented 18 vegetation communities and 296 species within the Preserve. The surveys detected 203 plant species, 52 bird species, 16 mammal species (six bats, eight small mammals, and two medium and large bodied mammals), 8 reptiles, and 17 invertebrate species. Sixteen special-status species were detected during baseline surveys, of which eight are MSCP-covered species (five wildlife and three plants).

3.1 Vegetation Communities/Habitat

Vegetation communities and land cover types present within the Preserve consist of Disturbed habitat, developed land, orchard, Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, chamise chaparral, coastal sage scrub-southern mixed chaparral, disturbed coastal sage scrub-southern mixed chaparral, southern mixed chaparral, non-native grassland, southern coast live oak riparian forest, southern cottonwood-willow riparian forest, southern riparian woodland, southern willow scrub, arrowweed scrub, coast live oak woodland, Engelmann oak woodland, and eucalyptus woodland (Figure 8, Table 1). A description of the vegetation communities and the dominant plant species detected during the survey are found below. A complete list of plant species observed within the Preserve is provided as Appendix A.

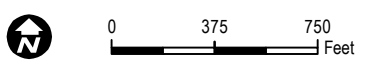
Table 1. Vegetation Communities within the Preserve

Vegetation Community	Acres
Developed Land	0.7
Disturbed Habitat	15.7
Orchard	2.1
Diegan Coastal Sage Scrub	162.6
Disturbed Diegan Coastal Sage Scrub	73.6
Chamise Chaparral	20.4
Coastal Sage Scrub – Southern Mixed Chaparral	53.5
Disturbed Coastal Sage Scrub – Southern Mixed Chaparral	10.5
Southern Mixed Chaparral	24.5
Non-native Grassland (Annual Grassland)	236.7
Southern Coast Live Oak Riparian Forest	4.2
Southern Cottonwood – Willow Riparian Forest	0.2
Southern Riparian Woodland	0.4
Southern Willow Scrub	0.2
Arrowweed Scrub	0.2
Coast Live Oak Woodland	7.2
Engelmann Oak Woodland	3.2
Eucalyptus Woodland	1.4
Total	617.3



Vegetation Communities:

- Annual Grassland (Non-native Grassland)
- Arroyo Scrub
- Chamise Chaparral
- Diegan Coastal Sage Scrub
- Diegan Coastal Sage Scrub-Southern Mixed Chaparral
- Developed
- Disturbed Habitat
- Open Engelmann Oak Woodland
- Eucalyptus Woodland
- Coast Live Oak Woodland
- Orchard
- Oak Riparian Forest
- Southern Cottonwood-Willow Riparian Forest
- Southern Mixed Chaparral
- Southern Riparian Woodland
- Southern Willow Scrub
- disturbed Diegan Coastal Sage Scrub
- disturbed Diegan Coastal Sage Scrub-Southern Mixed Chaparral



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SOURCE: Preserve Boundary, County of San Diego;
Vegetation (SanGIS 2008); DigitalGlobe, 2008

Baseline Biodiversity Survey for Simon Preserve

FIGURE 8
Vegetation Communities

Disturbed Habitat (Holland Code 11300)

Disturbed habitat refers to areas that are not developed yet lack native vegetation, and generally are the result of severe or repeated mechanical perturbation. Oberbauer et al. (2008) provides the following examples of disturbed land: areas that have been graded, repeatedly cleared for fuel management purposes and/or experienced repeated use that prevents natural revegetation, such as dirt parking lots and well-established trails, recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old homesites. Vegetation, if present, is nearly exclusively composed of non-native plant species, such as ornamentals or ruderal exotic forbs, such as thistles (*Centaurea* spp., *Carduus* spp., *Cynara* spp., *Sonchus* spp., *Salsola tragus*), horehound (*Marrubium vulgare*), London rocket (*Sisymbrium irio*), wild radish (*Raphanus* spp.), fig-marigold (*Carpobrotus edulis*), chrysanthemum (*Chrysanthemum* spp.), and fennel (*Foeniculum vulgare*). Although some grass species may be present in disturbed habitat, most annual grass species are more typical of Non-Native Grassland and do not dominate vegetative cover in Disturbed Habitat (Oberbauer et al. 2008). Disturbed habitat is a Tier IV vegetation community in the North County MSCP, indicating that it has limited habitat value.

There are 15.7 acres of disturbed habitat on site. The disturbed habitat on site consists primarily of dirt roads, which occur throughout the site.

Developed (Holland Code 12000)

There is 0.7 acre of developed land in the northern portion of the Preserve. A water reservoir owned by the Ramona Municipal Water District occupies this area. Developed land is a Tier IV vegetation community in the North County MSCP, indicating that it has limited habitat value.

Orchards (Holland Code 18100)

Orchards refer to land that is set aside for cultivating nuts or fruits, especially olives. This land has little biological resource value because it provides very limited habitat value for most native species.

There are 2.1 acres of orchards in three areas in the western portion of the site. Olives and oranges were formerly grown in these areas but are no longer actively maintained. As agricultural land, orchards are a Tier IV vegetation community in the North County MSCP, indicating that they have limited habitat value.

Coastal Sage Scrub (Holland Code 32500)

According to Holland (1986), coastal sage scrub is composed of a variety of soft, low shrubs, characteristically dominated by drought-deciduous species such as California sagebrush (*Artemisia californica*), California buckwheat, and sages (*Salvia*

spp.), with scattered evergreen shrubs, including lemonadeberry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*). It typically develops on xeric slopes. Diegan coastal sage scrub is wide-spread in coastal Southern California from Los Angeles into Baja California (Holland 1986).

There is a total of 236.2 acres of coastal sage scrub on site. This community generally occurs in the northwestern and southeastern portions of the site, primarily along the east- and west-facing slopes below the central north-south ridgeline on site. Species such as California sagebrush, California buckwheat, deer weed and laurel sumac are relatively common throughout the coastal sage scrub areas on site. Other species present include California everlasting (*Gnaphalium californicum*), goldenbush (*Isocoma menziesii*), coast monkey flower (*Mimulus aurantiacus*), wishbone bush (*Mirabilis laevis* var. *crassifolia*), white sage (*Salvia apiana*), and black mustard (*Brassica nigra*).

Approximately 73.6 acres (31%) of the coastal sage scrub on site were mapped as disturbed due to the prevalence of non-native grasses and forbs. Within disturbed coastal sage scrub areas, the dominant non-native species included wild oats (*Avena barbata*, *A. fatua*), short-pod mustard (*Hirschfeldia incana*), and filaree (*Erodium* spp.).

Coastal sage scrub is a Tier II vegetation community in the North County MSCP. Coastal sage scrub is recognized as a sensitive plant community by local, state, and federal resource agencies.

Southern Mixed Chaparral (Holland Code 37120)

This vegetation community is a drought- and fire-adapted community of woody shrubs, 1.5 to 3 meters (5 to 10 feet) tall, frequently forming dense, impenetrable stands. It develops primarily on mesic north-facing slopes and in canyons, and is characterized by crown- or stump-sprouting species that regenerate following burns or other ecological catastrophes. This vegetation community is typically a mixture of chamise (*Adenostoma fasciculatum*), mission manzanita (*Xylococcus bicolor*), ceanothus (*Ceanothus* spp.), interior scrub oak (*Quercus berberidifolia*), laurel sumac (*Malosma laurina*), and black sage (*Salvia mellifera*). This community extends from the coastal foothills of San Diego County to northern Baja California, generally below 3,000 feet amsl.

There are 24.5 acres of southern mixed chaparral on site, generally on north- and northeast-facing slopes. Southern mixed chaparral mainly occurs in the southwestern and northeastern portions of the site. Another small area is mapped along the eastern boundary of the Preserve west of Arena Way.

The following species are associated with the southern mixed chaparral in the Preserve: chamise (*Adenostoma fasciculatum*), California buckwheat (*Eriogonum fasciculatum*), California everlasting (*Gnaphalium californicum*), goldenbush

(*Isocoma menziesii*), deerweed (*Lotus scoparius*), laurel sumac (*Malosma laurina*), and cheeseweed (*Malva parviflora*). As a chaparral community, southern mixed chaparral is a Tier III vegetation community in the North County MSCP.

Chamise Chaparral (Holland Code 37200)

Chamise chaparral, a widespread and abundant vegetation community in California, is dominated by chamise. Vegetation typically ranges from 1 to 3 meters (3 to 10 feet) tall with little herbaceous understory in mature stands. Chamise chaparral often occurs on xeric slopes and ridges. This vegetation community is adapted to repeated fires and responds via stump resprouting to reestablish after such disturbance (Holland 1986). Some species commonly associated with chamise chaparral include manzanita (*Arctostaphylos* spp.), ceanothus (*Ceanothus* spp.), birchleaf mountain-mahogany (*Cercocarpus betuloides*), bush poppy (*Dendromecon rigida*), and California buckwheat (*Eriogonum fasciculatum*) (Holland 1986). Chamise chaparral is the predominant chaparral type in Ventura, Los Angeles, San Bernardino, Riverside, and San Diego Counties (Holland 1986).

There are 20.4 acres of chamise chaparral on the Preserve. This community is located in the northern portion of the Preserve, and along the slopes to the east of the north-south road that traverses through the center of the Preserve. The chamise chaparral on site is clearly dominated by chamise, with species typically associated with adjacent coastal sage scrub or southern mixed chaparral communities comprising only a small portion of the overall vegetation cover. As a chaparral community, chamise chaparral is a Tier III vegetation community in the North County MSCP.

Coastal Sage Scrub – Southern Mixed Chaparral (Holland Code 37G00)

Coastal sage scrub – southern mixed chaparral is a post-fire successional community that serves as an intermediate between coastal scrubs and chaparrals (Holland 1986). This community is codominated by coastal sage scrub and southern mixed chaparral habitats with at least 50% of the overall habitat indicative of coastal sage scrub (as defined in County of San Diego 2009b). Coastal sage scrub – Southern mixed chaparral generally consists of a mix of sclerophyllous (characterized by thick and hard foliage), woody chaparral species and drought-deciduous malacophyllous (characterized by fleshy foliage) sage scrub species. Common associated species include chamise (*Adenostoma fasciculatum*), California sagebrush (*Artemisia californica*), ceanothus (*Ceanothus* spp.), black sage (*Salvia mellifera*), and western poison oak (*Toxicodendron diversilobum*) (Holland 1986).

Coastal sage scrub–southern mixed chaparral comprises 64.0 acres of the Preserve. This community predominantly occurs in the northeastern portion of the site. Approximately 10.5 acres (16%) of this community type is disturbed and occurs in the northeastern portion of the site, north of the area mapped as undisturbed coastal sage scrub–southern mixed chaparral.

Chamise (*Adenostoma fasciculatum*), laurel sumac (*Malosma laurina*), California sagebrush (*Artemisia californica*), and California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*) were relatively common in the coastal sage scrub–southern mixed chaparral mapped on site. Other associated species include but are not limited to mission manzanita (*Xylococcus bicolor*) saw-toothed goldenbush (*Hazardia squarrosa*), peak rush-rose (*Helianthemum scoparium*), scrub oak (*Quercus berberidifolia*), white sage (*Salvia apiana*), and sacapellote (*Acourtia microcephala*). Non-native species common in the disturbed areas include short-pod mustard (*Hirschfeldia incana*), red-stemmed filaree (*Erodium cicutarium*), and wild oat (*Avena fatua*).

As a coastal sage/chaparral scrub, coastal sage scrub–southern mixed chaparral is a Tier II vegetation community in the North County MSCP.

Non-Native Grassland (Annual Grassland) (Holland Code 42200)

According to Oberbauer et al. (2008), annual grassland is characterized by a dense to sparse cover of annual grasses, including wild oat (*Avena* spp.), bromes (*Bromus* spp.), mustard (*Brassica* spp.), and filaree (*Erodium* spp.). Wildflowers are also often associated with annual grassland. It may occur where disturbance by maintenance (mowing, scraping, disking, spraying, etc.), grazing, repetitive fire, agriculture, or other mechanical disruption have altered soils and removed native seed sources from areas formerly supporting native vegetation. Annual grassland typically occurs adjacent to roads or other developed areas where there has been some historic disturbance. Annual grassland may support sensitive plant and animal species and provide valuable foraging habitat for raptors (birds of prey).

Annual grassland is the most common community on the Preserve and occupies 236.7 acres. Annual grassland is the dominant vegetation community along the slopes and ridgelines through the central portion of the site from the northeast to southwest corner of the Preserve. Annual grassland also occupies the southeastern corner of the Preserve.

Annual grassland on site is largely composed of slender wild oat (*Avena fatua*), bromes (*Bromus* spp.), and short-pod mustard (*Hirschfeldia incana*), but also includes tocalote (*Centaurea melitensis*), sand-aster (*Corethrogyne filaginifolia*), laurel sumac, and wishbone bush (*Mirabilis laevis* var. *crassifolia*). One special-status plant species, Orcutt's brodiaea (*Brodiaea orcuttii*), a CNPS List 1B species and proposed for coverage under the North County MSCP, occurs within annual grasslands along two drainages in the southwestern portion of the Preserve, and along a drainage in the southeastern portion of the Preserve. Non-native grassland is a Tier III vegetation community in the North County MSCP.

Southern Coast Live Oak Riparian Forest (Holland Code 61310)

Southern coast live oak riparian forest (oak riparian forest) is an open to locally dense evergreen riparian woodland dominated by coast live oak (*Quercus agrifolia*). This community occurs on fine-grained, rich alluvium on bottomlands and outer floodplains along larger streams. Characteristic species of this habitat type include mugwort (*Artemisia douglasiana*), coast live oak (*Quercus agrifolia*), California blackberry (*Rubus ursinus*), California laurel (*Umbellularia californica*), and giant stinging nettle (*Urtica holosericea*). Compared to other riparian communities, southern coast live oak riparian forest is generally richer in herbs and poorer in understory shrubs. This community occurs from the Transverse and Peninsular Ranges from Point Conception south into Baja California Norte (Holland 1986).

There are 4.2 acres of southern coast live oak riparian forest that occur along the eastern boundary of the Preserve. Southern coast live oak riparian forest on site has a moderately dense to open canopy dominated by coast live oak with scattered western sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), and willows (*Salix* spp.).

As a riparian forest, southern coast live oak riparian forest is a Tier I vegetation community in the North County MSCP.

Southern Riparian Woodland (Holland Code 62500)

Southern riparian woodland is described by Oberbauer et al. (2008) as a moderately dense riparian woodland dominated by small trees or shrubs. Scattered taller riparian trees may be present. This community occurs along major rivers and tributaries where flood scour occurs. Characteristic species of this habitat type include broom baccharis (*Baccharis sarothroides*), western sycamore, cottonwoods (*Populus* spp.), willows, and elderberry (*Sambucus* spp.). Although the full distribution of this community is unknown, it occurs throughout San Diego County (Oberbauer et al. 2008).

There is 0.4 acre of southern riparian woodland associated with the southern portion of the drainage along the eastern boundary of the site. Southern riparian woodland on site is characterized by a relatively open canopy primarily comprised of western sycamore and Fremont's cottonwood. Mexican fan palm (*Washingtonia robusta*) and Engelmann's oak (*Quercus engelmannii*) are also present, with red willow (*Salix laevigata*) and mulefat (*Baccharis salicifolia*) occurring in the sub-canopy.

As a riparian woodland, southern riparian woodland is a Tier I vegetation community in the North County MSCP.

Southern Cottonwood–Willow Riparian Forest (Holland Code 61330)

Southern cottonwood–willow riparian forest is described by Holland (1986) as a tall, open, broadleafed, winter-deciduous riparian forest dominated by cottonwood (*Populus trichocarpa*) and several tree willows species. The understory is generally composed of shrubby willows. Species associated with this community include mugwort, mulefat, wild cucumber (*Marah macrocarpus*), western sycamore, and hoary nettle (*Urtica dioica* ssp. *holosericea*). This community occurs on sub-irrigated and frequently overflowed lands along rivers and streams of the Transverse and Peninsular Ranges from Santa Barbara County south into Baja California Norte and east to the edge of the deserts (Holland 1986).

There is 0.2 acre of southern cottonwood–willow riparian forest on site. This community is associated with the drainage along the eastern boundary of the site near the Nightsky Road cul-de-sac. Southern cottonwood-willow riparian forest on site is dominated by Fremont's cottonwood and red willow, with scattered mulefat in the understory.

As a riparian forest, southern cottonwood–willow riparian forest is a Tier I vegetation community in the North County MSCP.

Southern Willow Scrub (Holland Code 63320)

According to Holland (1986), southern willow scrub has been described as a dense, broad-leafed, winter-deciduous riparian thicket dominated by several species of willow (*Salix* spp.), with scattered emergent Fremont cottonwood (*Populus fremontii*) and western sycamore (*Platanus racemosa*). Most stands are too dense to allow much understory development. This habitat is considered seral due to repeated disturbance/flooding and is therefore unable to develop into the taller southern cottonwood willow riparian forest.

