

Resource Management Plan for **Lakeside Linkage Preserve** **San Diego County**



August 2010



LAKESIDE LINKAGE
PRESERVE

RESOURCE MANAGEMENT PLAN

Revised August 2010

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Appendix B	Baseline Biological Resources Evaluation, Lakeside Linkage Preserve
Appendix C	Cultural Resources Phase I Survey and Inventory of the Lakeside Linkage Preserve, San Diego County, California

1.0 INTRODUCTION

Lakeside Linkage Preserve (Preserve) consists of approximately 134 acres located in the hills just north of the City of El Cajon and west of Lake Jennings Reservoir, in southwestern San Diego County, California (Figure 1). The Preserve is comprised of the following three non-contiguous properties: (1) western property, 46 acres located west of Los Coches Road between Calle Lucia Terrace on the south and a Private Drive south of Rock Crest Lane on the north; (2) central property, 77 acres located east of Los Coches Road between Ha-Hana Road on the south and extending slightly north of Casa Vista Road on the north; and (3) eastern property, 11 acres located approximately one block northwest of the junction of Lakeview and East Lakeview Roads, for a total of 134 acres.

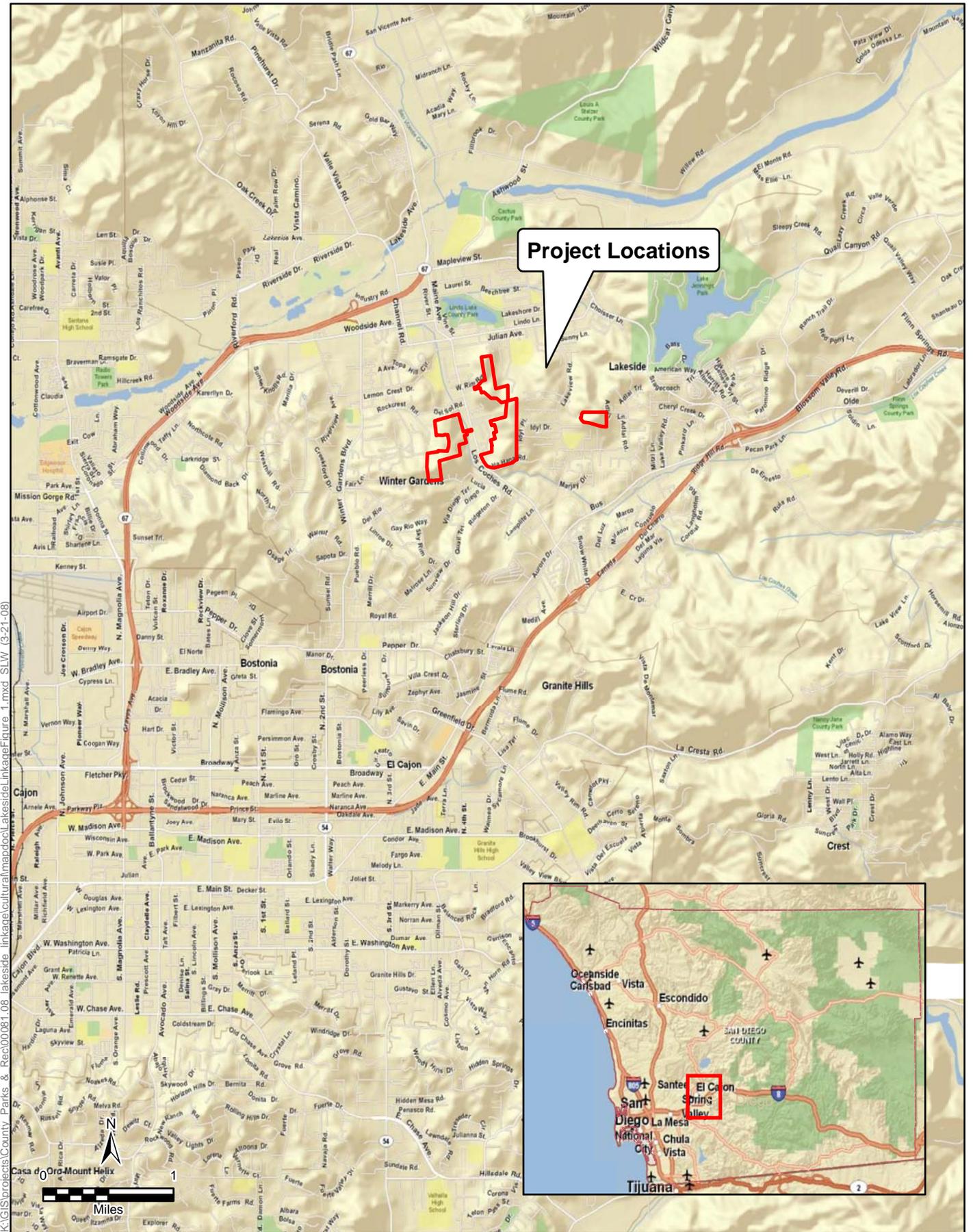
Beginning in 1948, parcels within the Preserve were acquired by the County. In 1994, the Whitaker parcel (APN 394-330-19) located on the central property was donated to the County to be reserved in perpetuity as a park. From 1999-2000 the remaining parcels of what is now considered the Preserve (western, central, and eastern properties) were acquired as part of the South County Multiple Species Conservation Program (MSCP). In 2003 a parcel located adjacent to Los Coches Road (central property) originally acquired in 1932 by the Department of Public Works was transferred to the Department of Parks and Recreation to be included in the Preserve.

1.1. Purpose of Management Plan

The Resource Management Plan (RMP) has been prepared as a guidance document to preserve and manage the biological and cultural resources within the Preserve, and to provide Area-Specific Management Directives (ASMDs) pursuant to the requirements of the County's MSCP Subarea Plan (County of San Diego 1997), the Framework Management Plan (County of San Diego 2001) and Sections 10.9A and 10.9B of the Implementing Agreement (County of San Diego 1998). These sections specify that the County will be responsible for managing lands which it owns or acquires within the MSCP preserve system.

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



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SOURCE: ESRI Street Map (2008)

Figure 1
Regional Location
Lakeside Linkage Preserve

- e) provide an overview of the operation and maintenance requirements to implement management goals.

Chapter 5 of this RMP includes ASMDs for Lakeside Linkage Preserve.

It is recognized that 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 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 County's MSCP Subarea Plan when a regional funding source is identified pursuant to Section 10.9C of the Implementing Agreement.

1.1.1 MSCP Background

The MSCP is a cooperative habitat program that encompasses 582,000 acres and establishes a 172,000-acre preserve system in southwestern San Diego County. The MSCP covers 85 plant and animal species and 23 vegetation communities. 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). Lakeside Linkage Preserve is fully owned and operated by the County and is included under the County of San Diego South County MSCP Subarea Plan.

1.1.2 County Subarea Plan

The South County MSCP Subarea Plan (MSCP Subarea Plan) was adopted in October 1997. The MSCP Subarea Plan is subdivided into three segments: Lake Hodges, South County, and Metro-Lakeside-Jamul (North and South), with Lakeside Linkage Preserve located in the North Metro-Lakeside-Jamul segment. In this segment, preserve boundaries were not designated; rather, pre-approved mitigation areas consisting of high-value habitats were identified and a set of preserve design goals and criteria for cores and linkages were established for consideration during project review.

1.1.3 Framework Management Plan and Area-Specific Management Directives

According to Section 6.3.1 of the MSCP Plan and as a condition of the Implementing Agreement with the Wildlife Agencies (Section 10.10), the County was required to prepare a Framework Management Plan for the portion of the MSCP preserve within the MSCP Subarea Plan's boundaries. The Framework Management Plan sets forth management goals and objectives, along with general management directives that apply to all areas of the MSCP Subarea Plan.

The Framework Management Plan states that appropriate recreational activities shall be accommodated in concurrence with the goals of the MSCP and MSCP Subarea Plan, as follows:

- a) Public access and passive recreation are permitted uses within specified areas of the preserve. Access points, new trails and facilities, and a public control plan will be included in the specific framework habitat management plans and the area-specific management directives.
- b) Riding and hiking trails will be allowed within the preserves to allow passive recreational opportunities for the public. Passive recreation includes hiking, scientific research, bird watching, and under specified conditions and locations identified in approved projects and or management plans, mountain biking, horseback riding, sailing, sun bathing, fishing, and swimming. Equestrian, hiking, and bicycles may be allowed when in accordance with approved management plans and are consistent with the County of San Diego Subarea Plan. All recreational activities will be required to avoid impacts to narrow endemics or unique critical populations of specific species, unless the activities are in "take" authorized areas as identified or allowed under the MSCP.

The Framework Management Plan incorporates a requirement for the subsequent preparation and implementation of ASMDs. These directives are required to be developed following baseline surveys using generally accepted practices and procedures for management of biological preserves, and in compliance with the criteria established by the Framework Management Plan and Table 3-5 of the MSCP Plan. They are intended to be specific management actions that are appropriate for the habitats and species found in a local area and take into account the particular circumstances of the given area. In addition to addressing the general directives of the Framework Management Plan and species-specific management requirements of MSCP Table 3-5, ASMDs are required to address fuel management activities. Chapter 5 of this RMP includes ASMDs for Lakeside Linkage 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 are being revisited 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. The Preserve is fully owned and operated by the County Department of Parks and Recreation (DPR) and the DPR District Park Manager assigned to the Preserve is the land manager. DPR will be responsible for the implementation and enforcement of the RMP.

The Preserve is located in the management district of one senior park ranger. The senior park ranger patrols the Preserve by vehicle three to four times a week and foot patrol once a week. It is expected that many of the implementation measures, especially the maintenance tasks, will be carried out by the ranger who is most familiar with the site and currently patrols the Preserve.

1.2.3 Regulatory Context

The County's park rangers manage County parks and enforce park 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 Sections 41.111, 41.112, 41.113 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 park/preserve needs in their work plan for the fiscal year based on the priority of the directives in the RMP for each park/preserve.

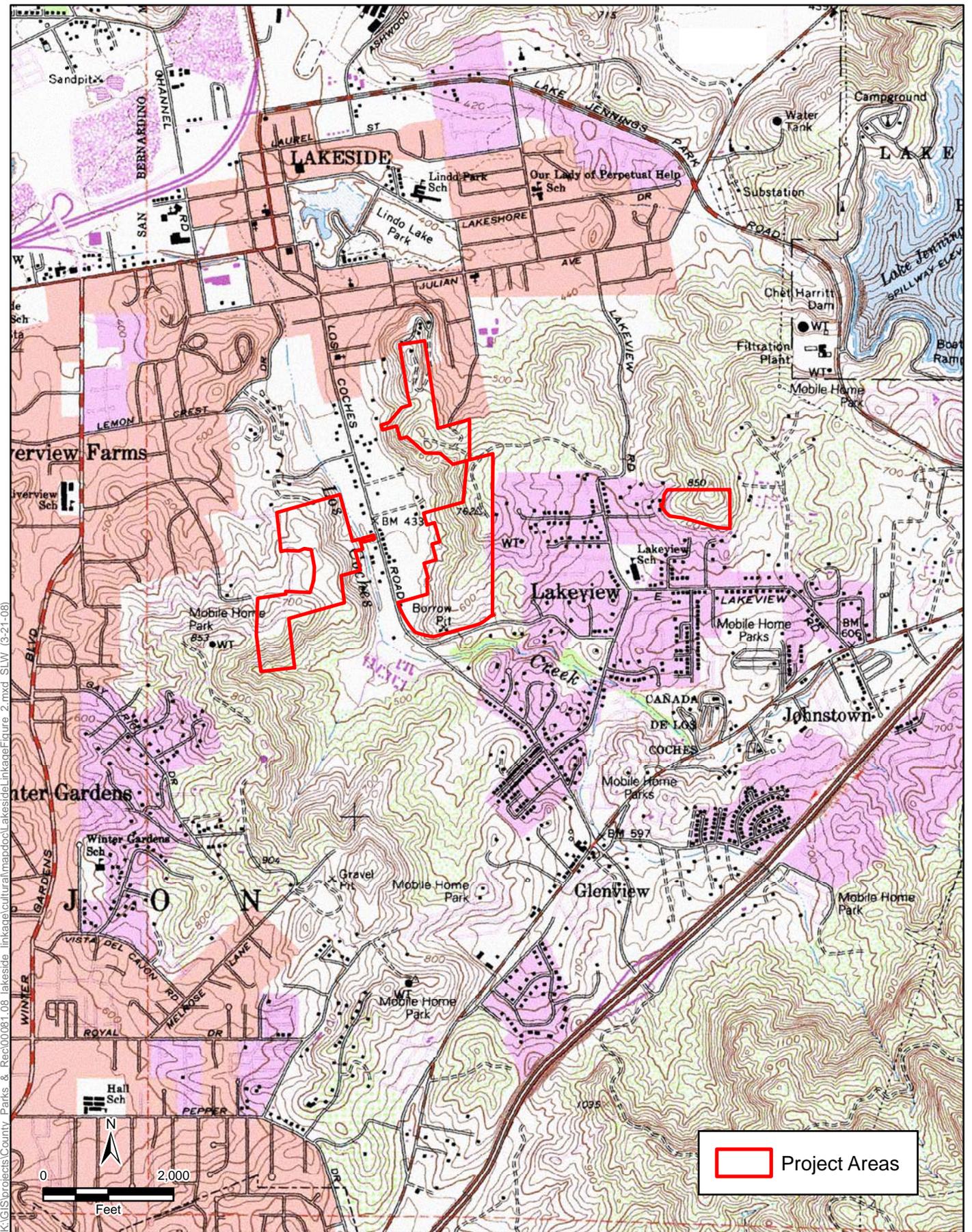
2.0 PROPERTY DESCRIPTION

2.1 Property Location

The Preserve property is located in the hills just north of the City of El Cajon and west of Lake Jennings Reservoir, along both sides of Los Coches Road between State Route 67 and Interstate 8, within and adjacent to the communities of Lakeside, Lakeview, and Winter Gardens, in southwestern San Diego County, California. On the USGS 7.5' El Cajon Quadrangle, the Preserve properties lie within an unsectioned portion of the southwest one-quarter of Township 15 South, Range 1 East (Figure 2). The Assessor's Parcel Numbers for the Preserve are 394-330-19; 394-430-01; 394-460-26; 394-470-16; 394-470-18; 394-470-19; 394-470-20; 395-151-08; 397-020-56; 397-020-57; 397-030-14; 397-030-29; 397-030-43; 397-030-44; 397-030-45; 397-060-66; 397-060-82; 397-061-11; and 397-150-05.