There are approximately 0.2 acre of southern willow scrub in the southeastern corner of the Preserve. This community consists of red willow (*Salix laevigata*) and mulefat (*Baccharis salicifolia*).

As a riparian scrub, southern willow scrub is a Tier I vegetation community in the North County MSCP.

Arrowweed Scrub (Holland Code 63820)

Arrowweed scrub is a moderate to dense community dominated by arrowweed (*Pluchea sericea*). Arrowweed scrub forms thickets along streams, ditches, and washes. Soils are generally gravelly or sandy. Species associated with arrowweed Scrub include cattails (*Typha* spp.), bulrush (*Scirpus* spp.), rushes (*Juncus* spp.), and saltgrass (*Distichlis spicata*). This community occurs throughout San Diego County and elsewhere (Oberbauer et al. 2008). Arrowweed scrub is widespread in

the drier southern parts of California from the Cuyamaca Valley and Santa Ynez River in Santa Barbara County east to the Amargosa River in Death Valley, Antelope Valley, the Mojave River at least to Barstow, around the Salton Sea, and along the lower Colorado River. Maintained by disturbance, arrowweed scrub appears to be replacing the willow, cottonwood, and cottonwood-sycamore riparian forest types because of grazing and groundwater pumping (Oberbauer et al. 2008).

There is 0.2 acre of arrowweed scrub located along the western boundary of the Preserve in the northern portion of the site. This area is a nearly monotypic stand of arrowweed.

As a riparian scrub, arrowweed scrub is a Tier I vegetation community in the North County MSCP.

Coast Live Oak Woodland (Holland Code 71160)

According to Holland (1986), coast live oak woodland is dominated by a single evergreen species: coast live oak (*Quercus agrifolia*). Canopy height reaches 10 to 25 meters (33 to 82 feet). This community typically occurs on north-facing slopes and ravines in San Diego County (Holland 1986). The shrub layer is poorly developed, but may include toyon (*Heteromeles arbutifolia*), gooseberry (*Ribes* spp.), laurel sumac (*Rhus laurina*), or Mexican elderberry (*Sambucus mexicana*). The herb component is continuous, dominated by a variety of introduced species. Coast live oak woodland occurs in the outer South Coast Ranges, and coastally in the Transverse and Peninsular ranges, typically below 4,000 feet amsl (Holland 1986).

There are 7.2 acres of coast live oak woodland within the Preserve. This community is limited to a single location in the west-central portion of the site on generally northwest-facing slopes.

Coast live oak woodland on site has a moderately open canopy of coast live oak trees in various stages of post-fire recovery. The following species are associated with the coast live oak woodland on site: California sagebrush (*Artemisia californica*), slender wild oat (*Avena fatua*), splendid mariposa lily (*Calochortus splendens*), sand-aster (*Corethrogyne filaginifolia*), toyon (*Heteromeles arbutifolia*), goldenbush (*Isocoma menziesii*), laurel sumac (*Malosma laurina*), bush monkeyflower (*Mimulus aurantiacus*), and white sage (*Salvia apiana*). As an oak woodland, coast live oak woodland is a Tier I vegetation community in the North County MSCP.

Engelmann Oak Woodland (Holland Code 71180)

According to Holland (1986), Engelmann oak woodland is dominated by Engelmann oak (*Quercus engelmannii*). The understory is generally composed of grasses. This community is generally found on gentle slopes and valley bottoms with fine-textured soils. This community often intergrades with coastal sage scrub, and commonly

surrounds grassland potreros. Species associated with this community include black oak (*Juglans californica*), coast live oak, sugar bush (*Rhus ovata*), and skunkbrush (*Rhus trilobata*). Engelmann oak woodland is found primarily in the Santa Ana Mountains of San Diego and Riverside Counties, below 4,000 feet amsl (Holland 1986).

There are 3.2 acres of Engelmann oak woodland in two areas of the Preserve located in the northern portion of the site. The Engelmann oak woodland on site contains a high cover of non-native grasses, such as bromes and wild oat. Other associated species include coast live oak, western poison oak, scrub oak, sacapellote (*Acourtia microcephala*), southern pink (*Silene laciniata*), and goldenbush (*Isocoma menziesii*). Engelmann oak woodlands are considered a Tier I vegetation community in the North County MSCP.

Eucalyptus Woodland (Holland Code 79100)

Eucalyptus woodland typically consists of monotypic stands of introduced Australian eucalyptus trees (*Eucalyptus* spp.). The understory is either depauperate or absent owing to shade and the possible allelopathic (toxic) properties of the eucalyptus leaf litter. Although eucalyptus woodlands are of limited value to most native plants and animals, they frequently provide nesting and perching sites for several raptor species.

There are 1.4 acres of eucalyptus woodland mapped in the southwestern corner of the site. Eucalyptus woodland is a Tier IV vegetation community in the North County MSCP.

3.2 Plant Species

3.2.1 Plant Species Present

Floristic inventories detected 203 plant species at the Preserve. The Baseline Biological Resources Evaluation (Appendix A) includes the complete list of all plant species observed during the surveys.

3.2.2 Rare, Threatened, or Endangered Plant Species Present

The following section discusses special-status plant species observed within the Preserve. A special-status plant species is one listed by federal or state agencies as threatened or endangered; considered to be of special status by one or more special interest groups, such as the California Native Plant Society (e.g., CNPS List 1, 2, 3, and 4 Plant Species); or is included on the County's Sensitive Plant list (Group A, B, C, or D Listed Plants).

Special-status plant species observed within the Preserve (Figure 9) consist of San Diego thornmint (*Acanthomintha ilicifolia*), Orcutt's brodiaea (*Brodiaea orcuttii*), Engelmann oak (*Quercus engelmannii*), and Delicate clarkia (*Clarkia delicata*).

San Diego thornmint (*Acanthomintha ilicifolia*)

Federally Threatened, State Endangered, CNPS List 1B, San Diego County List A, North County MSCP Covered Species

San Diego thorn-mint is endemic to San Diego County and Baja California, Mexico (CNPS 2009). This species occurs in chaparral, coastal scrub, valley and foothill grassland, and in vernal pools with clay soil between 32 and 3,150 feet amsl (CNPS 2009). A large population (approximately 5,000 to 10,000 individuals) of San Diego thorn-mint occurs along the eastern boundary of the Preserve southwest of Nuevo Mundo Street. The population was observed in an opening of burned chaparral dominated by mission manzanita.

Orcutt's brodiaea (*Brodiaea orcuttii*)

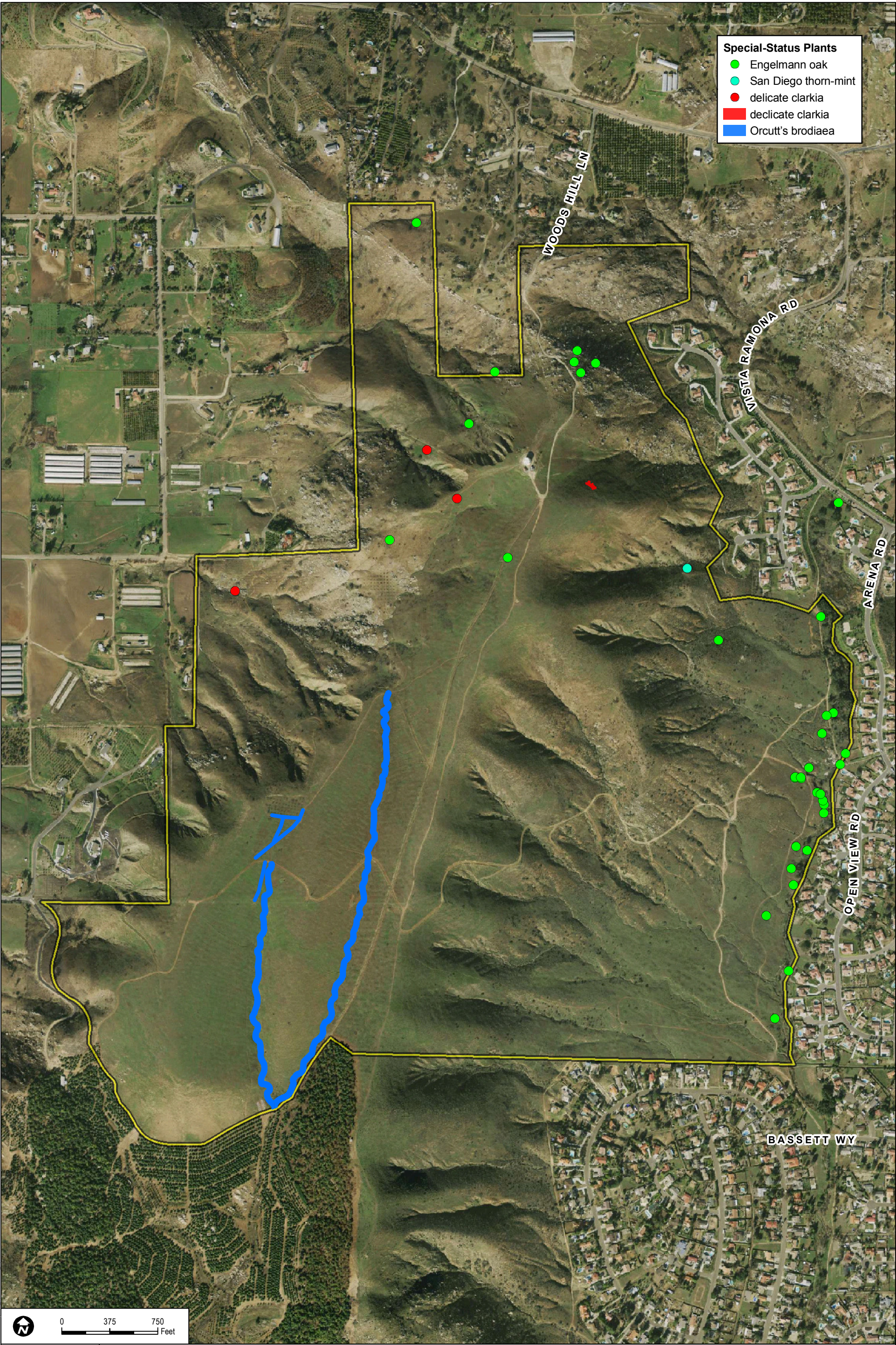
CNPS List 1B, San Diego County List A, North County MSCP Covered Species

This species occurs in a variety of habitats, including closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and mesic vernal pools with clay or serpentinite soils (CNPS 2009). Since this species is only detected during or just after its blooming period and given its relatively wide range of potential sites in vernal moist montane and coastal locales, areas with Orcutt's brodiaea may unknowingly be developed (Reiser 1994). Orcutt's brodiaea was mapped in annual grassland in the southwestern portion of the Preserve. Two populations occur along the margins of the two drainages that flow south and off site, and two populations occur within disturbed areas along existing or abandoned roads and trails. One population along the eastern drainage is estimated to include thousands of individuals, while a second population along the western drainage is estimated to include hundreds of individuals.

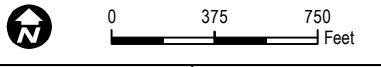
Engelmann oak (*Quercus engelmannii*)

CNPS List 4, San Diego County List D, North County MSCP Covered Species

Suitable habitat for this species includes chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland (CNPS 2009). Several locations of Engelmann oak were mapped on the Preserve. The majority of Engelmann oak on site occurs on the outer margins of the drainage along the eastern boundary of the site and includes a number of planted specimens. This species also occurs in the northern portion of the site, including two polygons of mapped Engelmann oak woodland.



- Special-Status Plants**
- Engelmann oak
 - San Diego thorn-mint
 - delicate clarkia
 - delicate clarkia
 - Orcutt's brodiaea



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MARCH 2010

SOURCE: Preserve Boundary, County of San Diego;
Vegetation (SanGIS 2008); DigitalGlobe, 2008

Baseline Biodiversity Survey for Simon Preserve

FIGURE 9
Special-Status Plant Species

Delicate clarkia (*Clarkia delicata*)

CNPS List 1B, San Diego County List A

Suitable habitat for this species includes chaparral and cismontane woodland with soils that are often gabbroic (CNPS 2009). Delicate clarkia was mapped in the northwestern portion of the Preserve. A large population consisting of hundreds of individuals, largely not in flower, occurs in the burned annual grassland mapped in the northwestern portion of the Preserve. Another population of approximately 100 to 200 individuals, most not flowering at the time of observation, occurs along the drainage in the annual grassland near the western boundary of the site. A smaller population of up to 100 individuals was mapped in a more mesic area of Engelmann oak woodland near the northwestern portion of the site. A large population containing hundreds of individuals occurs on the slope of annual grassland also in the northwestern portion of the site.

3.2.3 Rare, Threatened, or Endangered Plant Species not Observed but with High Potential to Occur

Additional information on the species listed below can be found in the Baseline Biological Resources Evaluation (Appendix A).

San Diego gumplant (*Grindelia hirsutula* var. *hallii*)

CNPS List 1B.2, San Diego County List A

Since rare plant surveys were conducted in May, while San Diego gumplant blooms from July to October, the timing of surveys was not ideal for detection of this species. In addition, suitable chaparral vegetation occurs on the Preserve and there are known occurrences of this species within five miles of the Preserve.

Southern mountains skullcap (*Scutellaria bolanderi* ssp. *austromontana*)

CNPS List 1B.2 and San Diego County List A

Southern mountains skullcap blooms after the rare surveys were conducted (June to August) so timing of surveys was not ideal for detection of this species. Also, suitable chaparral vegetation occurs on the Preserve and there are known occurrences of this species within five miles of the Preserve.

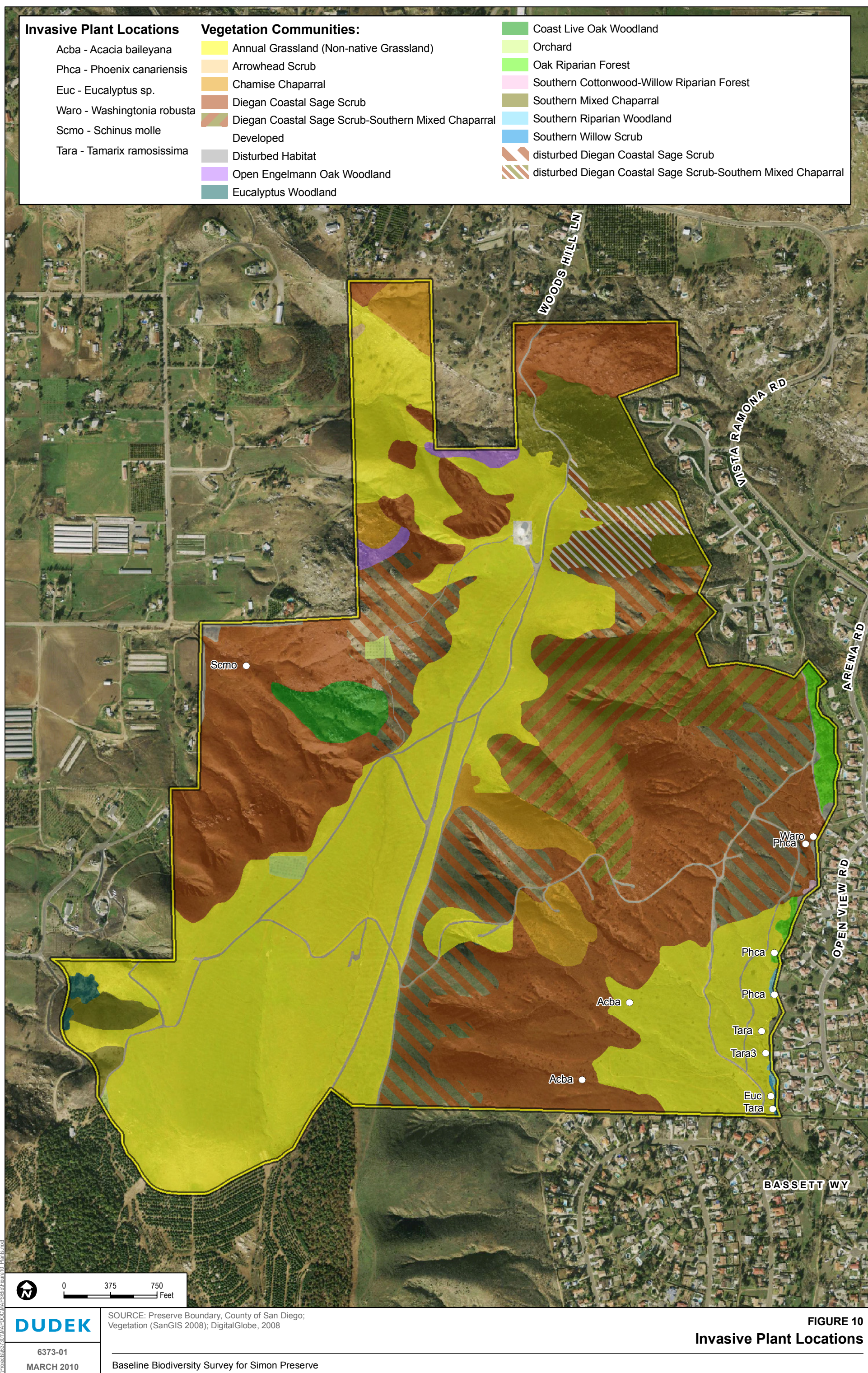
3.2.4 Non-native and/or Invasive Plant Species

In general the Preserve is dominated primarily by native or naturalized plant species. However, eucalyptus (*Eucalyptus* sp.), Canary Island date palm (*Phoenix canariensis*), Peruvian pepper tree (*Schinus molle*), saltcedar/tamarisk (*Tamarix ramosissima*), and Mexican fan palm occur within the Preserve (Figure 10). The

Cal-IPC rates each species in their inventory based on its negative ecological impact in California (Cal-IPC 2007). The ratings assigned to the species observed on the Preserve range from limited to high.