2.2 Geographical Setting

The natural setting within the project area is characterized by steep coastal foothills with ridgelines separated by numerous small canyons, ravines, and drainages. Specifically, the two largest of the three Preserve properties, the western and central properties, lie on the western and eastern sides of Los Coches Creek. The third property lies immediately to the east of these properties (Figure 2). Los Coches Creek enters the San Diego River just north of the Preserve area. Elevations in the



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SOURCE: USGS 7.5' Quadrangle El Cajon 1967 Photorevised 1975

Figure 2
Project Vicinity
Lakeside Linkage Preserve

Preserve areas range between approximately 259 m (850 feet) above mean sea level (AMSL) along the northern edge of the easternmost property, and approximately 140 m (460 feet) AMSL adjacent to Los Coches Creek in the southwest corner of the central property. The closest sources of fresh water are Los Coches Creek and the San Diego River.

2.2.1 Site Access

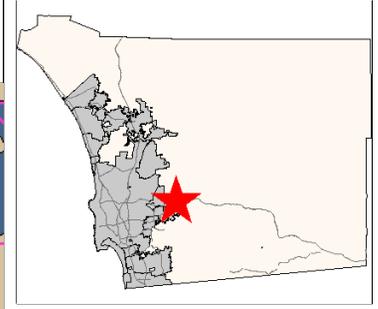
The western property of the Preserve can be accessed from Calle Lucia Terrace and Sherann Drive. Access to the central property is gained from Ha-Hana Road on the southern boundary and Castle Court Drive on the north. The eastern property is accessed by crossing an adjacent privately owned open space area at the east end of Bluestone Drive.

2.2.2 MSCP Context

The Preserve is included within the North Metro-Lakeside-Jamul segment of the County's MSCP South County Subarea Plan. The western property of the Preserve is identified as Pre-Approved Mitigation Area (PAMA) with 3.4 acres designated as Unincorporated Land in Metro-Lakeside-Jamul Segment (Figure 3). The central property is also designated as PAMA with 15 acres designated as Unincorporated Land in North Metro-Lakeside-Jamul Segment. The entire eastern property is designated as PAMA.

The Preserve is essential to the South County MSCP because the three properties function as a corridor linkage for Coastal California Gnatcatcher (*Polioptila californica californica*) from conserved lands to the south of I-8 (Crestridge Conservation Bank) to conserved lands to the northeast (lands around El Capitan Reservoir) (Figure 4). Crestridge Conservation Bank is located south of the Preserve across Interstate 8 (I-8). This property supports significant stands of coastal sage scrub, southern mixed chaparral, and oak woodland habitat and represents a regionally important habitat linkage between the Crest/El Cajon areas south of I-8. El Capitan Preserve located northeast of the Preserve and west of El Capitan Reservoir consists of mixed chaparral, oak woodland, and coastal sage scrub and connects to the U.S. Forest Service land east of the MSCP area.

Figure 3. MSCP Designations and Adjacent Conserved Lands



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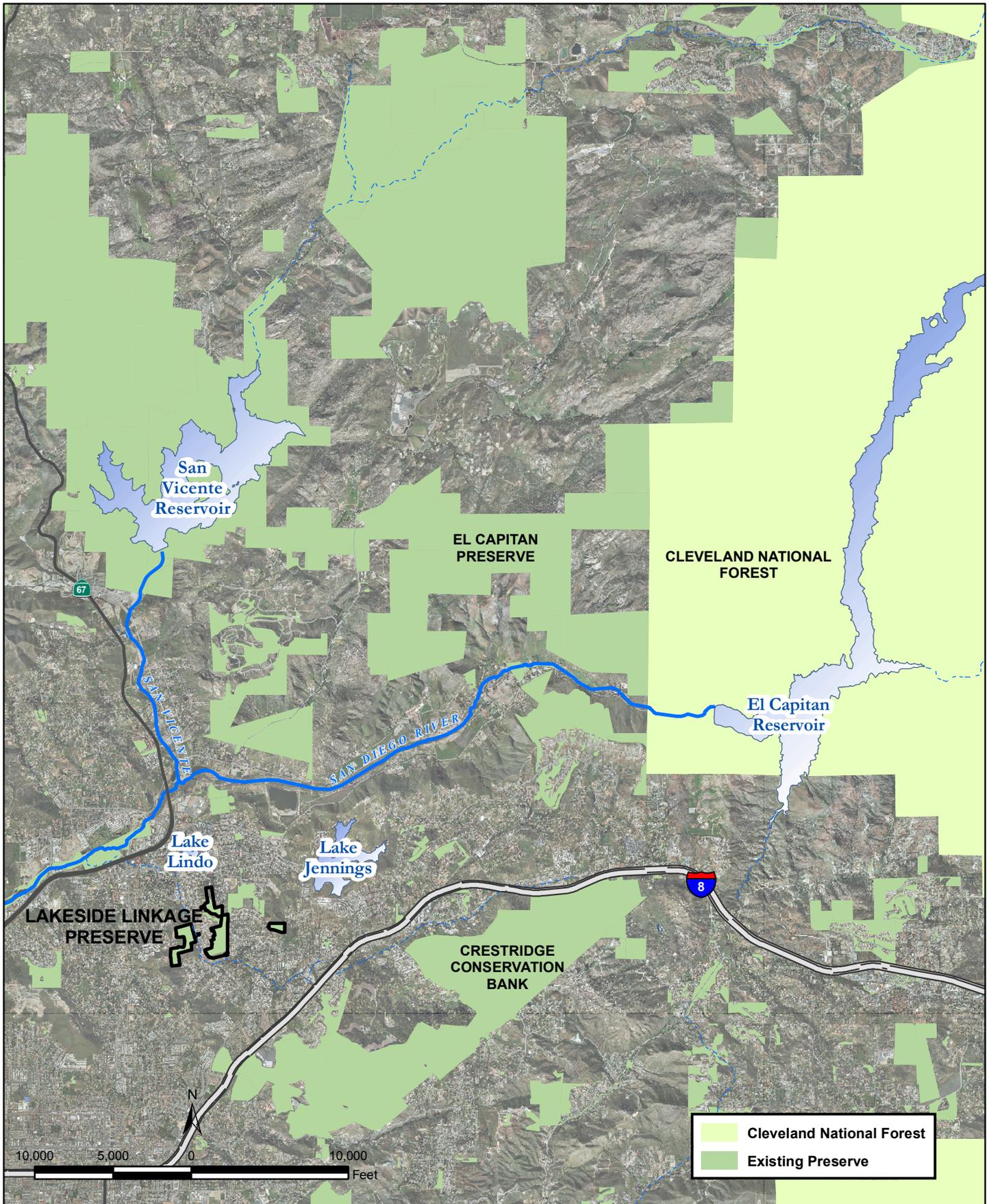
- Parcels with out labels
- ⚡ Highways
- ⚡ Freeways
- ⚡ Streets
- Water Bodies
- Water Bodies
- Habitrak 2005 Data
- Habitrak Gain
- Habitrak Loss
- MSCP_Designations - South
- Hardline Preserve
- Pre-Approved Mitigation Area (PAMA)
- Major Amendment Area
- Minor Amendment Area
- Minor Amendment Area Subject to Special Considerations
- Conserved Subject to Agreement with Wildlife Agencies
- Santa Fe Valley Open Space II
- Santa Fe Valley 'D' Designator
- Otay Ranch Areas Where No Take Permits will be Issued
- Take Authorized Area
- Unincorporated Land in Metro-Lakeside-Jamul Segment
- Other
- Sponsor Groups
- Sponsor Groups
- Other
- Community Planning Area
- Community Planning Areas
- Incorporated Areas
- S.D. COUNTY

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Figure 4
Corridor Linkage
Lakeside Linkage Open Space Preserve

2.3 Physical and Climatic Conditions

2.3.1 Geology and Soils

The western and central Preserve properties are situated atop the southern California batholith consisting of Cretaceous granitic rocks. These rocks form the majority element of this massive feature that underlies roughly two-fifths of San Diego County. In the project area, this exposed granitic bedrock is comprised of either the Woodson Mountain Granodiorite or the Green Valley Tonalite Formations, which consist principally of granodiorite, tonalite (quartz diorite), and minor occurrences of granite (Strand 1962). Between these two properties is the Los Coches Creek valley, which contains a narrow band of late Quaternary alluvium. The smaller eastern property lies in an area containing bedrock consisting of undifferentiated Pre-Cretaceous metamorphic rocks (Strand 1962).

Within the Preserve, two general soil associations are represented: the Fallbrook-Vista association and the Friant-Escondido association. The Fallbrook-Vista association exists in rocky areas and consists of excessively drained to moderately well drained, gently sloping to very steep sandy loams to silt loams on uplands in foothill areas with 9 to 30 percent slopes. The Friant-Escondido association exists in eroded areas and consists of well drained, fine sandy loams and very fine sandy loams over metasedimentary rock, with 30 to 70 percent slopes (USDA 1973). Within these associations, a number of specific soil types are present. The physical and chemical decomposition of the granitic rocks in the area has produced mainly two soil types, Vista and Cieneba.

Vista soils, consisting of coarse sandy or rocky coarse loams ranging from 15 to 65 percent slopes, are present in the northern area of the central property and in the southern margins of the western property. Cieneba soils, consisting of very rocky coarse sandy loam with 30 to 75 percent slopes, are present in the central property and coarse sandy loam with 5 to 15 percent slopes occur in the southwestern area of the western property. Along the Los Coches Creek Valley, Grangeville fine sandy loam is present in areas of 0 to 2 percent slopes and Tujunga sand occurs in areas of 0 to 5 percent slopes. In the central property, in a transitional area between the granitic bedrock and the creek sediments, Fallbrook soils are present, consisting of sandy loam with 15 to 30 percent slopes. The eastern property is underlain principally by metamorphic bedrock. Here, Friant soils are present, consisting of rocky fine sandy loam with 30 to 70 percent slopes (USDA 1973, Figure 5).

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 Preserve Boundary

Soils (USDA 1973)

-  Cieneba coarse sandy loam, 5 to 15 percent slopes, eroded (CID2)
-  Cieneba very rocky coarse sandy loam, 30 to 75 percent slopes (CmrG)
-  Fallbrook sandy loam, 15 to 30 percent slopes, eroded (FaE2)
-  Friant rocky fine sandy loam, 30 to 70 percent slopes (FxG)
-  Grangeville fine sandy loam, 0 to 2 percent slopes (GoA)
-  Ramona sandy loam, 5 to 9 percent slopes (RaC)
-  Tujunga sand, 0 to 5 percent slopes (TuB)
-  Vista coarse sandy loam, 15 to 30 percent slopes (VsE)
-  Vista coarse sandy loam, 30 to 65 percent slopes (VsG)
-  Vista rocky coarse sandy loam, 30 to 65 percent slopes (VsE)

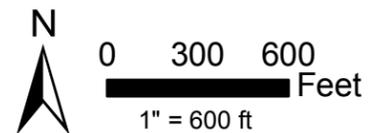


Figure 5
Soils Map
Lakeside Linkage Preserve

2.3.2 Climate

A semi-permanent, Pacific high-pressure cell, located over the Pacific Ocean, dominates San Diego County's climate. This cell drives the dominant on-shore circulation, maintaining clear skies for much of the year. Summers in the Preserve area are typically warm and dry, while winters are mild with occasional rain (USDA 1973).

The Western Regional Climate Center, a collaborative project of the National Oceanic and Atmospheric Agency and the Desert Research Institute, maintains a climatic station in El Cajon, the closest such station to the Preserve. Data collected at the station indicate that the area experiences a normal mean temperature of approximately 65 degrees Fahrenheit, with a mean maximum temperature of 77.8 and a mean minimum of 52.4. The normal mean precipitation is approximately 12.2 inches. The El Cajon area tends to experience more sunshine than the coastal regions of southern California due to its inland location.

A predominant feature of the local climate is the sea-breeze/land-breeze cycle. During the daytime, particularly in the summer, on-shore winds move inland with speeds of approximately seven to ten miles per hour (mph). Easterly land breezes of approximately two to four mph often occur at night. Surrounding rugged terrain, which induces turbulence into the airflow, modifies the influence of this cycle. In addition, this cycle is periodically affected by land airflow that dominates weather patterns. The most widely recognized of these are the Santa Ana conditions, during which strong, hot, dry easterly winds prevail for two or three-day periods.