Several eucalyptus, which is rated by the Cal-IPC as either limited or moderate depending on species (*E. camaldulensis* is limited and *E. globulus* is moderate) occur in the southeast corner of the Preserve. Three Canary Island date palms, with a limited Cal-IPC rating, occur along the eastern boundary of the Preserve. A single Peruvian pepper tree, which also has a limited Cal-IPC rating, occurs in the northwestern portion of the site. Approximately five salt cedar/tamarisk individuals were observed in the riparian vegetation along the eastern boundary of the Preserve. Saltcedar/tamarisk has a high Cal-IPC rating because it can cause detrimental changes in geomorphology, groundwater availability, soil chemistry, fire frequency, plant community composition, and native wildlife diversity (Cal-IPC 2010). A single Mexican fan palm was noted along the eastern boundary of the Preserve. This species has a moderate Cal-IPC rating as it can create monospecific stands in riparian areas and its dead fronds may be a fire hazard (Cal-IPC 2010). Two individuals of Bailey acacia (*Acacia baileyana*), which was nominated for inclusion in the Cal-IPC inventory (Cal-IPC 2007) but not reviewed, were observed in the southeastern portion of the site. According to the Cal-IPC inventory, Bailey acacia is not known to be widespread in wildlands with no information available on impacts.

Preserve-wide, the annual non-native grassland on site is dominated by non-native invasive grasses, such as slender wild oat and bromes. Non-native forbs including filaree and mustards were also a consistent component of the non-native grassland.



3.3 Wildlife Species

3.3.1 Wildlife Species Present

Invertebrates

A complete list of invertebrate species identified on the Preserve below the level of family is included in the faunal list of the Baseline Biological Resources Evaluation (Appendix A). No special-status butterfly species or other invertebrate species were detected during the 2009 surveys and no special-status invertebrate species have high potential to occur at the Preserve.

Butterflies

Six butterfly species were observed during surveys conducted on the Preserve: funereal duskywing (*Erynnis funeralis*), cloudless sulfur (*Phoebis sennae*), checkered white (*Pontia protodice*), California white (*Pontia sisymbrii beringiensis*), Edward's blue (*Hemiargus ceraunus*), and acmon blue (*Icaria acmon acmon*).

No Quino checkerspot butterfly (*Euphydryas editha quino*; Quino) or any other special-status butterfly species were observed on the Preserve. However, in accordance with the USFWS survey protocol (USFWS 2002) and based on the site assessment conducted on site, the majority of the habitat on the Preserve is considered suitable and focused surveys would be recommended. With the exception of riparian areas along the eastern Preserve boundary that would be excluded from focused surveys, the remaining portions of the Preserve include suitable sage scrub, open chaparral, and grassland habitats, as well as the presence of hilltop and ridgeline topography. In addition, during the 2009 flight season, Quino were observed approximately 3.5 miles southwest of the Preserve on the Rancho Cañada Preserve (formerly Monte Vista Ranch) south of the intersection of San Vicente Road and Wildcat Canyon Road (USFWS 2009).

No Quino host plants, including dwarf plantain (*Plantago erecta*), desert plantain or sometimes called woolly plantain (*P. patagonica*), thread-leaved bird's beak (*Cordylanthus rigidus*), white snapdragon (*Antirrhinum coulterianum*), owl's clover (*Castilleja exserta*) and Chinese houses (*Collinsia* spp.) were observed on site over the course of botanical surveys conducted throughout the Preserve in May 2009². However, 2009 was a relatively poor year for spring annuals and many sites did not develop robust populations of either host or nectar plant populations for the Quino checkerspot butterfly. In addition, the start of the baseline surveys was relatively late in the year when the majority of spring ephemeral plants had already completed

² Although woolly plantain (*Plantago ovata*) was observed on site (see Appendix A) and is related to dwarf plantain and desert plantain (also sometimes called woolly plantain) which are two primary host plants for quino, woolly plantain is not a known host plant species (USFWS 2002, 2009). According to Hickman (1993), woolly plantain may be a long-naturalized exotic species from the Mediterranean region.

their life cycle. As a result, if present on the Preserve, host plants are more likely to be detected during spring surveys conducted in a year with average or above-average rainfall. Therefore, despite the lack of host plant observations in 2009, Quino is considered to have a moderate to high potential to occur on the Preserve based on the proximity to recently documented Quino and the presence of suitable habitat (grasslands, sage scrub and open chaparral) and topography (hilltops and ridgelines).

Other Invertebrates

A variety of invertebrates were observed, including tarantula (*Aphonopelmus eutylum*), burrowing scorpion (*Anuroctonus phaidactylus*), and iron-clad beetle (*Phloedes pustulosis*) as indicated in Appendix A.

Amphibians

No amphibians were identified on the Preserve during 2009 surveys.

Reptiles

During the 2009 sampling at the Preserve, seven reptile species were detected. Three special-status reptile species including Coronado skink (*Eumeces skiltonianus interparietalis*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*) and orange-throated whiptail (*Aspidoscelis hyperythra*), were observed during herpetological surveys. Sensitive coast horned lizard (*Phrynosoma coronatum*) was also observed on site during other survey efforts. Orange-throated whiptail and coast horned lizard are both covered under the North County MSCP. A complete list of herpetofauna observed within the Preserve during the 2009 herpetological surveys is included in the faunal list of the Baseline Biodiversity Survey (Appendix A).

Birds

Fifty-one bird species were observed at the Preserve during avian point count surveys. The most common species observed in terms of numbers of individuals recorded were common raven (*Corvus corax*), California towhee (*Pipilo crissalis*), lesser goldfinch (*Carduelis psaltria*), mourning dove (*Zenaida macroura*), yellow-rumped warbler (*Dendroica coronata*), and house finch (*Carpodacus mexicanus*). The following birds were observed during the nocturnal surveys: barn owl (*Tyto alba*), common poorwill (*Phalaenoptilus nuttallii*), common raven, great horned owl (*Bubo virginianus*), lesser nighthawk (*Chordeiles acutipennis*), red-tailed hawk (*Buteo jamaicensis*), and western kingbird (*Tyrannus verticalis*). All species detected during avian point count surveys and other wildlife surveys are included in the faunal list of the Baseline Biodiversity Survey (Appendix A).

Eight special-status bird species were observed during avian point count stations: Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's

sage sparrow (*Amphispiza belli belli*), turkey vulture (*Cathartes aura*), northern harrier (*Circus cyaneus*), California horned lark (*Eremophila alpestris actia*), loggerhead shrike (*Lanius ludovicianus*), western bluebird (*Siala mexicana*), and barn owl (*Tyto alba*). In addition, Cooper's hawk (*Accipiter cooperii*) was observed during other surveys conducted on site. Northern harrier, southern California rufous-crowned sparrow, and Bell's sage sparrow are North County MSCP covered species. Because most of these special-status species were observed during the breeding season, it could be presumed that they all nested within the area or on site; however, none of them were confirmed to be nesting on the Preserve. The Cooper's hawk was likely nesting nearby or on site because it acted very territorial towards the biologists conducting the botanical surveys. The northern harrier was observed late in the season (October) and thus may have nested elsewhere and was using the site for migratory stopover or wintering.

Mammals

A complete list of mammal species observed within the Preserve during the 2009 surveys is included in the faunal list of the Baseline Biodiversity Survey (Appendix A).

Small Mammals

Eight small mammals, all rodents, were trapped on the Preserve during the small mammal surveys, including the special-status species San Diego pocket mouse (*Chaetodipus fallax fallax*) and San Diego desert woodrat (*Neotoma lepida intermedia*). The most common species trapped was deer mouse (*Peromyscus maniculatus*). Dulzura kangaroo rat (*Dipodomys simulans*) and northwestern San Diego pocket mouse were also relatively common on site. The remaining species had fewer than seven individuals caught throughout the survey.

Medium and Large Mammals

Two large mammal species were detected using the wildlife cameras operated during the medium and large mammal surveys: coyote (*Canis latrans*) and mule deer (*Odocoileus hemionus*). Mule deer is a special-status species. The Preserve is generally open to wildlife movement with no specific routes that could be identified.

Bats

Four bat species calls were identified from Anabat and Sonobat survey systems located in the Preserve: pocketed free-tailed bat (*Nyctinomops femorosaccus*), canyon bat (*Parastrellus hesperus*), and a 40kHz and a 50 kHz unidentified myotis (*Myotis* sp. 1 and *Myotis* sp. 2, respectively). The calls of the 40kHz and 50 kHz myotis bats did not contain any diagnostic feature so they could not be identified to species.

3.3.2 Rare, Threatened, or Endangered Wildlife Species Present

This section discusses special-status wildlife species observed at the Preserve (Figure 11). A special-status wildlife species is one listed by federal or state agencies as threatened or endangered; is included on the County's Sensitive Animal List (Group 1 or 2 Species); or is covered under the MSCP. Seventeen special-status wildlife species were detected at the Preserve. Each of these 17 species is addressed below in more detail.

Coast Horned Lizard (*Phrynosoma coronatum blainvillei*)

State Species of Special Concern, San Diego County Group 2, North County MSCP Covered Species

Coast horned lizard inhabits valley-foothill hardwood, conifer, pine-cypress, juniper, annual grassland, and riparian habitats (Zeiner et al. 1988). The coast horned lizard occurs throughout the central and Southern California coast up to 6,000 feet and the Sierra Nevada foothills from Butte County to Kern County up to 4,000 feet (Zeiner et al. 1988). Horned lizards forage on the ground in open areas. Coast horned lizards' diet consists primarily of ants, but also includes large numbers of small beetles when especially abundant, and can include wasps, grasshoppers, flies, and caterpillars. In Southern California, egg-laying occurs from late May through June; the mean clutch size is 13 eggs (Zeiner et al. 1988). Threats to the species include non-native Argentine ants (*Linepithema humile*) that often displace native ants, an important food source.

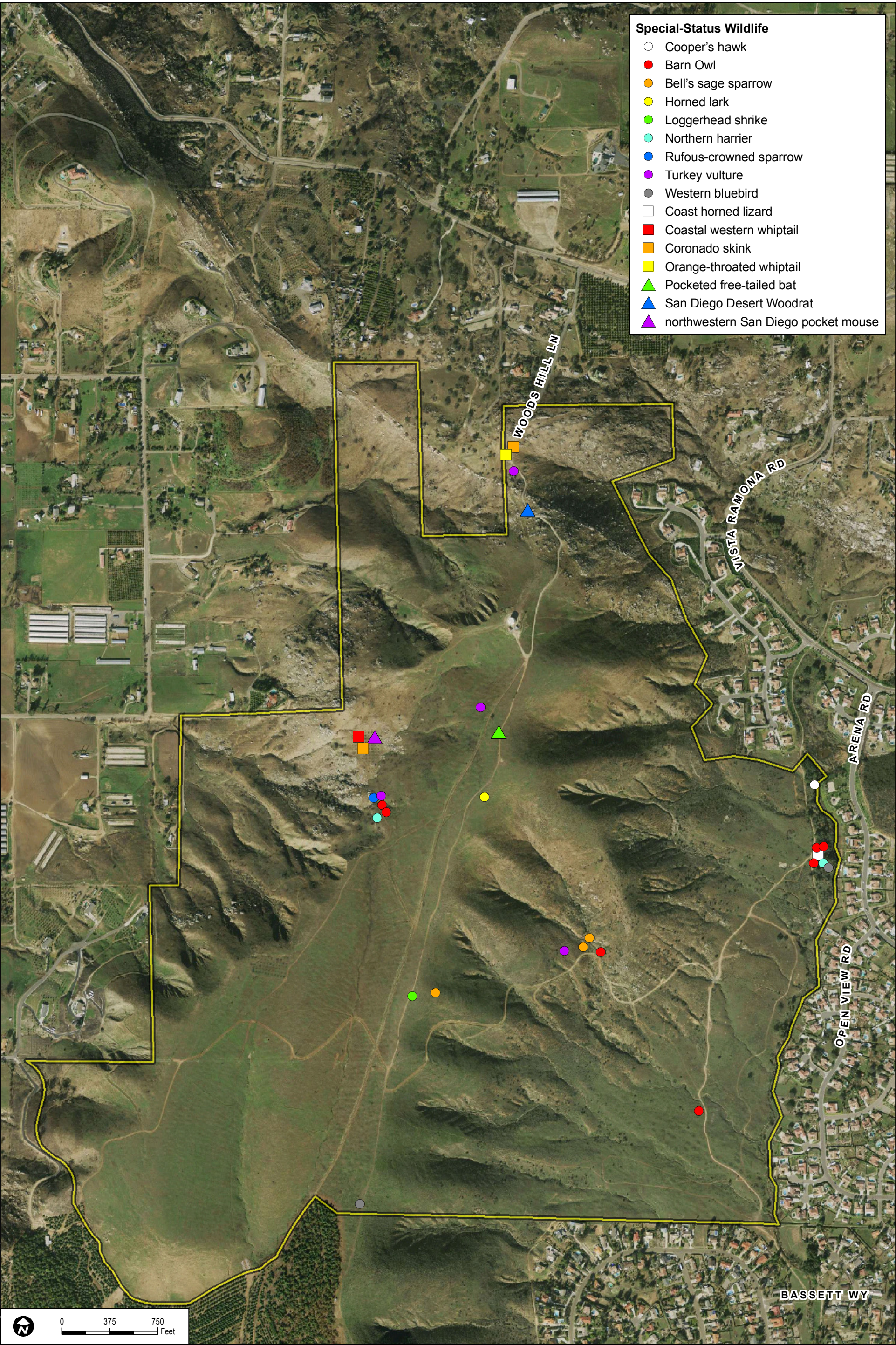
Two coast horned lizards were observed near the road along the eastern boundary of the Preserve in July 2009.

Orange-throated Whiptail (*Aspidoscelis hyperythra*)

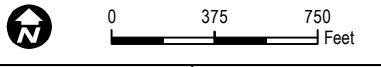
State Species of Special Concern, San Diego County Group 2, North County MSCP Covered Species

Orange-throated whiptail occurs in low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats (Zeiner et al. 1988). The orange-throated whiptail occurs in Orange, Riverside, and San Diego counties west of the crest of the Peninsular Ranges, and in southwestern San Bernardino County near Colton. It extends up to 3,410 feet amsl (Zeiner et al. 1988). Orange-throated whiptails forage on the ground and scratch through surface debris for food. Their diet consists of a variety of small arthropods, especially termites. Orange-throated whiptails likely lay eggs in loose, well-aerated soil under or near surface objects, or at the base of dense shrubs (Zeiner et al. 1988). Threats to the species include non-native Argentine ants (*Linepithema humile*) that often displace native ants, an important food source.

During pitfall trap surveys a total of five orange-throated whiptail individuals were captured in the northern portion of the Preserve in July and August 2009.