2.3.3 Hydrology

The Preserve properties are situated within the San Diego River Watershed area. Designated beneficial uses for the San Diego River and its tributaries include municipal and domestic supply, agricultural supply, industrial service supply, industrial process supply, contact and non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, and rare, threatened, or endangered species (California Regional Water Quality Control Board San Diego Region 2003).

No blue-line streams occur on any of the three properties (Figure 6). Although surface water flows likely are conveyed off of the western and central properties into Los Coches Creek. Water within Los Coches Creek eventually flows into the San Diego River.

2.3.4 Fire History

According to the County of San Diego fire burn data, a small portion of the southern end of the western property burned in 1987 (Figure 7); none of the other areas has burned in recent fires (SanGIS 2008).

The Preserve is located within the jurisdiction of California Department of Forestry and Fire Protection (CalFire) and the Lakeside Fire Protection District. The Preserve is also located in a wildfire-prone area. The central and eastern properties and a majority of the western property have been mapped by CalFire as a “Very High Fire Severity Zone”. The southern portion of the western property has been mapped as “Moderate to High Fire Severity Zone”.



2.4 Land Use

2.4.1 On-Site Land Use

The Preserve consists of native habitat and the central property is open to the public for passive recreational use. There are approximately four miles of informal pathways in the three properties of the Preserve. An interim multi-use trail (e.g. hiking, horseback riding, and mountain biking) has been opened on the central property utilizing a portion of the informal pathway system. In addition, an SDG&E access road is located in the southeast area of the central property.

2.4.2 Adjacent Properties

The three properties of the Preserve are mainly bounded by residential development. Open space land owned by the Center of Natural Lands Management is located to the east of the northern portion of the central property. There is privately owned open space to the north of the eastern property. Los Coches Reservoir owned by Padre Dam Municipal Water District (Padre Dam MWD) is located adjacent to the western boundary of the western property.

2.4.3 Easements or Rights

Several easements are present within the Preserve. San Diego Gas & Electric (SDG&E) retains an easement on the dirt road located on the southeastern portion of the central property to access their infrastructure. 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.

As stated in deed number 1982-204606, Padre Dam MWD was granted a 30-foot pipeline easement from Los Coches Reservoir east across the western property to Los Coches Road. Operations and management of the pipeline by Padre Dam MWD including repair and replacement may take place within this easement.

2.5 Trails

Approximately four miles of informal pathways occur within the Preserve. These informal pathways have been formed by unauthorized motorized and non-motorized use. An interim multi-use trail (e.g. hiking, horseback riding, and mountain biking) has been opened on the central property (Figure 8). This trail is 1.3 miles in length and begins at Los Coches Road and travels north toward the Whitaker House. Street parking along Los Coches Road (southwest boundary of central property) is allowed to access the interim trail. Once appropriate management decisions and actions have been completed, a permanent trail system will be opened on the central property.

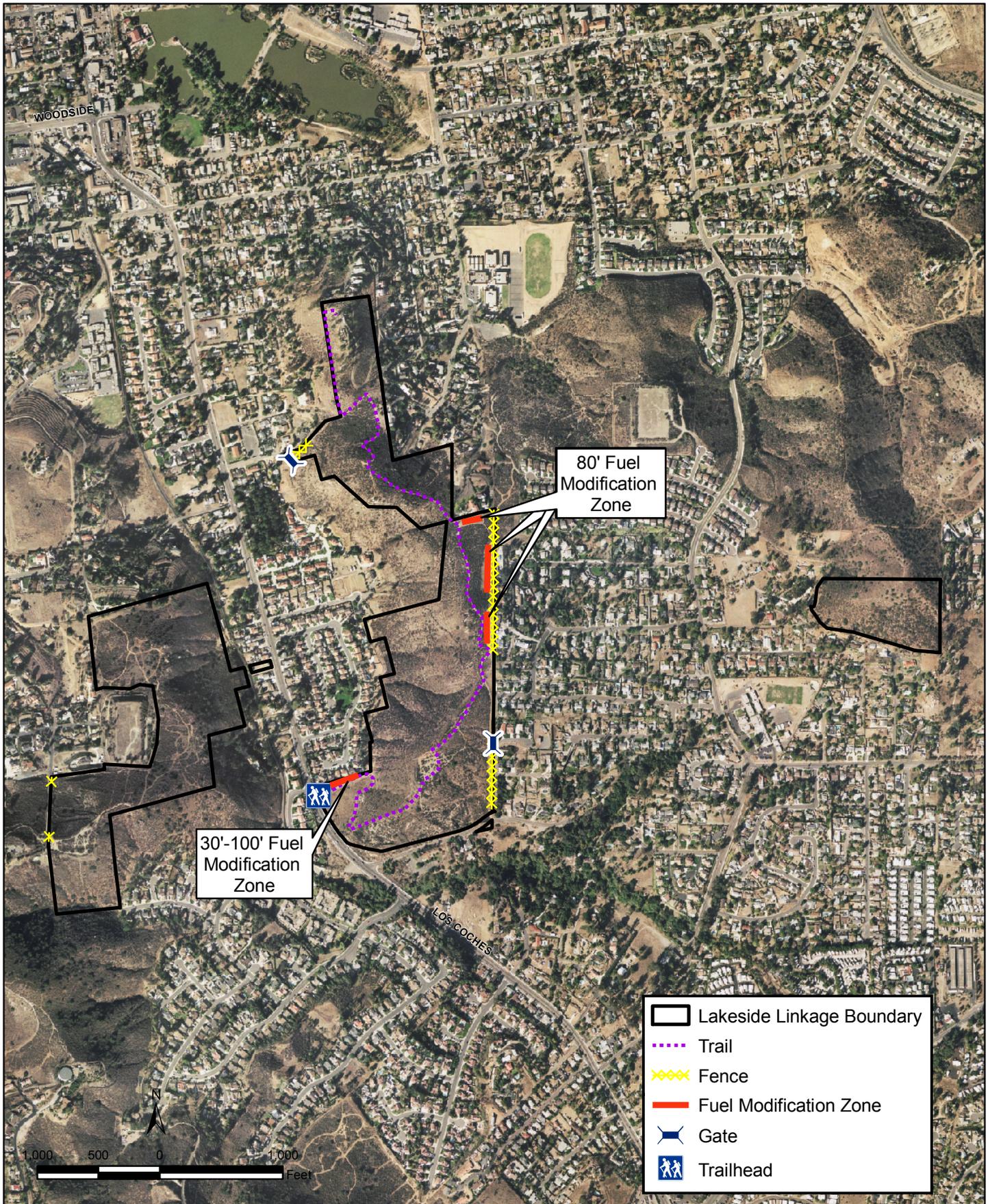


Figure 8
Lakeside Linkage Preserve
Trails, Gates & Fences

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3.0 BIOLOGICAL RESOURCES DESCRIPTION

The Preserve was surveyed during the spring and summer of 2007 by County of San Diego Temporary Expert Professionals for botanical resources including vegetation mapping and the potential presence of any sensitive plant species. The results of these surveys can be found in the letter report entitled, *Botanical Resources Letter Report for Lakeside Linkage Preserve*, dated March 2008, and attached as Appendix A. In addition, Jones & Stokes Associates, Inc. performed baseline biological surveys (animal only) on the Preserve in 2007 and 2008. The results of these surveys can be found in the biological resources report entitled, *Baseline Biological Resources Evaluation for the Lakeside Linkage Preserve*, dated December 2008, and attached as Appendix B. The survey results of both reports were used in the preparation of this RMP.

The surveys documented five vegetation communities and 221 species within the Preserve. The surveys detected 94 plant species, 62 bird species, 26 mammal species (nine bats, eight small mammals, and nine medium and large bodied mammals), 10 reptiles, and 29 invertebrate species. This list includes 20 sensitive species six of which are MSCP-covered species. One additional MSCP-covered species was observed immediately adjacent to the Preserve.

3.1 Vegetation Communities/Habitat

Overall, the three Preserve properties are primarily dominated by Diegan coastal sage scrub plant species. Land cover types identified in 2007 by the County (Appendix A) included Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed habitat, non-native grassland, ornamentals and urban/developed lands (Table 1; Figure 9). A description of the vegetation communities and the dominant plant species detected during the surveys are found below.

Table 1. Vegetation Communities within the Preserve

Vegetation Community	Acres
Western Property	
Diegan Coastal Sage Scrub	41.97
Disturbed Diegan Coastal Sage Scrub	1.03
Disturbed Land	2.20
Ornamentals	0.32
Urban/Developed	0.03
Subtotal	45.55
Central Property	
Diegan Coastal Sage Scrub	56.81
Disturbed Diegan Coastal Sage Scrub	12.39
Non-native Grassland	2.96
Disturbed Land	3.20
Urban/Developed	1.63
Subtotal	76.99
Eastern Property	
Diegan Coastal Sage Scrub	5.54
Disturbed Diegan Coastal Sage Scrub	5.88
Subtotal	11.42
Total	133.96

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 Preserve Boundary

Special status plant species

-  *Viguiera laciniata*
-  *Viguiera laciniata*

Potential sensitive butterfly host plant

-  *Castilleja exserta* (Quino)
-  *Rhamnus crocea* (Hermes Copper)
-  *Rhamnus crocea* (Hermes Copper)

Invasive plant

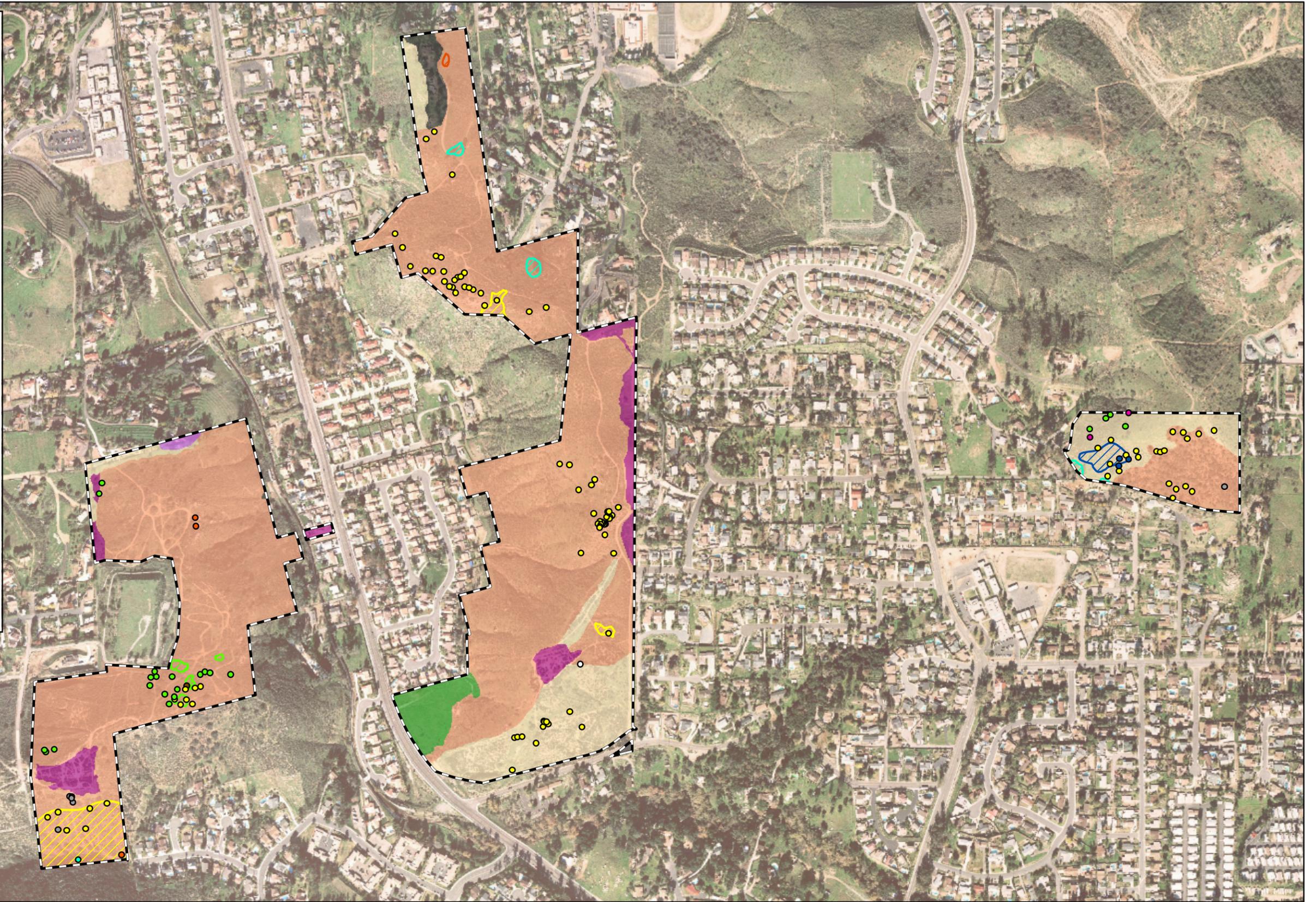
-  *Ailanthus altissima*
-  *Ailanthus altissima*
-  *Eucalyptus* sp.
-  *Eucalyptus* sp.
-  *Olea europaea*
-  *Pennisetum setaceum*
-  *Schinus molle*

Nesting habitat for coastal cactus wren

-  *Opuntia littoralis*
-  *Opuntia littoralis*

Vegetation Communities

-  Diegan Coastal Sage Scrub (CSS, 32500)
-  Disturbed Diegan Coastal Sage Scrub (DCSS, 32500)
-  Disturbed Habitat (DIST, 11300)
-  Non-native Grassland (NNG, 42200)
-  Ornaments (ORN, 11000)
-  Urban/Developed (DEV, 12000)



Diegan Coastal Sage Scrub and Disturbed Diegan Coastal Sage Scrub (Holland Code 32500)

The condition of the Diegan coastal sage scrub habitat within the three properties is mature, composed of adult stature shrubs, but with relatively sparse distribution. Other areas of Diegan coastal sage scrub within the three properties are disturbed, degraded quality or have an unnaturally high encroachment of weed species.

The dominant shrubs of this vegetation type include coast sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), and California buckwheat (*Eriogonum fasciculatum*). Subdominant shrubs include: white sage (*Salvia apiana*), deerweed (*Lotus scoparius*), broom baccharis (*Baccharis sarothroides*), San Diego sunflower, and blue elderberry (*Sambucus mexicana*).

Nonnative Grassland (Holland Code 42200)

Nonnative grassland was found within the southwest corner of the central property. Nonnative grasslands, in many circumstances, have replaced native grasslands as a result of disturbance (directly anthropogenic [e.g., mechanical disturbance, grazing]). Approximately 2.96 acres of nonnative grasses were identified within this property.

Disturbed Land (Holland Code 11300)

All disturbed land areas within the western and central properties are presumed to have consisted formerly of Diegan coastal sage scrub. The disturbed habitat is isolated on the southern portion of the western and central properties where off-highway vehicles (OHVs) have trespassed and left permanent erosion and trails. In addition, portions of the western and central properties adjacent to residential areas have been mowed to maintain a fuel break where residences abut the Preserve. These fuel breaks will remain for fire management purposes (Section 5.3.6, Fire Management).

Ornamentals (Holland Code 11000)

The western property is surrounded by residential development. Ornamental trees associated with a private residence to the north of the western property have likely been established on the western property.

Urban/Developed (Holland Code 12000)

Urban/Developed areas were found within the western and central properties. These areas included a paved road (e.g. Ha-Hana Road), the Whitaker Estate located on the central property, and encroachment onto the western property by a private residence.

3.2 Plant Species

3.2.1 Plant Species Present

Floristic inventories documented 94 native and naturalized plant species, along with a few ornamental species at the Whitaker residence. Nonnative species are found at the Whitaker residence and sporadically throughout the three properties. A complete list of all species observed during the surveys is presented in Appendix A.

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).

One special status plant species was detected within the survey area: San Diego sunflower (*Viguiera laciniata*) (Figure 9). This species is addressed below in more detail.

San Diego Sunflower (*Viguiera laciniata*)

CNPS List 4.2, San Diego County Group D

San Diego sunflower is common in dry coastal sage scrub and edges of foothill chaparral at elevations less than 3,000 feet. The southern portion of the western and central properties have San Diego sunflower as a significant percentage of the shrub cover on the south-facing slope of the two properties and to a lesser extent the middle portion of the western property (Figure 9). This plant is also scattered across the south facing slope of the eastern property (Figure 9). It is estimated that approximately 1,000 individuals are represented in the stand of Diegan coastal sage scrub on the western property. In addition approximately 1,000 individuals are found in the Diegan coastal sage scrub habitat in the southern portion of the central property.

Spiny redberry (*Rhamnus crocea*)

Spiny redberry has no special status listing; however, the plant is the host for larvae of the Hermes Copper butterfly (*Lycaena hermes*) a federal species of concern. The species is common in dry scrub and chaparral at elevations less than 4,000 feet. The plant occurs as a scattered shrub on the south end of the plateau on the western property (Figure 9). The plant is mostly concentrated in an area of less than ten acres. Spiny redberry is not present on the central property and is only present as one individual on the eastern property (Figure 9).

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

Two sensitive species described below have a high potential to occur within the Preserve.

Encinitas baccharis (*Baccharis vannessae*)

Federally threatened, CNPS List 1B, San Diego County Group A

Encinitas baccharis is typically associated with coastal mixed chaparral and central coast and foothills. This species was not observed during the surveys but is considered to have a moderate potential to occur on-site because shrubland habitat does exist within the Preserve. The plant has been identified at Mt. Woodson, San Pasqual, and Poway.

Delicate Clarkia (*Clarkia delicate*)

CNPS List 1B, San Diego County Group A

Delicate clarkia is typically associated with cismontane woodlands and chaparral. This species was not observed during the surveys but is considered to have a moderate potential to occur on-site because shrubland habitat does exist within the Preserve and a population of the species was found approximately 3,600 feet east of the central property on preserved land owned by the Center for Natural Lands Management.

3.2.4 Non-native and/or Invasive Plant Species

In general the Preserve is dominated primarily by native or naturalized plant species. However, six plants were identified during field surveys that are considered invasive non-native plants including tree-of-heaven (*Ailanthus altissima*), African fountain grass (*Pennisetum setaceum*), spiny emex (*Emex spinosa*), eucalyptus (*Eucalyptus* ssp.), olive tree (*Olea europaea*), and Peruvian peppertree (*Schinus molle*). The California Invasive Plant Council (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.

The Cal-IPC inventory categorizes tree-of-heaven, African fountain grass, and spiny emex as having an overall rating of “moderate”. Tree-of-heaven persists in a grove in the north end of the central property near the Whitaker residence. African fountain grass occurs in a few scattered areas of the southern portion of the western property and in one area of disturbed soil near the ridge that is the highest point of the property. Spiny emex occurs on the edges of the eastern property mostly on the adjacent privately owned open space land. A “moderate” rating signifies species that have substantial and apparent, but generally not severe, ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their

reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance.

The Cal-IPC inventory ranks eucalyptus, olive tree, and Peruvian peppertree as having an overall rating of "limited". These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Although there are many non-native invasive herbs and grasses within the intact scrub vegetation on the three properties of the Preserve, most of these are of diminutive size and are difficult to remove or require weed removal effort to control. These would include the brome grasses (*Bromus* spp.), yellow star thistle (*Centaurea melitensis*) and filaree (*Erodium* spp.).

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 B). No special-status butterfly species or other invertebrate species were detected during the 2008 surveys and no special-status invertebrate species have high potential to occur at the Preserve.

Butterflies

Focused surveys for Hermes Copper occurred during the months of May and June, 2008. No Hermes Copper butterflies were observed. Other butterflies observed during the focused Hermes Copper surveys, herptile array and avian point count surveys include: Sara's Orangetip (*Anthocaris sara*), Behr's Metalmark (*Apedemia mormo virgulti*), Brown Elfin (*Callophrys augustinus*), Orange Sulfur (*Colias eurytheme*), Funereal Duskywing (*Erynnis funeralis*), Pale Swallowtail (*Papilio eurymedon*), Common White (*Pontia protodice*), Painted Lady (*Vanessa annabella*), West Coast Lady (*Vanessa annabelle*), and Anise Swallowtail (*Papilio zelicaon*). A complete list of all invertebrates observed to date on the Preserve properties is included in the Baseline Biological Resources Evaluation (Appendix B).

Amphibians

No amphibian species were captured by the herptile arrays or detected within the Preserve properties during other active surveys.

Reptiles

During the 2008 sampling at the Preserve, nine reptile species were detected. Sensitive species captured include California legless lizard (*Anniella pulchra*), Coronado skink (*Eumeces skiltonianus interparietalis*), orange-throated whiptail (*Cnemidophorus hyperythrus beldingi*), coastal western whiptail (*Cnemidophorus tigris stejnegeri*), and San Diego ringneck snake (*Diadophis punctatus similis*). Other species captured include southern alligator lizard (*Elgaria multicarinata*), western fence lizard (*Sceloporus occidentalis*), granite spiny lizard (*Sceloporus orcutti*), and side-blotched lizard (*Uta stansburiana*). One additional reptile species was observed or detected but not captured in the arrays, the gopher snake (*Pituophis catenifer*). A complete list of herpetofauna observed within the Preserve during the 2008 sampling period is in the Baseline Biological Resources Evaluation (Appendix B).

Birds

Avian species richness (total species detected) within the Preserve was found to be moderate. In total, 62 bird species were detected with 53 bird species during the point counts and nine during other fieldwork. These included year-round residents, winter-only species, breeding species that migrate to the Neotropics, and species that are strictly migratory through the Preserve, neither breeding nor wintering there.

The Preserve's avifauna is a mixture of species that are closely associated with coastal sage scrub and also with development as each of the properties of the Preserve are surrounded by private residences. These species include California Quail (*Callipepla californica*), Mourning Dove (*Zenaida macroura*), Costa's Hummingbird (*Calypte costae*), Anna's Hummingbird (*Calypte anna*), Cassin's Kingbird (*Tyrannus vociferans*), Western Scrub-jay (*Aphelocoma californica*), American Crow (*Corvus brachyrhynchos*), Common Raven (*Corvus corax*), Cliff Swallow (*Petrochelidon pyrrhonota*), Bushtit (*Psaltriparus minimus*), Bewick's Wren (*Thryomanes bewickii*), Wrentit (*Chamaea fasciata*), Northern Mockingbird (*Mimus polyglottos*), California Thrasher (*Toxostoma redivivum*), Spotted Towhee (*Pipilo maculatus*), California Towhee (*Pipilo crissalis*), Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*), House Finch (*Carpodacus mexicanus*), Lesser Goldfinch (*Carduelis psaltria*), and House Sparrow (*Passer domesticus*).

The Preserve has a good diversity of raptors (birds of prey), including seven raptor species observed: Turkey Vulture (*Cathartes aura*), Cooper's Hawk (*Accipiter cooperii*), Red-shouldered Hawk (*Buteo lineatus*), Red-tailed Hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), Barn Owl (*Tyto alba*), and Great Horned Owl (*Bubo virginianus*). These birds are using the Preserve for foraging and some species have potential to breed on site; however, no active raptor nests were observed.

The Preserve does not support any habitat appropriate for use by Southwestern Willow Flycatcher (*Empidonax traillii extimus*) or Least Bell's Vireo (*Vireo bellii*

pusillus) for breeding. It is possible that other subspecies of Willow Flycatcher pass through the Preserve in spring and fall, though they were not recorded during the current work.

A complete list of all bird species detected within the Preserve is included in the Baseline Biological Resources Evaluation (Appendix B).

Coastal California Gnatcatcher Surveys

A survey for Coastal California Gnatcatcher (CAGN) was conducted on the Preserve, with breeding season (May – June) and autumn (October) components (Appendix B). Each survey component consisted of two complete visits to all potentially suitable habitat types by a qualified and experienced biologist, without use of taped vocalizations. The spring component also included data gathered anecdotally during the avian point count work. Thus, the survey was not equivalent in methods to a formal, presence/absence survey.

CAGN were detected on the central and western properties of the Preserve. The central property was confirmed to support at least three pairs, probably four, with low but reasonable potential for five; thus the estimate is three to five pairs. One additional lone CAGN was detected on this property during October 2008 (age/sex not determined). The western property was confirmed to support at least one pair and potentially two pairs. One additional lone CAGN was detected on this property during October 2008 (age/sex not determined). No CAGNs were detected on the eastern property. The eastern property does not support coastal sage scrub appropriate for this species because it is dominated by laurel sumac (*Malosma laurina*).

The approximate Preserve total is four to six pairs of CAGN. There appears to be fewer pairs on the western property than in 2001. In 2001, the estimates were three to five pairs on the central property (Figure 10) and three on the western property (Figure 11). The site currently appears to hold fewer pairs than potential capacity based on the number of acres of apparently suitable habitat available and the numbers of pairs detected. As discussed below, this may reflect either random (e.g., year-to-year) variation or a systematic change, though no obvious, relevant change in conditions between 2001 and 2008 was detected.

The general use areas of the CAGN pairs are shown from detections of the birds and marking their locations on aerial photos (Figure 12). No formal territory mapping program was conducted during 2008. It should be noted that in some instances, there are only two observation points associated with a pair location. These are not intended to show the complete home range of the CAGN pairs on the Preserve, but rather show where these birds were detected in 2008.

The CAGN use areas and the numbers present on a site are dynamic between seasons and between years. Home range changes can vary dramatically in response to resource availability, mate changes or loss, fledging of young, season,

interspecific competition, predator dynamics, and human disturbance. The actual number of CAGN pairs on the Preserve could be higher as there is suitable habitat surrounding the Preserve that was not surveyed for the species and birds could move into the Preserve at any time. In addition, without individual markers that can identify the birds, there is no assurance that the detected birds were the same each time.