- Special-Status Wildlife**
- Cooper's hawk
 - Barn Owl
 - Bell's sage sparrow
 - Horned lark
 - Loggerhead shrike
 - Northern harrier
 - Rufous-crowned sparrow
 - Turkey vulture
 - Western bluebird
 - Coast horned lizard
 - Coastal western whiptail
 - Coronado skink
 - Orange-throated whiptail
 - ▲ Pocketed free-tailed bat
 - ▲ San Diego Desert Woodrat
 - ▲ northwestern San Diego pocket mouse



DUDEK

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MARCH 2010

SOURCE: Preserve Boundary, County of San Diego;
Vegetation (SanGIS 2008); DigitalGlobe, 2008

Baseline Biodiversity Survey for Simon Preserve

FIGURE 11
Special-Status Wildlife Species

Coastal Western Whiptail (*Aspidoscelis tigris stejnegeri*)

San Diego County Group 2

Coastal western whiptail occurs primarily in hot and dry open areas with little vegetation, including chaparral, woodland, and riparian habitats (CaliforniaHerps 2009). The Coastal western whiptail occurs in coastal Southern California, ranging north into Ventura County and south into Baja California. Coastal western whiptails forage on small lizards and invertebrates, especially spiders, scorpions, centipedes, and termites. Coastal western whiptails lay eggs April to August (CaliforniaHerps 2009).

During pitfall trap surveys, two coastal western whiptail individuals were captured. One was captured in the northern portion of the site in July 2009 and the other was captured in the center of the site in September 2009.

Coronado Skink (*Eumeces skiltonianus interparietalis*)

State Species of Special Concern, San Diego County Group 2

Coronado skink occurs in rocky areas near streams with vegetation but is also found in areas away from water (CaliforniaHerps 2009). It occurs in grassland, woodlands, pine forests, chaparral and in open sunny areas such as clearings. The Coronado skink is found inland in Southern California south through the north Pacific coast region into Baja California. The Coronado skink feeds on insects and other small invertebrates, especially spiders and sow bugs. The skinks lay 2 to 10 eggs in June and July, which hatch late in July and August (CaliforniaHerps 2009).

During the pitfall trap surveys, two Coronado skink individuals were captured. One was captured in the northern portion of the Preserve in July 2009 and the other was captured in the center of the site in August 2009.

Bell's Sage Sparrow (*Amphispiza belli belli*)

State Watch List Species, San Diego County Group 1, North County MSCP Covered Species

Bell's sage sparrow inhabits chaparral dominated by chamise, and coastal scrub dominated by sage in cismontane California (Zeiner et al. 1990a). Sage sparrows nest in a cup of dry twigs and stems on the ground beneath a shrub or in a shrub usually near the ground, but up to 39 inches above the ground. This species feeds on insects, spiders, and seeds while breeding, and eats mainly seed in winter (Zeiner et al. 1990a).

Bell's sage sparrow are residents from Marin County along the coast to Trinity County inland south through coastal California to Baja California. This subspecies

also occurs on the western slope of central Sierra Nevada from El Dorado County south to Mariposa County (Martin and Carlson 1998). Sage sparrows breed from late March to mid-August, with peak activity in May and June (Zeiner et al. 1990a).

In August, one Bell's sage sparrow individual was observed near a bird count survey point in the center of the site, and another was observed southeast of that point. In September, two individuals were detected in this same area. This species occurs on site in relatively low numbers and would be expected to breed on site as well.

California Horned Lark (*Eremophila alpestris actia*)

State Watch List Species, San Diego County Group 2

California horned lark inhabits grasslands and other open habitats with low, sparse vegetation, such as open desert scrub and alpine dwarf-shrub habitat. This species is occasionally found in coniferous or chaparral habitats. Horned larks nest in depressions on the ground and feed on insects, snails, and spiders during breeding season, adding grass and forb seeds in other seasons (Zeiner et al. 1990a).

Horned larks are yearlong residents in lowland areas throughout California, except the northern coastal area. The eastern Sierras also provide habitat in summer, with most birds in these montane habitats moving down slope in the winter. Winter migrants from out of state may join flocks in the southeastern deserts. Horned larks breed from March through July, with peak activity in May (Zeiner et al. 1990a).

One California horned lark individual was observed in August near an avian bird count survey point east of the road in the center of the site. This species was also observed during bat surveys on October 22. Although observations were limited, it is likely that numerous individuals use the site. It would be expected that the California horned lark would breed on site as well as use the site for wintering.

Cooper's Hawk (*Accipiter cooperii*)

State Watch List Species, San Diego County Group 2

Cooper's hawk inhabits live oak, riparian deciduous or other forest habitats near water. Nesting and foraging usually occur near open water or riparian vegetation. Nests are built in dense stands with moderate crown depths, usually in second-growth conifer or deciduous riparian areas. Nests in deciduous trees are typically located in crotches 20 to 50 feet above the ground; in conifers, nests are in horizontal branches or the main crotch of conifers. Cooper's hawks use patchy woodlands and edges with snags for perching, hunting small birds, small mammals, reptiles and amphibians broken woodland and habitat edges (Zeiner et al. 1990a).

Cooper's hawks are diurnally active and are yearlong residents. Breeding occurs from March through August, with peak activity in May through July. Males defend an area about 330 feet around potential nest sites (Zeiner et al. 1990a).

Cooper's hawk was observed during botanical surveys in May 2009. Although no nests were detected on site, one individual was observed displaying territorial behavior in the oak riparian forest along the eastern boundary of the Preserve. Given the behavior of the individual and the timing of the observation, it is likely that this species nests within the oak riparian forest on site; however, a nest was not observed.

Loggerhead Shrike (*Lanius ludovicianus*)

Federal Birds of Conservation Concern, State Species of Special Concern, San Diego County Group 1

Loggerhead shrike inhabits open areas, such as open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Loggerhead shrike is found most often where several perches, such as scattered shrubs, trees, posts, fences, and utility lines, are available. Loggerhead shrikes typically nest in a densely foliated shrub or tree and feed primarily on large insects, but also take small birds, mammals, amphibians, reptiles, fish, carrion, and various other invertebrates (Zeiner et al. 1990a).

Loggerhead shrikes are a common resident and winter visitor in lowlands and foothills throughout California. Loggerhead shrikes lay eggs from March to May in California (Zeiner et al. 1990a).

In August 2009, one loggerhead shrike individual was observed near an avian bird count survey point east of the road in the center of the site. Loggerhead shrikes require plants that can protect and conceal a nest and plenty of open ground to forage (Unitt 2004). Therefore, based on the habitat available on site, it is likely that this species uses the site for both foraging and breeding. According to the San Diego County Bird Atlas, loggerhead shrike breeding has been confirmed in the grid occupying the western portion of the Preserve and is considered probable in the adjacent grid covering the eastern portion of the Preserve (Unitt 2004).

Northern Harrier (*Circus cyaneus*)

State Species of Special Concern, San Diego County Group 1, North County MSCP Covered Species

Northern harrier inhabits meadows, grasslands, open rangelands, desert sinks, and fresh and saltwater emergent wetlands; this species is rarely found in wooded areas. Northern harriers nest in shrubby vegetation on the ground usually at the edge of a

marsh and feed on voles and other small mammals, birds, frogs, small reptiles, crustaceans, insects; northern harriers rarely feed on fish (Zeiner et al. 1990a).

Northern harrier is a permanent resident in the northeastern plateau and coastal areas of California and a less common resident of the Central Valley. This species is a widespread winter resident and migrant in suitable habitat. Northern harriers breed up to 5,700 feet amsl in the Central Valley and Sierra Nevada and up to 3,600 feet amsl in northeastern California from April to September, with peak activity from June to July (Zeiner et al. 1990a).

In October, northern harrier was observed near a bird count survey point location near the base of the slopes near the center of the site and near a bird count survey point location along the eastern boundary of the Preserve. This species is not known for breeding in San Diego County and there are little suitable marshy areas on site for nesting. It is likely that this species breeds elsewhere and forages on site. It has not been recorded as breeding within this area (Unitt 2004). The northern harrier also could use the site for foraging during the winter.

Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)

Federal Species of Concern, State Watch List Species, San Diego County Group 1, North County MSCP Covered Species

Southern California rufous-crowned sparrow inhabits mixed chaparral and coastal sage scrub. In California, its range extends southward from Mendocino and Tehama counties, being most numerous in the western part of this range (Zeiner et al. 1990a).

Rufous crowned-sparrows breed and forage on dry, grass, and/or forb-covered hillsides with scattered shrubs and rock outcrops. Nests are usually made on the ground, at the base of grass tussock or shrubs. It is a year-round resident and is diurnally active, eating mostly insects and spiders during the breeding season, and seeds, grass and forb shoots throughout the year. It breeds from mid-March to mid-June with a peak in May. In Southern California coastal sage scrub, the average sized territory is about two acres (Zeiner et al. 1990a).

One Southern California rufous-crowned sparrow was observed in the southeastern portion of the site during botanical surveys in May 2009. In September 2009, one individual was observed near an avian bird count survey point location near the base of the slopes close to the center of the site. It is likely that this species breeds on site since it was observed during the breeding season and suitable habitat is present on site. Southern California rufous-crowned sparrow is well documented as a San Diego County breeding bird (Unitt 2004).

Turkey Vulture (*Cathartes aura*)

San Diego County Group 1

Turkey vulture most regularly inhabits a wide variety of habitats including pastured rangeland, non-intensive agriculture, and wild areas, with rock outcrops suitable for nesting. Turkey vultures feed on a wide variety of carrion, consisting largely of mammals, ranging from rodents to large ungulates (Kirk and Mossman 1998).

Turkey vulture nests primarily on rocky cliffs or slopes. In California, this species occurs year-round in the Coast Ranges and inland. It breeds in the eastern portion of the state (Kirk and Mossman 1998).

Turkey vulture was noted during avian bird count surveys conducted in July and September near avian bird count survey point locations in the north and center of the Preserve. The species was often observed foraging over the site; however, there is no habitat that is suitable for nesting.

Barn Owl (*Tyto alba*)

San Diego County Group 2

Barn owl inhabits a variety of open habitats. Barn owls nest in cavities, both natural and manmade, including trees, cliffs, caves, riverbanks, church steeples, barn lofts, haystacks, and artificial nest boxes. Barn owls feed at night and locate prey by sound. Their diet consists primarily of rodents, but also includes shrews, bats, and leporids (rabbits and hares) and less frequently includes birds, reptiles, amphibians, and arthropods (Marti et al. 2005).

Barn owls breed and winter throughout lowlands and lightly forested foothills in California. This species is fairly common in the lower Colorado River Valley. Where the climate permits, barn owls can breed year-round (Marti et al. 2005).

From July to October, Dudek biologists recorded barn owl eight times throughout the site, specifically near avian bird count survey point locations in the southern portion of the Preserve. Although there is no nesting habitat suitable on site for this species, it likely uses the Preserve regularly for foraging.

Western Bluebird (*Siala mexicana*)

San Diego County Group 2

Western bluebird inhabits open coniferous and deciduous woodlands, riparian woodlands, grasslands, coastal chaparral, desert habitats, and farmlands. Western bluebirds nest in rotted or previously excavated cavities in trees and snags, or

between the trunk and bark of a tree. Western bluebirds feed on insects, small fruits, and seeds (Guinan et al. 2008).

In California, western bluebird breeds from the Oregon border south to the area of Mono, Kern, and Santa Barbara counties, and from Ventura, Los Angeles, and San Bernardino counties south through the Transverse and Peninsular ranges of southwestern California to southern San Diego County. Western bluebird winters in all areas west of the Klamath, Salmon, Trinity, and Panamint mountains (Guinan et al. 2008).

In October 2009, two western bluebirds were observed near an avian bird count survey point location at the southern end of the Preserve and five western bluebirds near an avian bird count survey point location along the eastern edge of the site. Western bluebirds had not previously been recorded as breeding regularly in San Diego County until recently. Although this species could breed on site, based on the late season observation, it may be wintering on site and likely did not breed on site.

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)

State Species of Special Concern, San Diego County Group 2

San Diego pocket mouse inhabits coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland, usually in sandy herbaceous areas with rocks or coarse gravel (Zeiner et al. 1990a). San Diego pocket mouse feed mostly on seeds of forbs, grasses, and shrubs, but also eat some insects. San Diego pocket mice carry seeds in cheek pouches and store them in and around the burrow (Zeiner et al. 1990b).

San Diego pocket mouse occurs mainly in the arid coastal and desert border areas of San Diego County, but also occurs in parts of Riverside and San Bernardino counties. The elevational range extends from sea level to 6,000 feet amsl. San Diego pocket mouse generally breeds from March to May with an average of four young per litter (Zeiner et al. 1990b).

Northwestern San Diego pocket mouse was observed twice during pitfall trapping for herpetological surveys, once in the northern portion of the site in July 2009 and once located more centrally on the site in September 2009. Northwestern San Diego pocket mouse was captured several times during small mammal trapping and was observed along each trapline in both August and October 2009.

San Diego Desert Woodrat (*Neotoma lepida intermedia*)

State Species of Special Concern, San Diego County Group 2

San Diego desert woodrat inhabits desert habitats including Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats. It is abundant in rocky areas (Zeiner et al. 1990b). The woodrat constructs houses or middens of twigs, sticks, cactus parts, and rocks. The middens are used for nesting, food caching, and predator escape. The San Diego desert woodrat eats buds, fruits, seeds, bark, leaves, and young shoots of a variety of plants (Zeiner et al. 1990b).

The San Diego desert woodrat occurs throughout San Diego County. Marginal records for the species in the United States include San Luis Obispo, San Fernando, San Bernardino Mountains, Redlands, and Julian (Hall 1981). The species has been recorded at elevations from sea level to 8,500 feet amsl. The San Diego desert woodrat generally breeds from October to May. They nest solitarily and the average litter size ranges from one to five offspring (Zeiner et al. 1990b).

San Diego desert woodrat was captured once during the small mammal trapping at the northern portion of the site in August 2009.

Southern Mule deer (*Odocoileus hemionus fuliginatus*)

San Diego County Group 2

Southern mule deer inhabit a broad range of habitats including agricultural and suburban areas, desert, woodlands and forests, grassland and herbaceous vegetation communities, savanna, shrubland, and chaparral. Mule deer are herbivorous and browse on a variety of woody plants, grasses, and forbs (NatureServe 2009).

Mule deer occur throughout California and much of the western U.S. and Great Plains north into Canada and south to the southern end of the Mexican Plateau. Breeding typically peaks late November to mid-December (NatureServe 2009).

Wildlife cameras on site detected one mule deer. However, it is likely several individuals commonly traverse the Preserve.

Pocketed free-tailed bat (*Nyctinomops femorosaccus*)

State Species of Special Concern, San Diego County Group 2

Pocketed free-tailed bat inhabits pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Pocketed free-tailed bats roost in rock crevices, caverns, or buildings

and feed on flying insects, especially large moths, detected by echolocation (Zeiner et al. 1990b).

Pocketed free-tailed bat occur in San Diego, Riverside, and Imperial counties and are more common in Mexico. Pocketed free-tailed bats bear a single litter with one young in June and July, peaking in late June (Zeiner et al. 1990b).

Anabat equipment used during bat surveys on September 16, 2009 recorded two pocketed free-tailed bat calls along the road in the center of the Preserve.

3.3.3 Rare, Threatened or Endangered Wildlife with High Potential to Occur

Additional information on the species listed below can be found in the Baseline Biological Resources Evaluation (Appendix A).

Quino Checkerspot Butterfly (*Euphydryas editha quino*)

Federal Endangered, County Group 1, North County MSCP Covered Species

Quino checkerspot butterfly has a high potential to occur within the Preserve. The Preserve contains suitable habitat and topographic features including sparse shrub habitat and grassland and ridgelines and hilltops. The Preserve is located within the historic range of the species and has been observed within 3.5 miles of the site. In addition, there are other known recent locations of Quino including one on the north side of San Vicente Reservoir, one on the south side of the Reservoir, and one located in Sycamore Canyon Preserve. Hence, there appears to be a low population of the species within the region since the observation is generally of a single individual. During the botanical surveys conducted during 2009, no host plant species were detected; however, 2009 was a relatively poor year for the development of the host plant populations. Regardless, at other locations within the County, host plant was recorded, however it was recorded in low numbers. The Preserve may function more as an area of dispersal than as a breeding location since the host plant was not observed.

Western Spadefoot (*Spea hammondi*)

State Species of Special Concern, San Diego County Group 2, North County MSCP Covered Species

This species has a high potential to occur in the southern area of the site, dominated by grasslands, which appear to have the potential to pool during the rainy season.

Rosy Boa (*Charina trivirgata*)

San Diego County Group 2

This species has a high potential to occur within scrub and chaparral habitats, and rocky areas on the Preserve.

Northern Red-diamond Rattlesnake (*Crotalus ruber ruber*)

State Species of Special Concern, San Diego County Group 2, North County MSCP Covered Species

This species has a high potential to occur on the Preserve within scrub, chaparral and woodland habitats and rocky outcrops.

Coast Patch-nosed Snake (*Salvadora hexalepis virgultea*)

State Species of Special Concern, San Diego County Group 2

This species has a high potential to occur on the Preserve including grassland, scrub, and chaparral habitats.