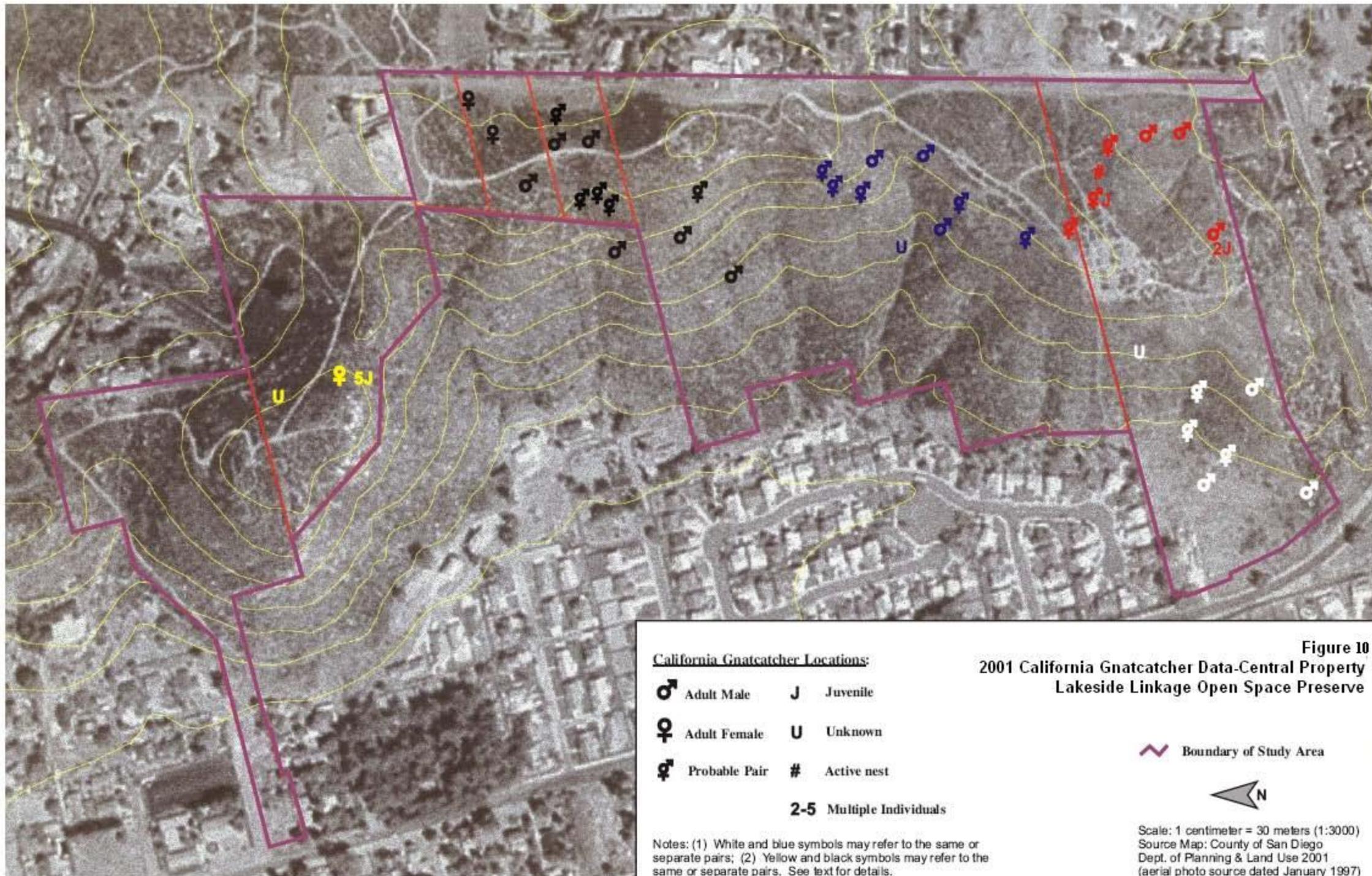
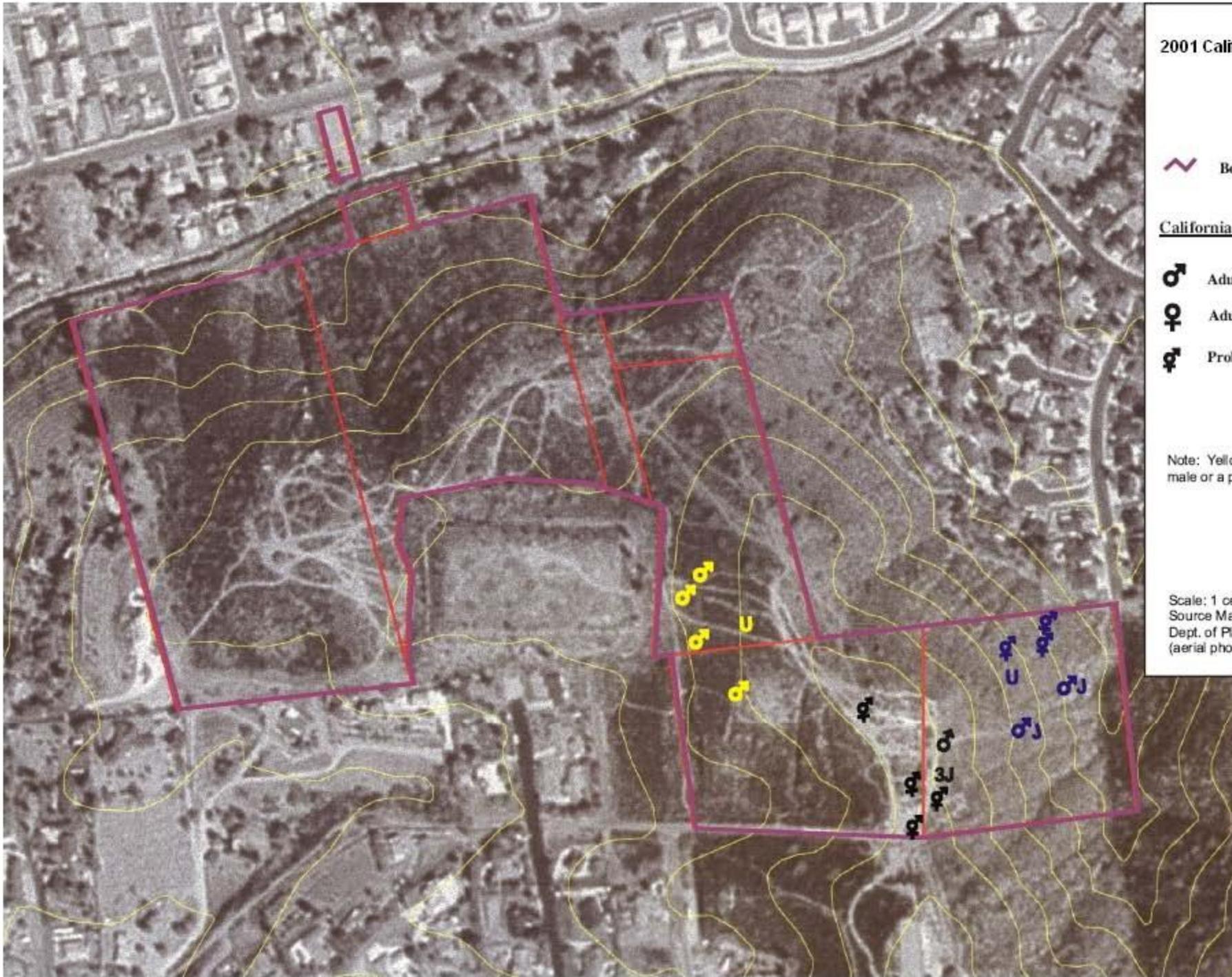


Figure 11
2001 California Gnatcatcher Data-Western Property
Lakeside Linkage Open Space Preserve



 Boundary of Study Area

California Gnatcatcher Locations:

- | | | | |
|---|---------------|------------|----------------------|
|  | Adult Male | J | Juvenile |
|  | Adult Female | U | Unknown |
|  | Probable Pair | # | Active nest |
| | | 2-5 | Multiple Individuals |

Note: Yellow symbols may represent an unmated male or a pair. See text for details.



Scale: 1 centimeter = 30 meters (1:3000)
 Source Map: County of San Diego
 Dept. of Planning and Land Use 2001
 (aerial photo source dated January 1997)



Mammals

A complete list of mammal species observed within the Preserve during the 2008 surveys is included in the faunal list of the Baseline Biological Resources Evaluation (Appendix B).

Small Mammals

In total six small mammal species were recorded at the Preserve during small mammal trapping and other surveys. Species included; California ground squirrel (*Spermophilus beecheyi nudipes*), Dulzura pocket mouse (*Chaetodipus californicus femoralis*), Northern Baja mouse (*Peromyscus fraterculus* [= *Peromyscus eremicus fraterculus*]), American deer mouse (*Peromyscus maniculatus gambelii*), Large-eared woodrat (*Neotoma macrotis* [= *Neotoma fuscipe macrotis*]), and San Diego desert woodrat (*Neotoma lepida intermedia*). The species detected are commonly found in the habitats found on the Preserve.

Medium and Large Mammals

A total of nine mammal species were detected in the Preserve through camera stations, tracks, sign, and nocturnal surveys: coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), desert cottontail (*Sylvilagus audubonii*), domestic dog (*Canis familiaris*), long-tailed weasel (*Mustela frenata*), domestic cat (*Felis catus*), bobcat (*Lynx rufus*), domestic horse (*Equus caballus*), and southern mule deer (*Odocoileus hemionus fuliginata*). Movement of larger animals appeared to be concentrated along easily traveled routes with good visibility such as trails and ridges. Most sign of smaller animals was within natural communities with cover, especially chaparral.

Bats

A total of nine bat species were detected using passive Anabat survey systems during spring, summer, and fall monitoring. The most active bat species detected were the canyon bat (*Parastrellus hesperus*), Mexican free-tailed bat (*Tadarida brasiliensis*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*). Species rarely detected included the western mastiff bat (*Eumops perotis*), California myotis (*Myotis californicus*), and hoary bat (*Lasiurus cinereus*). There was a suite of species detected during all three seasonal monitoring sessions including the canyon bat, pocketed free-tailed bat, and Mexican free-tailed bat. Species detected only during the spring included the hoary bat and big free-tailed bat (*Nyctinomops macrotis*). The California myotis was detected only during the summer and the Yuma myotis (*Myotis yumanensis*) only during the fall. A western mastiff bat was heard during the summer active survey.

Five bat species were detected during the active roost survey on August 19, 2008. However, only two were suspected to be using the rocky outcrops on the central property of the Preserve as a roost site: the canyon bat and big brown bat (*Eptesicus fuscus*).

3.3.2 Rare, Threatened, or Endangered Wildlife Species Present

This section discusses special-status wildlife species observed at the Preserve (Figure 12). 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. Twenty special-status wildlife species were detected at the Preserve. Each of these 20 species is addressed below in more detail.

California Legless Lizard (*Anniella pulchra pulchra*)

State Species of Special Concern, San Diego County Group 2

The California (or Silvery) legless lizard is a small slender lizard that ranges from the southern edge of the San Joaquin River southward to the Mexican border (CDFG 2005). This species is sometimes confused for a snake but upon close observation, the presence of eyelids identifies the animal as a lizard. Legless lizards are common in a variety of vegetation communities including coastal dune, valley-foothill, chaparral, and coastal scrub (CDFG 2005). This lizard lives mostly underground, burrowing in loose sandy soil and is tolerant of low temperatures, so it can be found foraging in loose soil, sand, and leaf litter on cool days and during the cooler times of day (morning and evening). The decline of this species is due to loss of habitat due to agriculture and development and the introduction of non-native plant species such as ice plant (California Herps 2008). This species was captured at herptile Array 1 (refer to Appendix B for array locations).

Coronado Skink (*Eumeces skiltonianus interparietalis*)

State Species of Special Concern, San Diego County Group 2

The Coronado skink is a medium-sized secretive lizard that is typically found in the moister areas of coastal sage, chaparral, oak woodlands, pinon-juniper, riparian woodlands and pine forests (Jennings and Hayes 1994). Their prey includes small invertebrates found in leaf litter or dense vegetation at the edges of rocks and logs. The Coronado skink is found along the coastal plain and Peninsular Ranges west of the deserts from approximately San Geronio Pass in Riverside County south to San Quentin, Mexico (Jennings and Hayes 1994). This species was captured at herptile Array 1 (refer to Appendix B for array locations).

Orange-throated Whiptail (*Cnemidophorus hyperythrus beldingi*)

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

The orange-throated whiptail is a medium-sized lizard that ranges from Southern California (specifically Corona del Mar in Orange County and Colton in San

Bernardino County) southward to the tip of Baja California, Mexico. Historically, most populations of the orange-throated whiptail were found on floodplains or terraces along streams in brushy areas with loose soil and rocks (McGurty 1980). Habitat types they are known to use include chaparral, non-native grassland, coastal sage scrub, juniper woodland, and oak woodland. California buckwheat is an important indicator of appropriate habitat for Orange-throated Whiptails (Dudek 2000). This plant species is a colonizer of disturbed, sandy soils and usually indicates open shrub spacing that is required for foraging and thermoregulatory behavior. Orange-throated whiptails appear to be dietary specialists with most (> 85%) of its prey being comprised of termites (Dudek 2000). The decline of orange-throated whiptails is likely due to loss of habitat to agriculture and urban development. This species was captured at herptile Arrays 1, 2, and 3 (refer to Appendix B for array locations).

Coastal Western Whiptail (*Cnemidophorus tigris multiscutatus*)

San Diego County Group 2

Coastal western whiptail is a medium-sized slender lizard that is found in arid and semiarid desert to open woodlands where the vegetation is sparse so running is easy (Stebbins 2003). Its range includes coastal Southern California and western Baja California. The decline of coastal western whiptails is likely due to loss of habitat to agriculture and urban development. This species was captured at herptile Array 1, 2 and 3 (refer to Appendix B for array locations).