Coastal California Gnatcatcher (*Polioptila californica californica*)

Federal Threatened Species, State Species of Special Concern, and County Group 1, North County MSCP Covered Species

This species was historically observed on the Preserve prior to recent wildfires (North County MSCP Framework Resource Management Plan [FRMP] County 2009c) and was recorded for the site in CNDDB (CDFG 2009a). In addition, there is suitable coastal sage scrub habitat on site; however, it is currently relatively sparse and low in stature due to the recent wildfires. The existing habitat may not be sufficiently recovered to support the species.

Grasshopper Sparrow (*Ammodramus savannarum*)

State Species of Special Concern, San Diego County Group 1, and County Group 1, North County MSCP Covered Species

The grasshopper sparrow has a high potential to occur on the Preserve within grassland habitat.

Western Red Bat (*Lasiurus blossevillii*)

San Diego County Group 2

There is a high potential for the occurrence of the western red bat on the Preserve due to the presence of the riparian area composed of large oak trees along the eastern edge, which could serve as a roosting area.

3.3.4 Non-native and/or Invasive Wildlife Species

Three brown-headed (*Molothrus ater*) individuals were detected in the coastal sage scrub in the northern portion of the Preserve during a single avian point count survey on October 31. Although only three brown-headed cowbirds were observed, the data may understate the level of cowbird use on site as cowbirds breed primarily between April and May and avian point count surveys were conducted from July through October.

3.4 Overall Biological and Conservation Value

The Preserve is part of the Eastern Ramona Core, which includes 18,996 acres east of downtown Ramona, south of Lake Sutherland, including lands east of the Barona Reservation. The Preserve generally forms the western boundary of the central portion of the Eastern Ramona Core, connecting future preserve lands in Pre-Approved Mitigation Areas (PAMA) to the north and south. The Preserve also forms an important natural linkage to Barnett Ranch Preserve, and ultimately to preserve lands around San Vicente Reservoir, in the South County MSCP Subarea.

Based on the MSCP Habitat Evaluation Model Map, the majority of the Preserve is rated as moderate value with a small portion in the northwestern area rated as high.

The following vegetation communities within the Preserve are considered MSCP Tier I habitat: southern coast live oak riparian forest; southern cottonwood – willow riparian forest; southern riparian woodland; southern willow scrub; arrowweed scrub; coast live oak woodland; and Engelmann oak woodland. The southern coast live oak riparian forest is located in the eastern area of the Preserve and supports Engelmann oaks, Cooper's hawk, barn owl, Northern harrier, western bluebird, and coast horned lizard. Southern cottonwood – willow riparian forest, southern riparian woodland, and southern willow scrub vegetation communities were also located in the eastern area of the Preserve and support Engelmann oaks. The coast live oak woodland habitat is limited to a single location in the west-central portion of the Preserve and during 2009 surveys was not found to support special status species. The Engelmann oak woodlands were located in the northern area of the Preserve.

Coastal sage scrub including Diegan coastal sage scrub and disturbed Diegan coastal sage scrub located in the northwestern and southeastern areas of the Preserve is considered MSCP Tier II habitat and supports special status species including: delicate clarkia, loggerhead shrike, Bell's sage sparrow, barn owl, rufous-

crowned sparrow, Northern harrier, and turkey vulture. Coastal sage scrub – southern mixed chaparral and disturbed coastal sage scrub – southern mixed chaparral located in the northeastern area of the Preserve is considered MSCP Tier II habitat and supports several special status species including: delicate clarkia, San Diego thornmint, Engelmann oak, barn owl, and Bell's sage sparrow.

Non-native grassland is the dominant vegetation community along the slopes and ridgelines through the central portion of the Preserve from the northeast to the southeast corner and is considered MSCP Tier III habitat. One special status plant species, Orcutt's brodiaea occurs within non-native grasslands along two drainages in the southwestern portion of the Preserve, and along a drainage in the southeastern portion of the Preserve. Other special status species include barn owl, horned lark, turkey vulture, and pocketed free-tailed bat.

The California Gnatcatcher and Stephens' kangaroo rat Habitat Evaluation Model shows small portions of the Preserve rated as moderate to low habitat value for both species. No habitat is present on the Preserve to support arroyo toad.

3.4.1 Wildlife Linkages and Corridors

The general area may function to convey large and small mammals within and through the Preserve because evidence is provided by the wildlife cameras of the presence of mule deer and coyote. Observation of mammal tracks and scat were documented anecdotally throughout the Preserve within no specific areas of concentrated activity. Deer and coyote may use the path of least resistance, which can include drainages, ridgelines, and the numerous dirt roads that are on site depending on time of day. In general, the entire area currently functions as a block of habitat and is not constrained for wildlife use to specific locations.

4.0 CULTURAL RESOURCES

San Diego County is characterized by a rich and varied historical past. Cultural resources which reflect this history consist of archaeological remains, historic buildings, artifacts, photographs, oral histories, Native American memories and public documents. This RMP identifies the known cultural resources within Simon Preserve and describes areas of potential resources.

In 2009, an archaeological survey was completed for the Preserve in compliance with the California Environmental Quality Act (CEQA) and County environmental guidelines to assist in continued and future land use and resource protection planning. The results of this study can be found in the report titled *Archaeological Survey Report for Simon Preserve, San Diego County, California*, dated March 2010, and is attached as Appendix B (Stringer-Bowsher, et.al. 2010). This Phase I inventory involved site records searches, literature reviews, Native American consultation, historic map checks, field survey, and resource documentation. The survey and inventory results were used in the preparation of this RMP.

4.1 Site History

The Preserve is located southeast of the town of Ramona and on the western border of San Diego County Estates (SDCE).³ The Preserve straddles the historic boundaries of Rancho Santa Maria and Rancho San Vicente and had been home to settlers since at least 1882. After multiple land transactions, the County of San Diego eventually acquired the 618.57 acre Rancho San Vicente Open Space (Parcel 94-0446-A) property on July 17, 1995 from Western/WSGP Ramona Associates, Ltd., an entity headed by the sons of former U.S. Secretary of the Treasury, William E. Simon. They granted the land to the County with the stipulation that it must be used as an open space and/or park for recreation purposes, and that it must be known as William E. and Carol G. Simon Park (Kross 1995; San Diego County Archives 1994).

The backcountry of Santa Maria and San Vicente valleys developed far from the hustle and bustle of the city and nearby communities as a rural town, and the Preserve is located between those two valleys. While both valleys have historically been rural areas connected by similar livelihoods and lifestyles, the two valleys evolved differently; one into a town center, and the other a rural, suburban community. The Santa Maria Valley retains its ranching and agricultural roots with residential communities primarily centered in town with scattered ranches surrounding that residential core. The San Vicente Valley has become a rural, suburban community known as the SDCE with amenities such as a golf course, tennis courts, equestrian center, clubhouse, and restaurant (LeMenager 1983).

During the 1860s and 1870s, land grants in the county had been recognized by the Federal government, prompting speculation and emerging new towns. The Santa Maria Valley developed as the town center of Nuevo, later known as Ramona, and the San Vicente Valley remained relatively isolated with large ranches and sporadic homesteads. Mining operations occurred in both valleys and included extracting gemstones and minerals such as gold. Yet gemstone mining proved more lucrative than extracting gold, in spite of the short distance from the Julian gold mines. No active mines were located on the Preserve. In those early years, most residents of Ramona focused on ranching, farming, making honey, or providing services in town (LeMenager 1983, 1989).

Homesteading in the Preserve began in Section 24 of Township 13 South, Range 1 East in November 1882 when Francis N. Casner and his three children began living on land in that section. Several Timber Culture claims had been submitted for portions of sections 24-25, but were canceled in 1887-1888 before the Timber Culture Act was repealed. Successful patents in the Preserve were cash, homestead, or public sale entries, but primarily homestead entries. The first

³ The majority of the Preserve is located in sections 24 and 25 of Township 13 South, Range 1 East. The southwest corner of the Preserve was part of Rancho Santa Maria. The eastern portion of the Preserve includes a small portion of the W ½ of Section 19 and NW ¼ of Section 30 of Township 13 South, Range 2 East. It also includes a portion of Rancho San Vicente.

successful patents in sections 24-25 were in 1884 and 1891 with a majority occurring in 1891 and the 1930s with the latest patents in 1938. Homesteading in Section 19, Township 13 South, Range 2 East began in April 1892 as a homestead entry with the first patent authorized two months later. A portion of Section 19 became part of a BLM lease for Recreation and Public Purpose in 1984 (BLM 1977a, 1977b, 1995, n.d.).

Transportation in the backcountry in those early days was essential for connecting the relatively isolated area with mail, goods, and services in San Diego. Early stages and wagons from San Diego took the Government Highway (Poway route) through Mission Valley and Poway into San Pasqual Valley before crossing into the Santa Maria Valley, the McIntosh Ranch and onto Ballena and Santa Ysabel. Travelers could head north to Warner's Ranch and then Temecula and San Bernardino, or east onto the mines in Julian. The first stage coach established by William Tweed, traveled the Poway route in 1871. Another important transportation route was St. Vincent's trail (a horse trail) that extended from the El Cajon pass, crossed the San Diego River at Lakeside then extended northward to the Barona Valley into the San Vicente Valley where it joined the main road to Ballena at Casner's house. A section of this trail extended through the Preserve's eastern boundary.

4.2 Native American Consultation

The Native American Heritage Commission (NAHC) was contacted to request a search of their files for any recorded Traditional Cultural Properties or Native American heritage sites within ½ mi. of the survey area on May 7, 2009. The NAHC responded that no known Traditional Cultural Properties or heritage sites were known within or adjacent to the Preserve but that Native American cultural resources were present in proximity to the project area. The NAHC also provided a listing of all Native American tribal representatives that may have further knowledge of such sites within the project area. Subsequently, on May 14, 2009, Mr. Laylander contacted those tribal representatives by letter to solicit further information regarding known Traditional Cultural Properties and Native American heritage sites. The letters were sent to Steve Banegas (Kumeyaay Cultural Repatriation Committee), Bobby L. Barrett (Viejas Band of Mission Indians), Ron Christman (Kumeyaay Cultural Historic Committee), Paul Cuero (Kumeyaay Cultural Heritage Preservation), Johnny Hernandez (Santa Ysabel Band of Diegueno Indians), Allen E. Lawson (San Pasqual Band of Mission Indians), Clint Linton, Carmen Lucas (Kwaaymii Laguna Band of Mission Indians), Kenneth Meza (Jamul Indian Village), Rebecca Osuna (Inaja Band of Mission Indians), Edwin Romero (Barona Group of the Capitan Grande), Mark Romero (Mesa Grande Band of Mission Indians), and Danny Tucker (Sycuan Band of the Kumeyaay Nation). As of the final report, no response to these letters was received.

4.3 Cultural Resource Descriptions

4.3.1 Prehistoric Archaeological Resources

Lithic Scatters

SDI-11637

This site was originally recorded in 1990 by Pignuolo and Briggs as containing one mano, one worked cobble, and at least 10 quartzite and metavolcanic flakes. The previously recorded boundary of the site ran along the property line of the Preserve and an adjacent private parcel containing an avocado orchard. However, none of the constituents of the site could be located within the Preserve during 2009 surveys or seen on the adjacent private parcel. The private parcel was not thoroughly investigated, but the area has been impacted substantially by maintenance of the orchard and by a drainage and a dirt road. It is probable that the surface collection conducted during site evaluation in 1991 has removed all surface artifacts within the site boundaries.

SDI-11639

This site was originally recorded in 1990 by Pignuolo and Briggs as a lithic testing and procurement area containing a light scatter of tested cobbles and flakes in an area of exposed Ballena gravels, with five distinct chipping areas. During the current survey, ASM archaeologists relocated two of the five distinct chipping areas. The two northernmost loci were found to contain approximately five quartzite flakes each. The other three loci were not relocated, and only five additional quartzite flakes were identified throughout the remainder of the area within the previously recorded site boundaries.

SDI-11640

This site was originally recorded in 1990 by Pignuolo and Briggs as a prehistoric cobble testing and procurement area with two loci. Locus A contained at least 20 flakes/angular waste fragments, and Locus B contained at least 50 flakes and pieces of angular waste. During the current survey, ASM archaeologists relocated only five quartzite flakes in the vicinity of Locus A.

SDI-11641

This site was originally recorded in 1990 by Pignuolo as a lithic site with two flakes and five pieces of angular waste. During the current survey, ASM archaeologists surveyed the reported site location but were not able to relocate it. It is likely that the complete surface collection undertaken in 1991 removed all cultural material from the site.

SDI-11644

This site was originally recorded in 1990 by Clevenger, Pignuolo, and Briggs as a prehistoric cobble-testing and procurement site with two loci. Locus A contained three flakes and two flaked stone tools, and Locus B contained three flakes. During the current survey, ASM archaeologists surveyed the reported site area but were unable to relocate the site.

Habitation Site

SDI-11642

This site was originally recorded in 1990 by ERC Environmental as a prehistoric habitation site with flaked and ground stone tools. Two loci were defined: Locus A on the top of a ridge and Locus B on the lower slope. Surface artifacts noted included at least 300 flakes, five manos, and five flaked stone tools. During the current survey, ASM archaeologists noted that the site's major constituents were as they had been described in the original record. However, the rock alignments that were previously recorded as being prehistoric appeared to have been constructed during the historic period. In addition, they are located outside of the boundaries of prehistoric site SDI-11642. The rock alignments and associated historic-period artifacts have been recorded as a new site, SG-3. During the present survey, the prehistoric site was observed to contain approximately 30 flakes. There appears to be disturbances from heavy equipment, possibly during the last fire. Dense grasses also created poor ground visibility that may have obscured some of the archaeological material.

4.3.2 Historic Sites

SDI-11650

This site was originally recorded in 1990 by Pignuolo and Briggs as a historic well adjacent an olive grove that has been excavated into the bedrock. It was noted that there were fragments of milled wood and concrete near the well opening that may have been the remnants of a structure covering the well. The well was documented during evaluation of sites for the Rancho San Vicente Development project (Pignuolo et al. 1991). ASM archaeologists surveyed the area in 2009 and noted that the well is still present as described by Pignuolo and Briggs. However, since the original recordation of the well, it has been capped with a 4-x-6-ft. concrete slab with a PVC pipe at the center. No historic debris associated with the well was identified. The wooden structure recorded by Pignuolo and Briggs was not relocated. The well appears to be associated with an olive grove, approximately 20 m (65.6 ft.) to the west. This well is immediately adjacent SDI-5040, and the historic olive grove is located within the mapped boundary of that site.

SDI-19640

This site consists of 50+ cans in a 12-x-14-m (40-x-45-ft.) area. The trash scatter consists of sanitary and hole-in-cap cans with assorted broken glass and ceramic fragments and barbed wire. Some modern debris is present at this location, and most of the material is non-diagnostic or in poor condition.

SDI-19641

This is a small historic trash scatter 7.5 m (25 ft.) in diameter, and consisting of barbed wire, galvanized metal, chicken wire, glass, sanitary cans, milk cans, one large galvanized bucket, and a metal tube.

SDI-19642

This site consists of a historic road segment bordered on either side by a low rock alignment and a low rock wall surrounding a natural spring. The rock alignments were previously recorded with SDI-11642, although they are located outside of the site boundaries, and mistakenly identified as prehistoric. The associated historical artifacts were not previously recorded. The historic road segment runs north-south across a west-facing slope, leading to a spring. It is bordered on the west side by a low alignment of rocks, one to three courses high, and on the east side by an alignment of single rocks. A short square rock alignment surrounds the natural spring. A barbed wire fence surrounds both the rock alignment and the spring. Associated artifacts include a metal pipe, approximately 4.5 m (15 ft.) long, extending out of the spring and running down a drainage to the southeast; a cooking pan; and several metal fragments. A sanitary can covering a metal pipe coming out of the ground is located between the rock alignment along the road and the spring.

SDI-19643

The site consists of two historic mine prospect pits approximately 7.5 m (25 ft.) apart. No tailing piles or artifacts were identified. These pits are quite shallow and do not appear to represent a public safety hazard.

Isolates

CW-1

This isolate consists of the remnants of an automobile. The elements present include the frame, partial right and left fenders, the right running board, and the seat. The car appears to have been manufactured in the early twentieth century; however, it is unknown how long it has been at this location. Based upon the condition of the automobile it is possible it is related to the early homesteads on this property.

4.3.3 Multi-Component Resources

SDI-5038

This site was originally recorded in 1979 by Johnson and Pettus as a milling area containing two mortars, 16 slicks, and three basins. ERCE completed a re-survey of this site in 1990 and subsurface testing in 1991 (Clevenger and Cooley 1990; Pignuolo et al. 1991). A site record update prepared by Andrew Pignuolo identified six loci, including two milling areas and four loci of lithic debris, comprising hundreds of flakes and several associated artifacts. Subsurface testing included excavation of a series of STPS and one 1-x-1-m (3.28 x 3.28 ft.) unit at Locus A. Loci A-D of SDI-5038 were recommended as important cultural resources under CEQA as a result of this study. In 2009, ASM archaeologists surveyed the location and found that the site was still present but that not all of the reported constituents could be relocated.