San Diego Ringneck Snake (*Diadophis punctatus similis*)

San Diego County Group 2

The San Diego ringneck snake is a small, thin snake that prefers moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands (Stebbins 2003). It is secretive in its behavior, usually found under the cover of rocks, wood, bark, boards, and other surface debris. Ringneck snakes eat small salamanders, tadpoles, small frogs, small snakes, lizards, worms, slugs, and insects. This species' range includes San Diego County along the coast and into the Peninsular range, southwestern San Bernardino County, and barely south into northern Baja California (Stebbins 2003). Threats to this species include habitat degradation and fragmentation from urban development. One San Diego ringneck snake was captured at herptile Array 2 (refer to Appendix B for array locations).

Turkey Vulture (*Cathartes aura*)

San Diego County Group 1

Turkey Vultures are often seen foraging over woodlands and nearby open country (Unitt 2004). They prefer dry, open country, ranch lands and often occur along roadsides where carrion is common. They nest in crevices among granite boulders (Unitt 2004). The Turkey Vulture's range has been retracting from the coast due to human disturbance, loss of foraging habitat and pesticide contamination (Unitt 2004). Turkey Vultures were detected foraging over the Preserve.

Cooper's Hawk (*Accipiter cooperii*)

San Diego County Group 1, MSCP Covered Species

The Cooper's Hawk is a resident of riparian deciduous habitats and oak woodlands but in recent times has become adapted to urban park environments (Unitt 2004). They hunt their primary source of food, passerines, in broken woodlands and forest margins and they are also known to take fish and mammals. The Cooper's Hawk population declined due to hunting and loss of habitat; however, this species is making a comeback through its adaptation to the urban environment (Unitt 2004). Cooper's Hawks were observed foraging over all three Preserve properties. These birds may use the surrounding ornamental trees for breeding.

Red-shouldered Hawk (*Buteo lineatus*)

San Diego County Group 1

The Red-shouldered Hawk was once an uncommon breeder of lowland riparian woodlands but has been thriving in urban environments with large trees such as gum (*Eucalyptus sp.*) (Unitt 2004). On the west coast, this species is found in California and northern Baja California and is common throughout San Diego County (Unitt 2004). A Red-shouldered Hawk was observed sporadically through the season at the Preserve. This species has also adapted well to development.

Barn Owl (*Tyto alba*)

San Diego County Group 2

The Barn Owl is the owl species that is most tolerant to urban development (Unitt 2004). It will nest in buildings, nest boxes, at the base of the leaves in palm trees, and in cavities in native trees. Even though this species is tolerant of human development, dense housing communities do not provide suitable nesting habitat and loss of birds to increased traffic has a negative effect on the species (Unitt 2004). The Barn Owl was detected during nocturnal surveys. This bird may breed nearby.

Coastal California Gnatcatcher (*Polioptila californica californica*)

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

The Coastal California Gnatcatcher (CAGN) is a small resident insectivorous species whose occurrence is strongly associated with sage scrub habitats found throughout southern California into northern Baja California, Mexico. Although CAGN have a close association with sage scrub, this species has also been documented using coastal sage-chaparral scrub, chamise chaparral and other habitat types such as the ecotone between coastal sage scrub and grasslands (Campbell et al. 1998, Bontrager 1991, K. Fischer pers. obs.). Habitat destruction, fragmentation and modification have led to this species' decline (USFWS 1993). Loss resulting from agriculture and urban development were leading causes until 2003 when the Cedar Fire destroyed almost 28% of the remaining habitat that the U.S. Fish and Wildlife Service (USFWS) believed to be suitable for the CAGN (Bond and Bradley 2003). The Preserve supported four to six pairs of CAGN in 2008.

San Diego Cactus Wren (*Campylorhynchus brunneicapillus sandiegensis*)

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

The San Diego Cactus Wren is associated with cactus thickets. This species builds multiple nests within their territory but they do not use them all for raising young (Unitt 2004). They will also use nests as winter roosts. The San Diego Cactus Wren population decline has been due to habitat loss resulting from urban sprawl and fire (Unitt 2004). The fires throughout the County in 2003 and 2007 have decimated many acres of coastal sage scrub occupied by this species and cactus takes many years to grow to a level appropriate for use by Cactus Wrens (Unitt 2004). This species is historically documented as having four regions where the population is concentrated: southern Marine Corps Base Camp Pendleton/Naval Weapons Station Fallbrook, Lake Hodges/San Pasqual Valley, Lake Jennings and Sweetwater/Otay (Unitt 2004). All four areas had many acres burned by fires in 2003 and 2007. Lake Jennings, one of the core areas, is approximately three miles southwest of the Preserve.

One San Diego Cactus Wren was observed in July at a point count station located on the central property. The individual was observed just west of the Preserve boundary using a patch of cactus for breeding. As there is no cactus within the Preserve boundary, there is no potential for this species to breed on the central property although there is high potential for these birds to forage. The eastern property supports a patch of prickly pear cactus that could potentially support a breeding pair of Cactus Wrens; however, no individuals were observed and there was no sign of use by this species (i.e., abandoned nests). The western property

does not support any habitat suitable for this species and there are no cactus patches in the immediate vicinity.

Western Bluebird (*Sialia mexicana*)

San Diego County Group 2, MSCP Covered Species

The Western Bluebird is a stocky blue bird with a chestnut chest and is considered common in the foothills and mountains of San Diego County. This species can usually be found in montane coniferous and oak woodlands (Unitt 2004). It can also occur in areas with scattered trees, open forests, scrubs and during the winter in the desert. Western Bluebirds breed in western North America from southern British Columbia south to central Mexico, east to western Montana and west Texas, but are absent from the Great Basin (Guinan et al. 2000). It can also winter outside its breeding range in central California and along the lower Colorado River (Guinan et al. 2000). Western Bluebird numbers are declining due to loss of nesting cavities to logging, fire suppression, and competition with non-native species such as European Starling and House Sparrow (*Passer domesticus*) (Unitt 2004). One Western Bluebird was observed in April. This bird may have been moving through the area as it was not detected during other sampling periods.

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

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

The Southern California Rufous-crowned Sparrow is a resident species that is closely associated with coastal sage scrub, steep rocky hillsides, burned chaparral, and openings in mature chaparral (Unitt 2004). Preferring open habitat, with approximately 50% shrub cover, this species seeks cover in shrubs, rocks, grass, and forb patches (Dudek 2000, Unitt 2004). The Southern California subspecies is restricted to semiarid coastal sage scrub and sparse chaparral from Santa Barbara south to the northwestern corner of Baja California (Dudek 2000). Rufous-crowned Sparrows are declining due to loss of appropriate habitat and are sensitive to habitat fragmentation (Unitt 2004). Southern California Rufous-crowned Sparrows are found occasionally throughout coastal sage scrub.

Dulzura Pocket Mouse (*Chaetodipus californicus femoralis*)

State Species of Special Concern, San Diego County Group 2

Dulzura pocket mouse is mainly active on the ground, but also climbs shrubs and small trees when feeding (CDFG 2005). This species can become torpid by day at any time of the year, and is inactive in cold wet weather. It breeds in spring to early summer and occurs from sea level to approximately 2,408 m (7,900 ft) (CDFG 2005). This species prefers dense chaparral and is less common in dry grassland

and desert scrub. During the trapping program, 198 of the 381 animals captured in Preserve were *Dulzura* pocket mouse. This accounts for 52% of the captures. This was the most abundant species captured during 2008.

San Diego Desert Woodrat (*Neotoma lepida intermedia*)

State Species of Special Concern, San Diego County Group 2

San Diego desert woodrat requires large amounts of water, which it obtains from fleshy plants such as *Yucca* species and Prickly Pear Cactus (*Opuntia* sp.). It usually makes a stick house under one of these food plants, or may den among rocks (CDFG 2005). House materials include cacti, sticks, bones and a variety of debris. Houses provide insulation against excessive heat as well as protection from predators. This species breeds in late winter or spring, occurs from sea level to approximately 2,591 m (8,500 ft) in deserts and coastal sage scrub, and prefers areas with rocky outcrops and plentiful succulents (CDFG 2005). During the trapping program, two of the 381 animals captured in the Preserve were San Diego desert woodrat.

Southern Mule Deer (*Odocoileus hemionus fuliginata*)

San Diego County Group 2, MSCP Covered Species

Southern mule deer are common across the western U.S. in a variety of habitats from forest edges to mountains and foothills (Whitaker 1996). Southern mule deer prefer edge habitats, rarely travel or forage far from water and are most active around dawn and dusk. Southern mule deer sign was seen at the Preserve.

Yuma Myotis (*Myotis yumanensis*)

San Diego County Group 2

The Yuma myotis is found throughout much of the western U.S. and up into Canada (BCI 2008). The species is always found near lakes, creeks or ponds where the species forages over the water. Typically, individuals skim low over the water and snatch up flying insects but they can forage in other mesic areas. The species roosts by day usually in buildings or bridges but have been documented using mines or caves (BCI 2008). Yuma myotis are threatened by loss of riparian habitat and the decline in permanent water sources in the southwest. Yuma myotis were detected foraging at the Preserve. No potential roosting habitat is present.

Pocketed Free-tailed Bat (*Nyctinomops femorosaccus*)

State Species of Special Concern, San Diego County Group 2

Pocketed free-tailed bats are rarely found in southwestern California. These bats live in arid desert areas and roost in crevices high on cliff faces in rugged canyons (BCI 2008). Nursery colonies are relatively small and usually include fewer than 100 individuals. This species primarily forages on large moths, especially over water. The regional status and species trends are unclear, but it is likely vulnerable to disturbance, especially at roosts, and perhaps also to threats to food supply from man-made toxins. The pocketed free-tailed bat is likely not roosting in the Preserve as there are no cliffs. The individuals detected are using the Preserve as a place to forage.

Big Free-tailed Bat (*Nyctinomops macrotis*)

San Diego County Group 2

Big free-tailed bats are typically found in desert and arid grasslands with rocky outcrops, canyons, or cliffs (BCI 2008). This species roosts on cliffs and occasionally in buildings. Isolated populations can be found throughout the southwestern U.S. into Mexico. The regional status and species trends are unclear, but it is likely vulnerable to disturbance, especially at roosts, and perhaps also to threats to food supply from man-made toxins. The big free-tailed bat is likely not roosting on the Preserve as there are no cliffs. The individuals detected are using the Preserve as a place to forage.

Western Mastiff Bat (*Eumops perotis*)

State Species of Special Concern, San Diego County Group 2

Western mastiff bats are the largest native bats in the United States. This subspecies occurs from the western foothills of the Sierra Nevada and the coastal ranges (south of San Francisco Bay) southward into Mexico (BCI 2008). In southern California, they are found throughout the coastal lowlands up to drier mid-elevation mountains, but avoid the Mohave and Colorado deserts (Zeiner et al. 1990). Habitats include dry woodlands, shrublands, grasslands, and occasionally even developed areas. This big bat forages in flight and most prey species are relatively small, low to the ground, and weak-flying. For roosting, western mastiff bats appear to favor rocky, rugged areas in lowlands where abundant suitable crevices are available for day roosts (BCI 2008). Roost sites may be in natural rock or in tall buildings, large trees or elsewhere. The reasons for this species' decline are poorly understood but probably are related to disturbance, habitat loss, and perhaps widespread use of pesticides. The western mastiff bat is likely not roosting in the Preserve as there are no cliffs. The individuals detected are using the Preserve as a place to forage.

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 B).

San Diego Horned Lizard (*Phrynosoma coronatum blainvillii*)

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

This species has high potential to occur in the coastal sage scrub found at the Preserve.

Coastal Rosy Boa (*Charina trivirgata roseofusca*)

San Diego County Group 2

This species has the potential to occur in any of the habitats found on the Preserve.

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

State Species of Special Concern, San Diego County Group 2

This species has the potential to occur throughout the Preserve due to presence of suitable habitat.

Red Diamond Rattlesnake (*Crotalus ruber ruber*)

State Species of Special Concern, San Diego County Group 2

This species has high potential to occur on the rocky slopes of the Preserve.

White-Tailed Kite (*Elanus caeruleus*)

State Fully Protected Species, San Diego County Group 1

There is suitable foraging and nesting habitat within the boundaries of the Preserve and immediately adjacent areas.

Sharp-shinned Hawk (*Accipiter striatus*)

San Diego County Group 2

This species has high potential to occur as a migrant within the Preserve.

Merlin (*Falco columbarius*)

San Diego County Group 2

This species has high potential to occur as a migrant within the Preserve.

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

San Diego County Group 1

Bell's Sage Sparrow has high potential to occur as there is suitable nesting habitat for the species within the Preserve.

Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*)

State Species of Special Concern, San Diego County Group 2

This species has high potential to occur as there is suitable habitat on the Preserve.

San Diego Black-tailed Jackrabbit (*Lepus californicus*)

State Species of Special Concern, San Diego County Group 1

Suitable habitat for this species occurs within the Preserve.

Mountain Lion (*Puma concolor*)

San Diego County Group 2, MSCP Covered Species

The Preserve and the surrounding open space provide habitat for Mountain Lion to use for foraging and cover.