SDI-5040

This site was originally recorded in 1990 by Clevenger and Cooley as a prehistoric milling site measuring 350 x 100 m (1148 x 328 ft.) with four loci (A-D) (Clevenger and Cooley 1990). Loci A and B also included evidence of habitation including a lithic scatter, ceramic sherds, and ground stone. Site testing, completed in 1991, included excavation of two test units and 17 STPs (Pignuolo et al. 1991). In 2009, ASM archaeologists identified Loci A, B, and C within the Preserve. Locus D is on adjacent private property and was therefore not accessible during this survey.

SDI-11638

This site was originally recorded in 1990 by Pignuolo and Briggs as a lithic testing and procurement site with a light scatter of flakes and tested cobbles. The site contained at least 200 flakes and at least 40 core tools over a very large area along a north/south-trending ridge. Also recorded was the presence of a historic olive grove within the north-central portion of the site. Site testing, completed in 1991, included site mapping, surface collection and excavation of 28 STPs (Pignuolo et al. 1991). A total of 193 artifacts were collected from the site surface. STP excavation indicated minimal subsurface deposits associated with shallow soil development on the ridge. The artifacts recovered suggested that this was a lithic testing and procurement site with a limited subsurface deposit. In 2009, ASM archaeologists surveyed the site and noted that the site was still present, although the lithic materials were very sparse and spread out over a very large area.

SDI-11643/H (including SDI-11653)

Sites SDI-11643/H and SDI-11653 have been combined. No distinct boundaries can be drawn between the sites, which overlap in the distributions of their features and artifacts. SDI-11643/H was originally recorded in 1990 by Pignuolo and Campbell as

a historic home site, containing three trash dumps as well as a prehistoric component. Prehistoric resources at the site were limited to a small outcrop of cobble material. The historic component of SDI-11643/H included three main concentrations of historic surface deposits and several surface depressions. No buildings remained on site.

SDI-11653 was originally recorded in 1990 by Pignuolo and Briggs as a prehistoric habitation site with bedrock milling stations, flaked and ground stone tools, and large amounts of fire-affected rock. The site record indicated that SDI-11653 contained at least 100 flakes, at least two hammerstones, at least five potsherds, and at least five flaked stone tools.

During the current survey, ASM archaeologists surveyed the area and noted that the site contained two bedrock milling outcrops, Features A and B. The remaining prehistoric archeological materials described in the original record could not be relocated.

The remains of the historical homestead site were also relocated. Pignuolo and Campbell originally identified three trash scatters, in addition to eucalyptus and olive trees. Pignuolo and Campbell's trash scatters #2 and #3 were combined in the present survey, and two new trash scatters, #4 and #5, were recorded. In addition, irrigation pipes and a sparse olive grove were identified in the northwest corner of the site. The olive grove appears to have burned down, and several small olive trees have re-grown.

Trash scatter #1 was originally recorded as containing 100+ solder seal sanitary and hole-in-cap cans. During the present survey approximately 10 sanitary and hole-in-cap cans were identified along with several refined white ware and stoneware ceramic fragments. A broken metate is in the vicinity of trash scatter #1. Also a small check dam is located along the side of a seasonal drainage several meters northeast of trash scatter #1. The check dam was constructed with local cobbles and concrete.

Trash scatters #2 and #3 were combined during the current survey. This area probably included the original homestead location due to the large amount of historical debris and a cluster of eucalyptus trees on the eastern side of the trash scatter. No building foundations were identified. One square burned wooden post is standing upright in the middle of the trash scatter. The trash scatter contains 100+ pieces of clear, aqua and amethyst glass, approximately 50 metal fragments, 25 milled wood fragments, 20+ stoneware and refined white ware ceramic sherds and a metal bed frame. Many of the artifacts showed signs of having been burned and much of the glass was melted. An oblong unifacial mano was identified in the middle of this trash scatter.

Trash scatter #4 contains the remains of a cast iron stove burner, three square cut nails, 10 fragmented sanitary cans, and several unidentifiable metal fragments.

Brown, clear, aqua, and amethyst glass fragments were also identified, many of which were burned and melted.

Trash scatter #5 contains a galvanized metal water trough, a metal bed frame, clear glass fragments, and corrugated metal sheeting. The artifacts in this area also show signs of having been burned. A cobble and concrete marker with a metal pipe extending out of the middle of it approximately 1 m (3 ft.) tall is located outside of the Preserve boundary to the west of trash scatter #5.

4.4 Resource Significance

The cultural resource testing program conducted by ERCE in 1991 evaluated all known cultural resources within the Preserve (Pignuolo et al. 1991). Four resources (SDI-5038, SDI-11642, SDI-11643/H, and SDI-11653) were recommended to be important cultural resources under CEQA. The rest of the resources were recommended as not important cultural resources. Table 2 summarizes the current eligibility status of resources within the Preserve. The four resources recorded as a result of the current survey (SDI-19640, SDI-19641, SDI-19642, and SDI-19643) have not been evaluated for eligibility under CEQA, NHPA or County Resource Protection Ordinance (RPO). These resources, two small trash scatters, a historic road bed and rock alignment and two prospecting pits have low research potential and are therefore unlikely to be considered significant resources under County RPO, or eligible for the NRHP, CRHR or Local Register. As the significance of these sites has not been determined through a program of significance testing, they are considered to be significant resources under County guidelines (County of San Diego, 2007).

Table 2. Potential Significance of Sites in the Preserve

Site Number	Era	Site Contents	Eligibility Status
New Sites			
SDI-19640	Historic	Historic Trash Scatter	Significant under County Guidelines
SDI-19641	Historic	Historic Trash Scatter	Significant under County Guidelines
SDI-19642	Historic	Historic road bed and rock alignment	Significant under County Guidelines
SDI-19643	Historic	Historic Prospecting Pits	Significant under County Guidelines
New Isolate			
CW-I-1	Historic	Automobile	Ineligible for CRHR
Previously Recorded Sites			
SDI-5038	Prehistoric and Historic	Bedrock Milling, Lithic Scatter; Metal Fragments	Loci A-D: Eligible for CRHR Loci E-F Ineligible for CRHR Historic: Ineligible for CRHR

Site Number	Era	Site Contents	Eligibility Status
SDI-5040	Prehistoric and Historic	Bedrock Milling, Lithic Scatter, Ceramic Scatter; Olive Grove, Historic Trash Scatter	Prehistoric: Ineligible for CRHR Historic: Significant under County Guidelines
SDI-11637	Prehistoric	Lithic Scatter	Ineligible for CRHR
SDI-11638	Prehistoric and Historic	Lithic Scatter; Orchard	Ineligible for CRHR
SDI-11639	Prehistoric	Lithic Scatter	Ineligible for CRHR
SDI-11640	Prehistoric	Lithic Scatter	Ineligible for CRHR
SDI-11641	Prehistoric	Lithic Scatter	Ineligible for CRHR
SDI-11642	Prehistoric	Lithic Scatter	Locus A: Eligible for CRHR Locus B: Ineligible for CRHR
SDI-11643/H (including SDI-11653)	Prehistoric and Historic	Bedrock Milling, Lithic Scatter; Historic Habitation, Historic Trash Scatter	Historic: Eligible for CRHR Prehistoric: Eligible for CRHR
SDI-11644	Prehistoric	Lithic Scatter	Ineligible for CRHR
SDI-11650	Historic	Historic Well	Ineligible for CRHR

5.0 RESOURCE MANAGEMENT

5.1 Management Goals and Objectives

Management of the natural and cultural resources within the Preserve will be guided by the general goals and objectives of both the County and the MSCP.

5.1.1 County-Specific

County-specific goals and objectives used to guide the management of resources within the Preserve can be found in the County Strategic Plan, the DPR Strategic Plan, as well as the Ramona Community Plan. The County's overall goal or mission, as indicated in the 2010-2015 Strategic Plan, is to provide the residents of San Diego County with superior County services in terms of quality, timeliness and value in order to improve the region's quality of life. The Strategic Plan for Parks and Recreation is closely aligned with the County's strategic initiatives.

The DPR Strategic Plan 2008-2013, outlines the department's priorities for accomplishing its mission over a five-year period. The overall goal or mission of DPR is to provide opportunities for high quality parks and recreation experiences and to preserve regionally significant natural and cultural resources. DPR makes this mission a reality through programs that create healthy communities, protect valuable natural and cultural resources, provide recreation opportunities, reduce crime and vandalism, and foster economic development.

In addition, County specific goals and guidelines can be found in the San Diego County General Plan. Specifically, the Preserve is located within the Ramona Community Plan. The Ramona Community Plan provides goals and policies which are designed to fit the specific or unique circumstances existing within this community. Goals provided in this plan seek to maintain the existing rural lifestyle within the area; encourage a pattern of open space lands for the preservation of natural resources; and develop a comprehensive plan of local, neighborhood, community, and regional parks and facilities directed to the needs of all age levels. To this end, the Ramona Community Plan provides policies and recommendations which are meant to guide the allocation of County resources towards prescribed outcomes consistent with the goals.

5.1.2 MSCP-Related

The MSCP Plan and the North County MSCP Plan provide both general and preserve segment-specific goals and objectives. The Preserve is located within a Pre-Approved Mitigation Area (PAMA) and designated as a preserve area and is part of the Eastern Ramona Core. The overall MSCP goal is to maintain and enhance biological diversity in the region and conserve viable populations of endangered, threatened, and key sensitive species and their habitat, thereby

preventing local extirpation and ultimate extinction. This is intended to minimize the need for future listings, while enabling economic growth in the region.

In order to maintain the biodiversity and ecosystem health in the region while ensuring quality of life and economic growth opportunities, the North County MSCP Plan incorporates the following underlying biological and social goals:

- Develop a preserve system that will preserve ecosystem functions and values, maintain the range of natural biological communities and native species within the Plan area and contribute to the recovery of endangered, threatened, and sensitive species and their habitats.
- Protect the quality of life for residents and visitors by maintaining the scenic beauty, natural biological diversity, cultural resources, and recreational opportunities within the Plan area.

In addition, the Framework RMP provides specific conservation goals for the Eastern Ramona Core. Two of these five conservation goals are applicable to the Preserve:

- Protection of oak woodlands, San Diego thorn-mint, and Orcutt's brodiaea
- Minimization of impacts to sensitive habitats, including upland habitat on mafic soils supporting sensitive plant species such as Parry's tetracoccus; grasslands, including those that are loamy or with clay soil; and California gnatcatcher habitat.

5.1.3 Management Directives and Implementation Measures

Based on the above management goals, recommended management directives have been identified. In accordance with the Framework RMP, specific conservation actions that will be performed on preserve lands fall into three categories: land stewardship, adaptive management actions, and biological monitoring. In general, land stewardship consists of the activities necessary for maintaining the integrity (i.e., functional ecosystem and protected resources) of preserved lands. Adaptive management actions include activities that are designed to benefit specific ecological features (e.g., certain species, vegetation communities or ecological processes) based upon information that has been gained through casual observations or scientific monitoring. Biological monitoring refers to focused assessments of species or vegetation communities.

The ASMDs provided herein have been designated as Priority 1 or Priority 2. This designation recognizes the fact that many of the directives cannot be immediately implemented, but instead will occur over the life of the MSCP. The ability to implement and the timing of many of the management directives will be directly related to the availability of funding in any fiscal year and on the priority. The

priorities are, therefore, intended to assist in decisions on where and how to spend limited funds. Priority designations are as follows:

Priority 1: Directives that protect the resources in the Preserve and the MSCP preserve, including management actions that are necessary to ensure that sensitive species are adequately protected.

Priority 2: Directives other than those required for sensitive species status and other long-term items that may be implemented during the life of the MSCP as funding becomes available.

The North County MSCP Framework RMP provides habitat specific management and monitoring guidelines which address the major factors that impact specific habitat types including: Riparian, Marsh and Wet Meadow Habitat; Coastal Sage Scrub, Chaparral, and Grassland Habitat; Oak Woodlands and Coniferous Forest; and Vernal Pools. The major factors that can impact these habitats include: hydrology, invasive non-native plant and animal species, and fire. Species that are most likely to benefit from these habitat based management and monitoring guidelines are detailed for each habitat type. Additionally, the North County MSCP Plan conservation analysis for specific species (such as narrow endemics, threatened or endangered species) provides species specific management and monitoring guidance.

This RMP includes management directives and implementation measures to meet MSCP goals and objectives under the following elements: A) Biological Resources, B) Vegetation Management, C) Public Use, Trails, and Recreation, D) Operations and Facility Maintenance and E) Cultural Resources.

5.2 Biological Resources Element (A)

5.2.1 Biological Monitoring

Biological monitoring will be performed onsite to gather information that will assist DPR in making land management decisions to conform to MSCP goals and objectives, as well as DPR objectives. The biological monitoring that will occur will be designed to guide decisions at the individual preserve level. The first year of monitoring has been conducted (baseline surveys) and the results are included as Appendix A. Additional monitoring results will be incorporated into stand alone monitoring reports. These reports may recommend revisions to the management directives contained within this RMP.

Monitoring at the preserve scale is focused on obtaining information for management purposes, but can be useful for subregional and ecoregional monitoring assessment as well. DPR will monitor the status and trends of covered species (in accordance with the Framework RMP) and collect data on key environmental resources within preserves to select, prioritize, and measure the effectiveness of management activities. In most instances, the array of threats or

stressors on preserved habitats, their mechanisms of action, and the responses of the habitats and associated species are not completely understood at this time. Therefore, ASMD's must comprehensively address resource management issues for each preserve. Information collected within each preserve will be aggregated for analysis at the subregion and ecoregion scales.

The key to successful monitoring at the individual preserve level is: close coordination with stakeholder groups that are performing subregional monitoring; sharing of data, future plans and schedules; and keeping abreast of monitoring methods as they are developed. To ensure uniformity in the gathering and treatment of data, a (SANDAG) land management working group has been formed and has designated a regional monitoring coordinator who will assist jurisdictions in coordinating monitoring programs, analyzing data, and providing other information and technical assistance. The County is an active participant in the development of monitoring methods for the MSCP. Once these methods are fully developed, and as feasible, these methods may be adapted for North County MSCP preserves.

DPR will follow the habitat and species specific monitoring requirements outlined in the North County MSCP Plan. Additionally, DPR will follow USGS monitoring protocols for rare plants (McEachern et al. 2007), SDSU habitat and vegetation monitoring protocols (Deutschman et.al 2009), and USFWS monitoring protocols for animals (USFWS 2008). These references will assist DPR in developing monitoring methods at the preserve level, as well as the management directives that are identified for specific species in this document.

Management Directive A.1 – Conduct habitat monitoring to ensure MSCP goals and DPR objectives are met (*Priority 1*)

Implementation Measure A.1.1: DPR will conduct habitat monitoring initially on an annual basis for coastal sage scrub habitat and other habitat types within the Preserve at five-year intervals. On-going monitoring within the Preserve will identify any adverse changes in vegetation community distribution and habitat quality, such as changes from fire, invasion by non-natives or decline of existing species, and indicate if modifications to current management actions are needed. More frequent monitoring may be required following a significant fire within the Preserve. The main product of this monitoring will be a report which will include a discussion of monitoring objectives, monitoring methods to meet those objectives and an updated vegetation community map.

Implementation Measure A.1.2: DPR will conduct general wildlife and rare plant surveys at five-year intervals utilizing and refining baseline monitoring methods to facilitate trend and distribution status analysis. This information will be included in the monitoring report.

Implementation Measure A.1.3: DPR will conduct monitoring for invasive non-native plant species at five-year intervals to assess invasion or re-invasion by invasive nonnative plants within the Preserve. These surveys will focus on areas where invasive, non-native plants have been detected in the past, but also look for new occurrences in the Preserve. This information will be included in the monitoring report.

Management Directive A.2 – Meet the corridor monitoring requirements of the MSCP (Priority 2)

The Preserve is part of the Eastern Ramona Core, which includes 18,996 acres east of downtown Ramona, south of Lake Sutherland, including lands east of the Barona Reservation. The Preserve generally forms the western boundary of the central portion of the Eastern Ramona Core, connecting to Mt. Gower Preserve and future preserve lands in Pre-Approved Mitigation Areas (PAMA) to the north and south. The Preserve also contributes to the formation of an important natural linkage to Barnett Ranch Preserve to the southwest, and ultimately to preserve lands around San Vicente Reservoir, in the South County MSCP Subarea.

During baseline biological surveys of the Preserve it was noted that the entire area currently functions as a block of habitat and wildlife use is not constrained to specific locations. Therefore, while corridor monitoring within the Preserve will take place at the preserve-level, it anticipated that it will provide data for better understanding wildlife movement on a regional scale.

Implementation Measure A.2.1: DPR will conduct corridor monitoring at five-year intervals in conjunction with habitat monitoring and general wildlife and rare plant surveys (as described in implementation measures A.1.1 and A.1.2). The scope of monitoring will be sufficient to determine if corridors are being utilized, but not to determine the extent of use (i.e., how many individuals of any given species use a corridor). The main product of this monitoring will be a report documenting the results of the current assessment of habitat linkage function including a list of focal species detected.

5.2.2 MSCP Covered Species-Specific Monitoring and Management

Not all species occurring within the Preserve are expected to require species-specific management. It is expected, rather, that other management directives and implementation measures outlined under the Biological Resources and Vegetation Management elements should be sufficient to protect and manage optimal habitat conditions for most, if not all, species to maintain and/or thrive within the Preserve.

The North County MSCP provides habitat specific management and monitoring guidelines that will benefit certain covered species for the following habitat types: Riparian, Marsh and Wet Meadow Habitat; Coastal Sage Scrub, Chaparral, and Grassland Habitat; Oak Woodlands and Coniferous Forest; and Vernal Pools. The

Framework RMP outlines the major factors that are a risk to these specific habitats and discusses management and monitoring to reduce the threats. Additionally the North County MSCP Plan conservation analysis provides species specific monitoring and management conditions for covered species that may need more specialized management directives.

Management Directive A.3 – Provide for management and monitoring of North County MSCP Covered Species (*Priority 1*)

DPR will implement habitat based and, in some cases, species specific monitoring and management as outlined in the Framework RMP and the conservation analysis of the North County MSCP for all North County MSCP covered species detected within the Preserve.

In order to avoid repetition, the following is a list of common risk/threats to covered species that are found to benefit from habitat based management and the corresponding management directives or implementation measures to address these factors:

- ***Invasive non-native plants:*** Implementation measure A.1.3 and management directives B.2 and B.3
- ***Invasive non-native animals:*** Multiple implementation measures under management directive A.4
- ***Wildfires:*** Multiple implementation measures under management directive B.4.
- ***Edge effects:*** Multiple implementation measures under management directives D.7, D.8, and D.9

San Diego thornmint (*Acanthomintha ilicifolia*)

Monitoring: Trend Monitoring (High Priority)

San Diego thornmint will benefit from habitat based monitoring within Coastal Sage Scrub, Chaparral, and Grassland Habitat. In addition, species specific monitoring will also benefit the species.

Species specific implementation measures are discussed below.

Implementation Measure A.3.1: DPR will conduct surveys at five-year intervals to determine the number, size, variability and health status (*e.g.*, new vegetative growth, flowering) of the San Diego thornmint population within the Preserve.

Implementation Measure A.3.2: In addition to implementation measure A.1.3, DPR will specifically monitor for invasive non-native plant species in the vicinity the San Diego thornmint population within the Preserve.

Implementation Measure A.3.3: In addition to implementation measure A.1.2, DPR will specifically monitor the condition of soils and evidence of soil disturbance such as trampling/crushing by humans within the San Diego thornmint population area within the Preserve.

Management: Habitat Maintenance

San Diego thornmint will benefit from coastal sage scrub/chaparral habitat based management actions. The habitat will be managed to reduce the threat of invasive non-native plants and wildfires.

Orcutt's brodiaea (*Brodiaea orcuttii*)

Monitoring: Status Monitoring (Low Priority)

Monitor in accordance with habitat based implementation measures A.1.1 and A.1.2.

Management: Habitat Maintenance

Orcutt's brodiaea will benefit from grassland habitat based management actions. The habitat will be managed to reduce the threat of invasive non-native plants and wildfires.

Engelmann oak (*Quercus engelmannii*)

Monitoring: Status Monitoring (Low Priority)

Monitor in accordance with habitat based implementation measures A.1.1 and A.1.2.

Management: Habitat Maintenance

Engelmann oak will benefit from oak woodland habitat based management actions. The habitat will be managed to reduce the threat of invasive non-native plants and sudden oak death syndrome. Sudden oak death syndrome is addressed through implementation measure A.1.1.

Orange-Throated Whiptail (*Cnemidophorus hyperythrus beldingi*)

Monitoring: Status Monitoring (Low Priority)

Orange-throated whiptail will benefit from habitat based monitoring within Coastal Sage Scrub, Chaparral, and Grassland Habitat. Monitoring efforts will include habitat monitoring and general wildlife (presence/absence) surveys (as described in implementation measures A.1.1 and A.1.2).

Management: Habitat Maintenance

Orange-throated whiptail will benefit from coastal sage scrub habitat based management actions. Threats to this species include non-native wildlife species including Argentine ant. No Argentine ants were observed within the Preserve, no landscaping on-site is proposed, and trash receptacles will be provided to reduce the accumulation of litter and food waste. The habitat will also be managed to reduce the threat of wildfires.

Coast Horned Lizard (*Phrynosoma coronatum*)

Monitoring: Status Monitoring (Low Priority)

Coast horned lizard will benefit from habitat based monitoring within coastal sage scrub, chaparral, and grassland habitat. Monitoring efforts will include habitat monitoring and general wildlife (presence/absence) surveys (as described in implementation measures A.1.1 and A.1.2).

Management: Habitat Maintenance

Coast horned lizard will benefit from coastal sage scrub habitat based management actions. Threats to this species include non-native wildlife species including Argentine ant. No Argentine ants were observed within the Preserve, no landscaping on-site is proposed, and trash receptacles will be provided to reduce the accumulation of litter and food waste. The habitat will also be managed to reduce the threat of wildfires.

Bell's Sage Sparrow (*Amphispiza belli belli*)

Monitoring: Trend Monitoring (Medium Priority)

Bell's sage sparrow will benefit from habitat based monitoring within coastal sage scrub and chaparral habitat.

Management: Habitat Maintenance

Bell's sage sparrow will benefit from coastal sage scrub habitat based management actions. Threats to this species include wildfires and non-native wildlife species. The habitat will be managed to reduce the threat of invasive non-native wildlife species and wildfires.

Northern Harrier (*Circus cyaneus*)

Monitoring: Status Monitoring (Low Priority)

Monitor in accordance with habitat based implementation measures A.1.1 and A.1.2. Monitoring of nest sites will not be necessary because northern harrier was not observed nesting on the Preserve during 2009 surveys.

Management: Habitat Maintenance

Northern harrier will benefit from coastal sage scrub habitat based management actions. Threats to this species include wildfires and invasive wildlife species. The habitat will be managed to reduce the threat of invasive non-native wildlife species and wildfires.

Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)

Monitoring: Trend Monitoring (Medium Priority)

Southern California rufous-crowned sparrow will benefit from habitat based monitoring within coastal sage scrub and chaparral habitat.

Management: Habitat Maintenance

Southern California rufous-crowned sparrow will benefit from coastal sage scrub and chaparral habitat based management actions. Threats to this species include wildfires and non-native wildlife species. The habitat will be managed to reduce the threat of invasive non-native wildlife species and wildfires.

Coastal California Gnatcatcher (*Polioptila californica californica*)

Coastal California gnatcatcher was not observed on-site during 2009 surveys, but has been historically observed on the Preserve prior to recent wildfires.

Implementation Measure A.3.4: DPR will conduct focused surveys for coastal California gnatcatcher at five-year intervals in conjunction with Implementation Measure A.1.2.

5.2.3 Non-Native Invasive Wildlife Species Control

Management Directive A.4 – Reduce, control, or where feasible eradicate invasive, non-native fauna known to be detrimental to native species and/or the local ecosystem (*Priority 2*)

Invasive, non-native species detected within the Preserve during the 2009 surveys include brown-headed cowbirds. This species does not currently appear to be posing an immediate threat to native species and/or the local ecosystem; however, they have potential to out compete native species for valuable resources. Argentine ants and goldspotted oak borer (*Agrilus coxalis*) were not observed on the Preserve, but will be monitored as these invasive species can adversely impact plant and animal species.

Implementation Measure A.4.1: DPR will conduct surveys for the presence of invasive, non-native wildlife species of management concern, including cowbirds, Argentine ants, and goldspotted oak borer at five-year intervals in conjunction with habitat monitoring and general wildlife surveys (as described in implementation measures A.1.1 and A.1.2).

Implementation Measure A.4.2: If detrimental effects of these species are detected within the Preserve, preparation and implementation of a trapping and removal program, or other means of humane control should be initiated.

Implementation Measure A.4.3: On a case-by-case basis, some limited trapping of non-native predators may be necessary at strategic locations, and where determined feasible to protect ground- and shrub-nesting birds, lizards, and other sensitive species from excessive predation. If implemented, the program would only be on a temporary basis and where a significant problem has been identified and therefore needed to maintain balance of wildlife in Simon Preserve and the MSCP Preserve. The program would be operated in a humane manner. Signage at access points and noticing of adjacent residents will inform people that trapping occurs, and how to retrieve and contain their pets.

Implementation Measure A.4.4: DPR will institute an equestrian education program regarding the potential negative impacts to native ecosystems from the accumulation of non-point source pollutants (e.g., increased potential for occurrence of cowbirds) and on frequently used trails. This could be accomplished through implementation of a signage program and interaction between rangers and trail users. See also implementation measure B.3.2.

Implementation Measure A.4.5: DPR will encourage the use of in-ground trash receptacles on the Preserve to reduce the accumulation of litter and food waste to reduce the risk and extent of Argentine ant invasion.

Implementation Measure A.4.6: DPR will concentrate monitoring activities for Argentine ant within the more mesic portions of the Preserve and especially along the eastern edge near the riparian area where there is an interface with private residences that likely support irrigated landscaped areas adjacent to the Preserve.

5.2.4 Future Research

The MSCP Preserve presents a rich array of research opportunities for the academic and professional communities, primarily in disciplines related to biology, ecology, and natural resources management, but also ranging to environmental design, sociology, and park use and administration. The County of San Diego encourages research within the MSCP Preserve in order to gain valuable information unavailable through other means.

There are a multitude of unanswered questions posed by the development of a multiple species and habitat system where little literature or previous research exists on the majority of species inhabiting the region. In addition, research on vegetation associations and habitats, natural regeneration, restoration, fragmentation, edge effects, genetics, viability, predation, wildlife movement, and much more, would be useful to provide information on the health and dynamics of an urbanized open space system as well as how to improve conditions.

Management Directive A.5 – Allow for future research opportunities for the Academic and Professional Scientific and Biologic Activities within the Preserve (Priority 2)

Implementation Measure A.5.1: DPR will accept and review proposals for scientific research, monitoring, and habitat restoration and enhancement activities which are permitted within the MSCP Preserve. Proposed research activities will be subject to approval by DPR. All such activities must obtain any necessary permits and shall be consistent with this RMP. Additionally, any person conducting research of any kind within the Preserve shall obtain a Right-of-Entry Permit from DPR, which will outline the precautions to be taken to preserve and protect sensitive biological and cultural resources within the Preserve and require results of any research to be made available to DPR.

5.3 Vegetation Management Element (B)

In 2010 Dudek prepared a Vegetation Management Plan for the Preserve (Dudek 2010) in addition to the baseline surveys. The Plan outlines invasive non-native plant species management, habitat restoration, and fire management. These recommendations were used to develop the management directives and implementation measures provided below.

5.3.1 Habitat Restoration

Management Directive B.1 – Restore degraded habitats to protect and enhance populations of rare and sensitive species through stabilization of eroded lands and strategic revegetation (*Priority 1*)

Implementation Measure B.1.1: DPR will assess and determine the need for restoration activities within the Preserve. The need for restoration activities will be determined based on the results of habitat monitoring (as described in implementation measure A.1.1) and trail maintenance activities (as described in implementation measure C.5.3). Any proposed restoration activities should utilize current, accepted techniques and avoid/minimize impacts to sensitive species or native habitats. Any proposed revegetation activities should use only local native species. No active restoration is currently needed. Passive restoration (recovery from fire) is ongoing. Coastal sage scrub habitat will be monitored for recovery (implementation measure A.1.1).

5.3.2 Non-Native Plant Species Removal and Control

Management Directive B.2 – Reduce, control, or where feasible eradicate invasive, non-native flora known to be detrimental to native species and/or the local ecosystem (*Priority 2*)

As described in Section 3.2.4 above, native and naturalized plant species primarily dominate the vegetation communities within the Preserve. However, eucalyptus, Canary Island date palm, Peruvian pepper tree, tamarisk, and Mexican fan palm are concentrated in the eastern portion of the Preserve not including the pepper tree which is located in the northwestern portion of the Preserve. Given the limited abundance of the invasive plant species observed on-site, no negative impacts (e.g., displacement of native species) were evident during 2009 surveys. However, if abundance increases, these species can potentially displace native vegetation, particularly the tamarisk and eucalyptus.

Implementation Measure B.2.1: DPR park rangers will routinely pull weeds or remove any non-native plant species in early stages of growth found along trails.

Implementation Measure B.2.2: DPR will coordinate with other agencies, non-profit organizations, and/or volunteer groups in order to seek funding and implement removal of eucalyptus, Canary Island date palm, Peruvian pepper tree, tamarisk, Mexican fan palm, or other invasive non-native plants found during 2009 plant surveys and monitoring (as described in implementation measures A.1.2 and A.1.3) within the Preserve.

Management Directive B.3 – Manage and minimize the expansion of invasive, non-native flora within the Preserve (*Priority 2*)

Implementation Measure B.3.1: DPR will implement an educational program for Preserve visitors and adjacent residents in order to discourage introduction of invasive, non-native plants into the Preserve. Information provided will include identification of invasive plants harmful to the Preserve, and prevention methods. The program may also encourage residents to voluntarily remove invasive exotics from their landscaping. See also implementation measure D.9.1.

Implementation Measure B.3.2: DPR will implement an equestrian education program regarding the potential negative impacts to native ecosystems from the accumulation of non-point source pollutants (e.g., spread of non-native seeds) on frequently used trails. This could be accomplished through a signage program/brochures and interaction between rangers and trail users. Specific signage could state, “Don’t Plant a Pest! Feeding horses weed-free feed for at least 72 hours prior to Preserve entry helps preserve our natural environment”. See also implementation measure A.4.4.

5.3.3 Fire prevention, control, and management

Simon Preserve is located in a wildfire-prone area and has been mapped by CalFire as a “Very High Fire Severity Zone”. The Vegetation Management Plan prepared for the Preserve outlined fuels reduction recommendations for vegetation habitats within the Preserve, management strategies to reduce the causes of fire, and post fire management.

Current fire management activities in the Preserve include two fuel modification zones (Figure 7):

- (1) 30-foot fuel modification zone in the southeastern corner of the Preserve where the Preserve abuts private residences (this fuel modification zone provides the adjacent residences a 100-foot buffer as measured from the residential structures); and
- (2) 30-50 foot fuel modification zone along the eastern border of the Preserve where the Preserve abuts private residences (this fuel modification zone provides the adjacent residences a 100-foot buffer as measured from the residential structures).

Emergency access roads are found within the Preserve in the form of existing utility and dirt roads.

Management Directive B.4 – Provide for necessary fire management activities that are sensitive to natural and cultural resources protection (*Priority 1*)

Implementation Measure B.4.1: The County will maintain the established fuel modification zones on the Preserve providing adjacent residences a 100-foot buffer as measured from the residential structures. The intent of a fuel modification zone is to protect habitable structures adjacent to the Preserve from wildfires. It may further protect the resources within the Preserve by absorbing some of the “edge effects” that might otherwise occur within the Preserve.

Management of a fuel modification zone, if needed, will adhere to CAL FIRE and/or Ramona Fire Protection District requirements.

Implementation Measure B.4.2: The existing dirt roads within the Preserve acting as access roads will be maintained annually to keep the roads fuel free. The dirt roads will be maintained at eight feet wide. In addition, DPR will continue to coordinate with CAL FIRE/Ramona Fire Protection District to determine what improvements need to be made to make fire response feasible throughout the Preserve.

Management Directive B.5 – Provide appropriate post fire management actions to address immediate threats (*Priority 1*)

Implementation Measure B.5.1: DPR will install erosion control best management practices (BMPs) in burn areas, especially in sloped areas to stabilize soils before the onset of the winter rainy season.

5.4 Public Use, Trails, and Recreation Element (C)

5.4.1 Public Access

Management Directive C.1 – Limit types of public uses to those that are appropriate for the site (*Priority 1*)

Currently, there are no identified unauthorized access problems compromising the Preserve.