3.3.4 Non-native and/or Invasive Wildlife Species

No non-native and/or invasive wildlife species were found on the Preserve during the baseline biological surveys performed during the 2008 surveys.

3.3 Overall Biological and Conservation Value

The Preserve lies within the "Interstate 8 at Lakeside" Habitat Linkage. This linkage provides a connection between the McGinty Mountain/Sequan Peak-Dehesa and Lake Jennings/Wildcat Canyon – El Cajon Mountains Core Areas. Sixteen core areas and associated habitat linkages were identified in the MSCP study area. According to the MSCP Plan core areas are defined as generally supporting a high concentration of sensitive biological resources which, if lost or fragmented, could not be replaced or mitigated elsewhere.

To define the core and linkage areas, an extensive geographic information system database of vegetation communities, species locations, elevation, slope, soils, drainages, and other physical parameters were used to develop a habitat evaluation map for the study area. The habitat evaluation map ranks habitat areas as Very High, High, Moderate, or Low based on their potential to support priority gnatcatcher habitat, and wildlife corridors. According to the MSCP Habitat Evaluation Model, habitat within the Preserve is very high in value with small developed areas.

The native vegetation communities within the Preserve have a high ecological value. Diegan coastal sage scrub within the Preserve is considered MSCP Tier II habitat and supports Coastal California Gnatcatcher.

3.4.1 Wildlife Linkages and Corridors

No clear evidence of regular or important, larger-scale dispersal across the site was found. The high density of residential homes, Los Coches Road and a large concrete channel found west of the road present large obstacles for animal movement between the three properties of this Preserve. However it can be assumed that larger mammals regularly move on, off of, and across the Preserve, to and from adjacent open space.

The three properties within the Preserve function as a corridor linkage for Coastal California Gnatcatcher from conserved lands to the south of Interstate 8 (I-8) (Crestridge Conservation Bank) to conserved lands to the northeast (lands around El Capitan Reservoir). Crestridge Conservation Bank is located southeast of the Preserve across I-8. The Preserve represents a regionally important habitat linkage between the Crest/El Cajon areas south of I-8. El Capitan Preserve located northeast of the Preserve and west of El Capitan Reserve connects to the U.S. Forest Service land east of the MSCP area.

The biological resources surveys performed within the Preserve in 2001 (Campbell BioConsulting, Inc. 2002) confirmed the dispersal of CAGN from the Preserve to adjacent conserved properties.

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 Lakeside Linkage Preserve and describes areas of potential resources.

In 2008, 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 *Cultural Resources Phase I Survey and Inventory, Lakeside Linkage Open Space Preserve, San Diego County, California*, dated April 2008, and is attached as Appendix C (Cooley and Jordan 2008). 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 Kumeyaay lived in this area for over 12,000 years. By utilizing resources from the mountains to the Pacific Coast, they had a successful and complex economic structure. The Kumeyaay remained hunter-gatherers until the time of contact with Europeans because the environment is rich and varied.

The Kumeyaay (Diegueño, Ipai, Tipai) Indians originally inhabited the Preserve. Their territory included San Diego County, Imperial County, and ranged 60 miles into northern Baja California. Descendants of these original Kumeyaay Indians lived in the Lakeside area. This is part of the traditional tribal territory of the Capitan Grande Band. In 1875, a Presidential Executive Order designated a number of reservations, including the Capitan Grande Reservation from which the Viejas Band and Barona Band descended. Due to population growth the City of San Diego decided it was necessary to dam the San Diego River and created El Capitan Reservoir to meet growing water demands. This reservoir forced Capitan Grande Reservation and Kumeyaay members to move to Barona Valley and Viejas Valley and into new reservations.

California Indians suffered greatly under the Spanish and Californio political structures (Carrico 1980). A large Californio Rancho covered the project area from the 1840s, so little is known about the Kumeyaay in the Preserve area after Euro-American contact. Minimal research has been conducted on Rancho El Cajon.

In the early 1800s, Mexico decided it no longer needed oversight by Spain. In 1821, after a ten-year struggle, Mexican revolutionary forces defeated Spain and won their

independence. To encourage settlement of frontier lands including California, the Mexican government implemented significant changes in land use and property ownership policies. By 1834, secularization was instituted throughout California. The Preserve became part of the large land holdings of the Mexican government.

Many of the people who lived in San Diego at the time of secularization realized that this was the time to obtain land in payment for years of service to Spain. The Preserve is located in the Rancho El Cajon, which encompassed present day El Cajon, Bostonia, Flinn Springs, Lakeside, and Santee. Originally part of the old Mission lands primarily used for grazing in these areas, the 48,799 acres was granted to Doña Maria Estudillo Pedrorena, daughter of Don Jose Antonia Estudillo of Old Town, by then the Mexican Governor Pio Pico in 1845.

In 1850, California became the 31st state to join the Union. Californio owners of the ranchos were required to confirm their ownership of the land. This was a very lengthy and involved process. Following a series of legal challenges, the ownership was finally confirmed to Doña Pedrorena in 1876.

Following entry into the United States, the State of California passed laws, which legalized the hunt for Indians. Government officials in Washington D.C. soon recognized that the only way to protect Native Americans was to develop reservations and to place Indian tribes under the care of the federal government through the ratification of treaties. However, the majority of Californians opposed these treaties because they feared the loss of land for farming, mining, or other commercial pursuits. The Native Americans in the area around Lakeside Linkage were first moved to the Capitan Grande Reservation and then to Barona and Viejas Reservations.

As part of the land speculation occurring throughout San Diego County, 6,600 acres of the former rancho were purchased by the El Cajon Valley Land Company in 1886 and the Preserve is located in this area. Lindo Lake is the only natural lake in San Diego County and recreational use of the area began to grow at the turn of the century. The Preserve is only a mile from the lake. The Lakeside Inn was built during in 1888 and operated until 1916. Controversy surrounded the Inn and it was destroyed in 1920. The history of water in San Diego County played a major role in the development of the town of Lakeside. Water was available locally with the presence of Lindo Lake, the San Diego River, and Los Coches Creek. In the 1880s, the growing demands of the City of San Diego spurred the creation of the San Diego Flume Company. The increase in available water aided in the development of nearby towns such as Lakeview, El Cajon, and La Mesa.

4.2 Native American Consultation

A letter was sent to the Native American Heritage Commission (NAHC) requesting a search of their Sacred Lands file on January 28, 2008. A response letter from the NAHC dated January 30, 2008 was received via fax on January 31, 2008. A NAHC search of the Sacred Lands File failed to indicate the presence of Native American

resources in the immediate project area. On January 31, 2008, letters were sent to the local Native American contacts provided by the NAHC requesting further information. To date, no replies have been received. On February 30, 2008, Mr. Clinton Linton of the Santa Ysabel Band of Diegueño Indians was contracted through his company, Red Tail Monitoring & Research, Inc., to provide Native American consultation and monitoring services for this study. Either Mr. Brandon Linton or Mr. Gabe Kitchen of Red Tail Monitoring & Research, Inc. was present during the entire time of the field survey.

4.3 Cultural Resource Descriptions

4.3.1 Prehistoric Archaeological Resources

Bedrock Milling Sites

CA-SDI-5047/P-37-005047

This resource was first recorded in 1979 (Oetting 1979) as a single bedrock milling feature with five milling elements. The elements were described as two circular and three oval basins. No other site materials were observed or features noted. During the current survey, the milling feature was re-discovered and appeared to be much as originally described.

CA-SDI-13,726/P-37-013726

This resource was first recorded in 1994 as a single bedrock milling feature with a single, 10x10x2 cm mortar situated immediately north of the extant Whitaker residence. No other site materials were observed or features noted. The site area contains several low, exposed granite outcrops. Hector and Parr designated this prehistoric site as the Whitaker Site on the 1994 site form. During the current survey, the milling feature originally recorded was re-discovered and appeared to be much as originally described. Another milling feature located on a different bedrock outcrop nearer the Whitaker back yard area, containing a single ill-defined milling slick with an adjacent brown ware sherd, was observed during the current survey. DPR 523 updates have been completed to reflect this boundary expansion.

CPLL-01

This resource, identified during the current survey, was observed to consist of three bedrock milling features. Bedrock milling feature 1 contains two basins and one milling slick, all of which exhibit heavy use. Bedrock milling feature 2 contains two basins and two milling slicks that display moderate to heavy use. Bedrock milling feature 3 contains one milling slick that exhibits heavy use. Also noted in the milling feature area was a single, brown ware rim sherd. Considerable disturbance was observed in the site area.

Isolates

CPLL-03

This resource was identified during the current survey and consists of one isolated prehistoric volcanic flake. Considerable disturbance was also observed in the area including past grading of unknown purpose.

4.3.2 Historic Sites

CPLL-05

This resource consists of the historic Broersma dairy complex. In 1951, Bill Broersma purchased the property from Ray Gavin. Though it was vacant at the time, dairy structures were built on the property in the late 1930s or early 1940s according to oral interviews and are present on 1948 aerial photographs on file at the County of San Diego Department of Planning and Land Use. The earliest development depicted on the site, however, is a structure indicated on the 1939 El Cajon USGS 15' quadrangle directly adjacent to Los Coches Road (formerly Chestnut Road), approximately 500 feet west of the westernmost foundation visible today. This appears to be a residence or office whose location is now at least partially covered by the widened Los Coches Road.

According to Broersma (personal communication c.2005), his dairy operation consisted of a dairy barn or milking room and three hay barns. Remnants of the dairy barn or milking room include a large room with a trough running along the east wall and a central linear drain, as well as a smaller room foundation located down slope and connected to the milking room by a straight-approach stairway. The low concrete walls of the structure, likely topped with wood while in use, are generally intact. A pile of weathered building wood sits to the southwest of the foundations. The southern end of the milking barn foundation, partially cut into the slope, is supported by a retaining wall of mortared cobble on its western face. A scored ramp runs north from the north end of the milking room and was likely used to drive cattle into the milking facility.

The foundations of the two adjoining hay barns are located northeast of the milking room. These long, rectangular structures formed a slight chevron in shape, and are marked today by their flat concrete foundations. Low concrete walls topped with what appear to be troughs are cut into the hillside on their eastern side, below a roadway visible on the 1949 and 1953 aerials. A concrete water tank is located approximately 100 feet east and up slope of the main structure. No indications of the residence/office structure or of the westernmost hay barn were observed during survey. Portions of the original dirt road entering from today's Los Coches to the north of the dairy are still visible, as is the road cut originating behind the adjoining hay barns and running to the southeast of the milking room. Supporting up to 80

cows, Broersma's small-scale dairy was in operation until 1956 when he sold the property; it is not known if, or for how long, subsequent owners continued the operation.

Whitaker Hilltop House (SDI-13,726)

This resource consists of the Whitaker residence and associated yard and landscaping at 12835 Castle Court Drive. The residence of Hale and Mildred Whitaker, the Whitaker House was built by Hale Whitaker in 1940. Located on the top of a small hill in Lakeside, the site was selected for its 360 degree view of the town and surrounding valley areas. In 1994, the house, its contents, and the property were donated to the County of San Diego Department of Parks and Recreation (County of San Diego Board of Supervisors 2006). The house and its architecture are described in detail in the Historic Structure Report "*Hilltop*", *the Mildred and Hale Whitaker House*, completed by ICF Jones & Stokes (2008).

Hale Whitaker, an equipment operator for the County Engineering Department, purchased the land for the house from W.E. Oaks, and constructed the residence using native stones. Whitaker bulldozed the long private road ascending the hill himself as well as the level area for the residence without disturbing the hill's natural contours. Construction on the single story, un-mortared stone house began in 1935 and was not completed until July 1940. The Whitakers made and installed the roof's original shingles and laid the hardwood floors. A stone path runs to the front door, crossing a large concreted area. On the most south-facing wall is a plaque reading "Hilltop" – the Whitakers' apt name for their beloved residence.

4.4 Resource Significance

None of the six cultural resource sites on the Preserve has been previously evaluated for importance. As per the original scope of work for this project, resource evaluation was not conducted as part of this survey and inventory effort. However, according to the County's guidelines in the absence of significance testing they are considered significant. Consequently, it is recommended that any of the sites that cannot be preserved through project design resulting in avoidance of the resource should be tested and evaluated for importance.

The Boersma Dairy building foundations are considered an historic archaeological site. As such according to the County's guidelines in the absence of significance testing it is considered significant. The Whitaker house is most likely significant at the local level and has been presented to the County of San Diego Historic Site Board for evaluation.

5.0 MANAGEMENT GOALS, OBJECTIVES, & RECOMMENDATIONS

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 Lakeside Community Plan. The County's overall goal or mission, as indicated in the 2010-2015 Strategic Plan, is to efficiently provide public services that build strong and sustainable communities. The Strategic Plan for Parks and Recreation is closely aligned with the County's strategic initiatives.

The DPR Strategic Plan outlines the department's priorities for accomplishing its mission over a five-year period. The overall goal or mission of DPR is to enhance the quality of life in San Diego County by providing opportunities for high level parks and recreation experiences and preserving regionally significant natural and cultural resources. DPR makes this mission a reality through programs that create healthy communities, preservation and management of natural, historic and cultural resources, maintaining safe and accessible parks and facilities, and creating community.