Implementation Measure C.1.1: The following public uses are prohibited in the Preserve. Park rangers are responsible for enforcing these restrictions and may call the sheriff for legal enforcement, as appropriate.

- a. Off-road or cross-country vehicle and public off-highway recreational vehicle activity are considered incompatible uses in the MSCP preserve, and are therefore prohibited in the Preserve, except for law enforcement, Preserve management, and/or emergency purposes.
- b. Hunting or discharge of firearms is an incompatible use in the MSCP preserve, and is therefore prohibited in the Preserve, except for law enforcement, and/or emergency purposes.

- c. Poaching or collecting plant or animal species, archaeological or historical artifacts or fossils from the Preserve is generally prohibited; however, the County may authorize collecting upon approval for scientific research, revegetation or restoration purposes, or species recovery programs. In addition, impacts to historic features are prohibited except upon approval by the County.
- d. Fishing, swimming, and wading in rivers, streams, or creeks
- e. Camping (including homeless and itinerant worker camps)
- f. Feeding wildlife
- g. Domestic animals, except horses and leashed dogs
- h. Smoking
- i. Campfires/Open Flames
- j. Off-trail biking, equestrian use, or hiking
- k. Littering

Management Directive C.2 – Manage public access in sensitive biological and cultural resource areas within the Preserve (*Priority 1*)

Implementation Measure C.2.1: DPR has identified and mapped narrow endemics and critical populations, and all covered species populations in the Preserve so that these areas can be avoided and/or monitored. Updated information on sensitive species in relation to public access points will be obtained during general wildlife and rare plant surveys in conjunction with habitat monitoring (as described in implementation measures A.1.1 and A.1.2).

Implementation Measure C.2.2: DPR will provide sufficient signage to clearly identify public access to the Preserve. Barriers such as vegetation, rocks/boulders or fencing may be necessary to protect highly sensitive areas. The appropriate types of barriers to be used will be determined based on location, setting and use. DPR will monitor new developments adjacent to the Preserve to enforce non-authorized trail use.

Management Directive C.3 – Provide appropriate interpretive and educational materials (*Priority 2*)

An educational kiosk is currently located at the Preserve entrance off of Bassett Way.

Implementation Measure C.3.1: DPR will share outreach and educational information and notify the public of volunteer opportunities that advance the management, monitoring, and stewardship resources available, and objectives of this RMP. This information will be provided on the DPR website, www.sdparks.org.

Implementation Measure C.3.2: When possible, park rangers assigned to this Preserve should organize and conduct interpretative walks or programs within the Preserve discussing biological and cultural resources. During these interpretative walks or programs the ranger should distribute the “Living Close to Nature” brochure. This brochure discusses how to live in harmony with wildlife. The interpretative walks and programs should be conducted in accordance with park ranger availability.

5.4.2 Fencing and Gates

Currently, gates are located in the following areas within the Preserve (Figure 7): 1) gate in the northern portion of the Preserve at the terminus of Woods Hill Road; 2) gate located in the southern portion of the Preserve off a dirt trail extending north from Bassett Way; and (3) two gates located in the northeastern portion of the Preserve, the northern gate can be accessed from a dirt trail extending from Vista Ramona Road and the southern gate can be accessed from a dirt trail extending from Arena Way. Fencing is currently located along the boundary of the Preserve adjacent to private residences and is privately owned.

Management Directive C.4 – Install and maintain fencing and gates within the Preserve (Priority 1)

Implementation Measure C.4.1: Ranger staff will install fencing and/or gates at points of unauthorized public access as appropriate. Points of unauthorized access will be identified in conjunction with trail monitoring activities (as described in implementation measure C.5.1). No unauthorized access is currently identified.

Implementation Measure C.4.2: Ranger staff will regularly inspect all fencing and notify appropriate Homeowner Associations if maintenance is needed. Gates within the Preserve will be monitored and maintained and will be repaired or replaced as necessary.

5.4.3 Trail and Access Road Maintenance

No public access roads are found within the Preserve and no staging area is proposed. The Preserve only includes a 6.5-mile multi-use trail system with 3.2 miles of utility maintenance roads maintained by SDG&E and 3.3 miles of trails maintained by DPR. There are currently no plans to modify the existing trail system.

Management Directive C.5 – Properly maintain trails for user safety, to protect natural and cultural resources, and to provide high-quality user experiences (Priority 1)

Implementation Measure C.5.1: Ranger staff will monitor DPR trails for degradation and off-trail access and use, and provide necessary repair/maintenance per the Community Trails Master Plan (County of San Diego 2005). See also implementation measure B.4.2.

Implementation Measure C.5.2: If temporary closure of a DPR trail is deemed necessary for maintenance or remediation, temporary closure actions will be accompanied by educational support, and public notification through signs and public meeting announcements. An implementation schedule should be written by DPR Operations staff when maintenance or remediation is deemed necessary.

The trail will be posted with signage that indicates temporary closure and the primary reason for the temporary closure (e.g., erosion issues, and sensitive biological resource impacts). Finally, signs should provide contact information for anyone wishing to provide input on trail use or gain additional information regarding temporary closure of trails.

Once posted, the trails in need of maintenance should be blocked with A-frame barricades and/or caution tape. Enforcement of the temporary closure of a trail would require increased ranger patrols of these areas and investigations to determine if the barriers are effective.

Implementation Measure C.5.3: DPR will restore degraded habitats and reduce detrimental edge effects through maintenance and stabilization of DPR trails and strategic revegetation. Measures to counter the effects of trail erosion may include the use of stone or wood cross-joints, edge plantings of native grasses, and mulching of the trail per the Community Trails Master Plan (County of San Diego 2005) or other approved Best Management Practices (BMPs). See also implementation measure B.1.1.

Implementation Measure C.5.4: If unauthorized trail formation is observed by ranger staff, those specific areas will be posted with clear signage reminding the public to remain on authorized trails. Also see management directive C.6.

5.4.4 Signage and Lighting

No lighting is currently present at the Preserve and is not anticipated to be installed in the future.

Management Directive C.6 – Develop, install, and maintain appropriate signage to effectively communicate important information to Preserve visitors (Priority 1)

Signs educate, provide direction, and promote sensitive resources and enjoyment of natural areas. Types of signs within the Preserve may include those necessary to:

protect sensitive biological and cultural resources (see A.4.4, B.3.2, and E.1.4); provide educational and interpretive information (see C.3.2 and E.2.1); explain rules of the Preserve (see C.1.1 and D.2.1); direct public access (see C.2.2 and C.5.4); and, provide Preserve operations information (see A.4.3 and C.5.2).

Implementation Measure C.6.1: Park ranger staff will regularly inspect and maintain all posted signs within the Preserve in good condition. Current posted signs include the following rules and regulations: Off-roading and ATV Vehicles Prohibited 41.130, Dogs on Leash At All Times 41.123(c) and No Open Flames. Signs shall be kept free from vandalism and will be repaired or replaced as necessary.

5.5 Operations and Facility Maintenance Element (D)

5.5.1 Litter/Trash and Materials Storage

Management Directive D.1 – Maintain a safe and healthy environment for Preserve users (*Priority 1*)

Implementation Measure D.1.1: The permanent storage of hazardous and toxic materials within the Preserve will be prohibited. Any temporary storage must be in accordance with applicable regulations, and otherwise designed to minimize any potential impacts.

Management Directive D.2 – Publicize and enforce regulations regarding littering/dumping (*Priority 1*)

Implementation Measure D.2.1: Lists of regulations will be provided to Preserve users (e.g., posted on kiosks) clearly stating that littering within the Preserve is illegal, and will provide appropriate DPR contacts to report any littering observed.

Implementation Measure D.2.2: Regulations regarding littering/dumping will be enforced by DPR staff (County Code of Regulatory Ordinance Section 41.116). Penalties for littering and dumping will be imposed by law enforcement officers sufficient to prevent recurrence and reimburse costs to remove and dispose of debris, restore the area if needed, and pay for additional DPR staff time. Areas where dumping recurs will be evaluated for potential barrier placement. Additional monitoring and enforcement will be provided as needed.

5.5.2 Hydrological Management

Native habitats in the MSCP Preserve have evolved, in part, on the distribution and flow characteristics of water. MSCP Preserve property should be managed to maintain existing natural drainages and watershed and to restore or minimize changes to natural hydrological processes. Proposed structures and activities should be evaluated for effects on hydraulics, and remedial actions should be taken

as needed. Best Management Practices (BMPs) should be used both within and outside the preserve system to maintain water quality.

One un-named tributary is located along the eastern border of the Preserve and drains to San Vicente Creek. The western portion of the Preserve generally drains to the northwest via small sub-drainages and gullies, drawing towards adjacent rural residential areas and eventually to Santa Maria Creek.

Management Directive D.3 – Retain un-named tributary in its natural condition. (Priority 2)

Implementation Measure D.3.1: No additional activities will be proposed adjacent to the un-named tributary located along the eastern boundary of the Preserve. Potential threats to jurisdictional waters from any activities including trail use shall be identified and impacts avoided or minimized to the maximum extent practicable.

Management Directive D.4 – Monitor and maintain culverts along un-named tributary (Priority 2)

Implementation Measure D.4.2: Park ranger staff will regularly inspect culverts and determine if there is build-up of sediment or flooding issues.

5.5.3 Emergency, Safety and Police Services

The Framework Resource Management Plan explains that the interface between current and future urban development and MSCP preserve areas requires increased coordination between the preserve managers and agencies responsible for public safety. The MSCP preserve system, including Simon Preserve, must accommodate access for emergency response and fire control and management. In the event that entry into the Preserve by law enforcement agencies is needed in the routine performance of their duties, use of existing roads and trails should be encouraged. In emergencies where there is a direct threat to public safety, the law enforcement agency should contact DPR whenever feasible.

Law enforcement and fire control agencies, the National Guard, the U.S. Citizenship and Immigration Service (USCIS), the Border Patrol, and organizations and agencies that respond to natural disasters shall be permitted to perform their activities within any preserve system subject to all applicable requirements of state and federal law.

Management Directive D.5 – Maintain or increase the ability of emergency response personnel to deal with emergencies within the Preserve or vicinity (Priority 1)

Implementation Measure D.5.1: Law enforcement officials will be invited to access Preserve property as necessary to enforce the law. If it becomes apparent that extensive enforcement activities are necessary, DPR will coordinate with the applicable agencies to inform field personnel of how to minimize damage to particularly sensitive resources.

Implementation Measure D.5.2: All medical, rescue, and other emergency agencies will be allowed to access Preserve property to carry out operations necessary to protect the health, safety, and welfare of the public. Access issues are further discussed in implementation measure B.4.2.

Management Directive D.6 – Provide for a safe recreational experience for Preserve visitors (Priority 1)

Implementation Measure D.6.1: In the event of a natural disaster, such as a fire or flood, park ranger staff shall evacuate the Preserve and coordinate with the Emergency Operations Center. In addition, staff will coordinate with the local agency in charge of responding to the emergency and, if possible, assist where necessary.

5.5.4 Adjacency Management Issues

As described in Section 2.4.2, there is currently sparse rural residential development located to the north and west of the Preserve, orchards to the southwest, vacant land to the north and south, and residential communities to the east and southeast. The establishment of the MSCP preserve system does not include regulatory authority on properties adjacent to the Preserve; however, the County will require adjacent property owners to follow permitting conditions when planning and implementing uses and activities that can be regulated when located immediately adjacent to the site.

Management Directive D.7 – Coordinate with adjacent open space land managers (Priority 1)

Implementation Measure D.7.1: DPR will coordinate with the Rancho San Vicente Association and San Diego Country Estates Association (in association with their contiguous open spaces) on an annual basis, or more regularly as needed, to ensure contiguous preserved land is managed consistently and in accordance with the North County MSCP Plan.

Management Directive D.8 - Enforce Preserve boundaries (Priority 1)

Implementation Measure D.8.1: DPR will enforce, prevent, and remove illegal intrusions into the Preserve (e.g., orchards, decks) on an annual basis, in addition to a complaint basis.

Management Directive D.9 – Educate residents of surrounding areas regarding adjacency issues (Priority 2)

Implementation Measure D.9.1: DPR will provide information on this RMP to residents adjacent to the Preserve to heighten environmental awareness, inform residents of access, appropriate landscaping, construction or disturbance within the Preserve boundaries, pet intrusion, fire management, and other adjacency issues. This RMP will also be accessible on the DPR website and will thus be available to adjacent residents and to the general public.

5.6 Cultural Resources Element (E)

The goal of this section of the RMP is long-term preservation, public interpretation of the cultural resources, and interaction with the bands in whose traditional tribal territory this preserve exists.

Management Directive E.1 – Preserve and protect significant cultural resources (including archaeological and historic resources) to ensure that sites are available for appropriate uses by present and future generations (Priority 2)

Implementation Measure E.1.1: Threats to the cultural resources from natural (e.g., fire, erosion, floods) or human-caused events shall be identified, and impacts prevented, reduced, eliminated, or adverse effects mitigated. Threats could include movement of resources after a heavy rain/flood or due to erosion after a fire event. Fire suppression activities could also threaten resources. Avoidance or mitigation measures will be identified if impacts are caused by future projects within the Preserve.

Implementation Measure E.1.2: The condition and status of recorded cultural resources shall be noted as part of routine monitoring activities conducted at five-year intervals (or on a more frequent basis as determined by DPR) and remedial measures shall be taken if damage is noted. Monitoring activities should also photo-document site conditions so that comparisons can be made over time. Any monitoring of the sites in the Preserve should follow the guidelines found in the County of San Diego *Report Format and Content Requirements, Cultural Resources: Archaeological and Historical Resources* (2007).

All site location information will be kept strictly confidential, and will be available only for qualified cultural resource staff and land managers. Site locations will not be shown on maps or divulged to the public.

Implementation Measure E.1.3: All management activities within the Preserve including, but not limited to, trail construction and/or maintenance, placement of fencing and gates, and restoration of habitat will take into consideration potential impacts to cultural resources and shall avoid adverse impacts to any cultural

resources to the maximum extent possible. No ground disturbing activities will be allowed on or in any cultural resource site within the Preserve until the impacts have been assessed. For those sites already evaluated and determined not significant, no further action is required.

If avoidance of significant sites is not feasible, appropriate mitigation measures will be established. Removal or disturbance of cultural resources shall not occur prior to completion of an approved mitigation program, such as data recovery or recordation. Preservation in place is the preferred mitigation measure.

Implementation Measure E.1.4: Signs shall be posted at all trail heads and throughout the Preserve to notify users that sensitive cultural resources within the Preserve cannot be damaged and that removal of any archaeological material is prohibited by law. Protection and preservation of cultural resources will comply with County of San Diego ordinances (Title 4; Public Property, Division 1; Parks and Beaches, Article 2, Section 41.113), and applicable state and federal laws, which will be enforced by park ranger staff. These signs shall be maintained as described in implementation measure C.6.1.

The County will ensure that park ranger staff has sufficient training through the DPR Ranger Academy to actively protect archaeological sites from vandalism and other forms of human impact. If a Preserve user is suspected of vandalism to cultural resources, the appropriate law enforcement authorities shall be notified. More aggressive measures may be needed if vandalism and damage continue or increase.

Management Directive E.2 – Promote the beneficial uses of cultural resources through interpretation and educational programs (*Priority 2*)

Implementation Measure E.2.1: Off-site, and when possible, on-site interpretive programs for Native American heritage, local and regional history, and prehistory will be developed for the Preserve. These may include lectures, walks, kiosks, signs, historic brochures, and displays, but will not include excavations, collecting of artifacts, or disclosure of confidential site locations unless an interpretive plan is developed and approved by the Director of DPR. The plan will include supervision by a qualified archaeologist approved by the Director of DPR. See also implementation measures C.3.1-3.

Management Directive E.3 – Honor Native American Heritage and promote Native American ceremonies, gathering, and cultural practices (*Priority 2*)

Implementation Measure E.3.1: Consultation with the Mesa Grande Band of Mission Indians and Santa Ysabel Band of Diegueño Indians shall be conducted frequently in order to identify appropriate management of pre-contact and ethnographic cultural resources. All tribes will be encouraged to participate in evaluation, recordation, protection and preservation of cultural resources.

Implementation Measure E.3.2: The County will open the Preserve to traditional uses by the Mesa Grande Band of Mission Indians and Santa Ysabel Band of Diegueño Indians. All activities by Native Americans in the Preserve shall be conducted with a Right-of-Entry permit specifically designed for the Preserve.

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APPENDIX A

Baseline Biodiversity Survey for the Simon Preserve

(See www.co.san-diego.ca.us/parks/management_plans.html)

APPENDIX B

Archaeological Survey Report for Simon Preserve, San Diego County, California

(See www.co.san-diego.ca.us/parks/management_plans.html)