In addition, the Lakeside 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 preserve Lakeside's rural atmosphere and unique resources, and provide a wide variety of recreational activities and facilities which will meet the needs and enrich the lives of all residents of Lakeside. To this end, the 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 County's Subarea Plan provide both general and segment-specific goals and objectives. The Preserve is located within the North Metro-Lakeside-Jamul Segment of the MSCP Subarea Plan and, as discussed in Section 3.4, lies in the "Interstate 8 at Lakeside" Habitat Linkage between the McGinty Mountain/Sequan Peak-Dehesa and Lake Jennings/Wildcat Canyon-EI Cajon Mountain Core Areas. 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 assure that the goal of the MSCP Preserve is attained and fulfilled, management objectives for the County of San Diego MSCP Subarea are as follows:

1. To ensure the long-term viability and sustainability of native ecosystem function and natural processes throughout the MSCP Preserve.
2. To protect the existing and restored biological resources from disturbance-causing or incompatible activities within and adjacent to the MSCP Preserve while accommodating compatible public recreational uses.
3. To enhance and restore, where feasible, the full range of native plant associations in strategic locations and functional wildlife connections to adjoining habitat in order to provide viable wildlife and sensitive species habitat.
4. To facilitate monitoring of selected target species, habitats, and linkages in order to ensure long-term persistence of viable populations of priority plant and animal species and to ensure functional habitats and linkages.
5. To provide for flexible management of the MSCP Preserve that can adapt to changing circumstances to achieve the above objectives.

5.1.3 Management Directives and Implementation Measures

Based on the above management goals and objectives, recommended management directives have been identified. In accordance with the Framework Management Plan, the ASMDs 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.

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 and B. Additional monitoring results will be incorporated into stand alone monitoring reports. These reports may recommend revisions to the management directives contained within this RMP.

It is recognized that subregional monitoring has been designed to answer concerns and objectives on a larger scale. A subregional monitoring survey site is located at the Preserve for Coastal California Gnatcatcher and Cactus Wren. While objectives of individual preserve and subregional monitoring may be different, draft subregional monitoring methods have been developed and may assist monitoring methods and decisions at the preserve level for particular species and habitats.

The key to successful monitoring at the individual preserve level, such that data gathered is not duplicative and meets individual preserve level objectives, 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 will designate a land manager who will assist jurisdictions in coordinating monitoring programs, analyzing data, and providing other information and technical assistance. DPR will work closely with this group.

MSCP covered species have been prioritized for monitoring by San Diego State University (SDSU) in the document *San Diego Multiple Species Conservation Program Covered Prioritization* (Regan et al., 2006). Subregional monitoring methods have been developed for rare plants (McEachern et al., 2007) and 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 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 plant species at five-year intervals to assess invasion or re-invasion by exotic plant species 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)

As discussed in Section 3.4, the Preserve does lie within a primary linkage – “Interstate 8 at Lakeside”. This linkage provides a connection between the McGinty Mountain/Sequan Peak-Dehesa and Lake Jennings/Wildcat Canyon – El Cajon Mountains Core Areas. The Preserve functions as a corridor linkage for Coastal California Gnatcatchers (species specific monitoring is discussed in Section 5.2.2).

The presence of residential homes, Los Coches Road and a large concrete channel found west of the road present obstacles for medium and large animal movement between the three properties of the Preserve. However, it can be assumed that larger mammals regularly move on, off of, and across the Preserve, to and from adjacent open space (Lake Jennings is accessible from the central and eastern properties to the east and open space is located south of the western property). Therefore, while corridor monitoring within the Preserve will take place at the preserve-level, it anticipated that it will provide data for better understanding 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 main product of this monitoring will be a report documenting the results of the current assessment of habitat linkage function including a list of species detected.

5.2.2 MSCP Covered Species-Specific Monitoring and Management Conditions

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. However, there are some species listed as MSCP Covered Species in the MSCP Subarea Plan which require additional management measures, particularly if monitoring indicates that the general guidelines are not sufficient to maintain acceptable population levels.

Table 3-5 of the Final MSCP Plan (City of San Diego, 1998) provides management and/or monitoring measures for specific MSCP species. In addition, in the document *San Diego Multiple Species Conservation Program Covered Prioritization* (Regan et al., 2006), SDSU has prioritized the MSCP covered species for monitoring. The species were classified as Risk Group 1 (most endangered), Risk Group 2 (moderately endangered), and Risk Group 3 (less endangered). Next, the threats/risk factors facing the species were identified and ranked as high, moderate, or low degree of threat to the species. Only management conditions addressing high and moderate threats for Risk Group 1 species will be discussed in this RMP. No Risk Group 1 species are currently present on the Preserve.

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

Implementation Measure A.3.1: Implement the species-specific monitoring and management conditions as listed in Table 3-5 of the MSCP Plan and *San Diego Multiple Species Conservation Program Covered Prioritization* (Regan et al., 2006) for all MSCP Covered Species detected within the Preserve.

The conditions of coverage for those species currently known to occur in the Preserve are listed below followed by an explanation of how management activities in the Preserve will comply.

Orange-Throated Whiptail (*Cnemidophorus hyperythrus beldingi*)

Monitoring: Table 3-5 - Site Specific, SDSU - Risk Group 3

Management Conditions: Table 3-5 states area-specific management directives must address edge effects. Edge effects are addressed through implementation measure C.5.1 and multiple implementation measures under management directives D.8 and D.9 below.

Cooper's Hawk (*Accipiter cooperii*)

Monitoring: Table 3-5 - Habitat Based, SDSU - Risk Group 3

Management Conditions: Table 3-5 states area-specific management directives must include 300-foot impact avoidance areas around active nests and minimization of disturbance in oak woodlands and oak riparian forests.

No nesting territories were observed within the Preserve during the 2008 surveys; however future detection will be addressed through general wildlife surveys (as described in implementation measure A.1.2).

Coastal California Gnatcatcher (*Polioptila californica*)

Monitoring: Table 3-5 - Area-specific Management Directives, SDSU - Risk Group 2

Management Conditions: Table 3-5 states area-specific management directives must include measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure. No clearing of occupied habitat may occur between March 1 and August 15.

Edge effects are addressed through implementation measure C.5.1 and management directives D.8 and D.9; fire protection is addressed in implementation measure B.4.3, habitat management is addressed in implementation measure A.1.1, and habitat restoration B.1.1.

Western Bluebird (*Sialia mexicana*)

Monitoring: Table 3-5 - Habitat Based; SDSU - Excluded

Management Conditions: None

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

Monitoring: Table 3-5 - Habitat Based, SDSU - Risk Group 3

Management Conditions: Table 3-5 states area-specific management directives must include maintenance of dynamic processes, such as fire, to perpetuate some open phases of coastal sage scrub with herbaceous components.

Southern California rufous-crowned sparrows were detected throughout the recovering coastal sage scrub found at the Preserve. This habitat will be maintained through vegetation management implementation measure B.4.3.

Southern Mule Deer (*Odocoileus hemionus*)

Monitoring: Table 3-5 - Habitat Based and Corridor Sites, SDSU - Risk Group 3

Management Conditions: None

5.2.3 Future Research

The MSCP Preserve system 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. The MSCP Biological Monitoring Plan makes recommendations for further research to supplement the required monitoring program.

Management Directive A.4 – Allow for future research opportunities for the Academic and Professional Scientific and Biologic Activities within the Preserve (*Priority 2*)

Implementation Measure A.4.1: 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)

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 assessed habitat conditions on the central property in regards to planting coast prickly pear (*Opuntia littoralis*) within the property. The coast prickly pear could provide potential coastal cactus wren breeding habitat. In 2009 DPR requested funding from the SANDAG TransNet Environmental Mitigation Program to restore coast prickly pear. Funding was approved and work is planned to begin in the summer of 2011.

Implementation Measure B.1.2: DPR will assess and determine the need for additional 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). 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.

5.3.2 Non-Native Plant Species Removal and Control

As described in Section 3.2.4 above, six invasive non-native plants were found within the Preserve. Tree-of-heaven is found in a grove in the north end of the central property near the Whitaker residence, African fountain grass occurs in a few scattered areas of the southern portion of the western property and in one area of disturbed soil near the ridge that is the highest point of the property, and spiny emex occurs on the edges of the eastern property mostly on the adjacent privately owned open space land. Eucalyptus, olive tree, and Peruvian peppertree were found in low numbers in the Preserve. Out of the six invasive non-native plants three are ranked as moderate by Cal-IPC (tree-of-heaven, African fountain grass, and spiny emex) and three are ranked as limited (eucalyptus, olive tree, and Peruvian peppertree).

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 1)

Implementation Measure B.2.1: DPR park rangers will treat tree-of-heaven, African fountain grass, and spiny emex within the Preserve following methods outlined in the Habitat Restoration Plan and Non-Native Plant Removal Guidelines for Otay Valley Regional Park (HDR 2006). DPR will also coordinate with volunteer groups to do non-native plant species removal days at locations

identified during invasive plant surveys and monitoring (as described in implementation measure A.1.3).

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 tree-of-heaven, African fountain grass, spiny emex, or other invasive non-native plants found during 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.

5.3.3 Fire prevention, control, and management

Current fire management activities in the Preserve include two fuel modification zones (Figure 8) as described below:

- 1) 100-foot fuel modification zone on the eastern border of the central property of the Preserve where the property abuts private residences
- 2) 30-80 foot fuel modification zone in the southwestern area of the central property of the Preserve where the property abuts private residences

These fuel modification zones provide the adjacent residences a 100-foot buffer as measured from the residential structures. Adequate emergency access roads are found within the Preserve in the form of existing 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 Preserve property adjacent to existing residential structures that are within 100 feet of the Preserve property boundary. 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 Lakeside 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. In addition, DPR will continue to coordinate with CAL FIRE and/or the Lakeside Fire Protection District to determine what improvements need to be made to make fire response feasible throughout the Preserve.

Implementation Measure B.4.3: DPR will coordinate with Cal-Fire and the Lakeside Fire Protection District to develop an integrated Vegetation Management Plan that will allow environmental documentation for strategic fuels management to be conducted if, and when, needed. The Vegetation Management Plan will also identify likely locations for equipment staging areas and fire breaks, assisting fire fighting activities to avoid known cultural sites, if feasible.

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

5.4.1 Public Access

In 2007 DPR received TransNet Environmental Mitigation Program funding from the San Diego Association of Governments to improve the habitat of the Preserve by reducing unauthorized access and dumping of refuse. The project included installing fencing and equestrian/pedestrian gates (Figure 8).

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

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. Camping (including homeless and itinerant worker camps)
- e. Feeding wildlife

- f. Domestic animals, except horses and leashed dogs
- g. Smoking
- h. Campfires/Open Flames
- i. Littering/Dumping

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

As described in Section 5.3.1 and shown in Figure 8, fencing and gates have been placed within the Preserve to discourage unauthorized access.

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 authorized and non-authorized public access to the Preserve.

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

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.sdparcs.org.

Implementation Measure C.3.2: Opportunities for educational trail-side signage and educational kiosks will be identified within the Preserve. In addition, signage provided at access points and on trails maps provides a form of education. See also implementation measures E.2.4 and E.3.1.

Implementation Measure C.3.3: 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, fences and gates are located in the following areas within the Preserve (Figure 8): 1) a concrete split-rail fence is located along the eastern side of the central property adjacent to Manajo Road and two equestrian/pedestrian gates were installed in association with the fencing; 2) a gate is located on the eastern boundary adjacent to Manajo Road and a second gate is located on the western boundary at the end of West Rim Road (237 linear feet of split-rail fencing is associated with this gate); and, 3) a gate is located on the southeastern portion of the central property adjacent to Ha-Hana Road.

Fencing is also located along the western boundary of the western property adjacent to Sherann Drive to prevent unauthorized access. Where it was impractical for fencing, boulders were placed to prevent access.

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

Implementation Measure C.4.1: DPR park staff will regularly inspect and maintain all fencing and gates within the Preserve. Fence segments and gates 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 central property of the Preserve will only include a multi-use 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: DPR park 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 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, or 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 authorized 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 DPR park staff, those specific areas will be posted with clear signage reminding the public to remain on authorized trails. Also see management directive C.6.

Implementation Measure C.5.5: Existing disturbed habitat and unauthorized trails on the Preserve will be allowed to passively revegetate.

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 E.2.4); provide educational and interpretive information (see C.3.2 and E.3.1); 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 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); Weapons and Fireworks Prohibited 41.117; All Plants and Animals Are Protected 41.111 and 41.112; Campfire or Open Flames Prohibited 41.118, Authorized Vehicles Only, and Motorcycle Activity Prohibited. 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.

No blue-line streams occur on any of the three properties, although surface water flows are likely conveyed off of the western and central properties into Los Coches Creek. Los Coches Creek is located adjacent to the eastern border of the western property and flows through a concrete channel.

Management Directive D.3 – Install BMPs to prevent potential erosion of hillsides. (Priority 2)

Implementation Measure D.3.1: Monitor potential sites that may erode through implementation measure C.5.3. If deemed necessary, install BMPs to stabilize slopes.

5.5.3 Emergency, Safety and Police Services

The Framework 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 Lakeside Linkage 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 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, DPR 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, residential development is immediately contiguous to almost all of the Preserve. Open space property owned and managed by the Center for Natural Lands Management Inc. (CNLM) is located directly east of the central property. Additional open space properties are located directly east of the CNLM properties privately owned and managed by the San Diego Habitat Conservancy. Open space property located to the west of the central property is privately owned and managed. All of the above open space properties have been dedicated to the County as open space easements.

Private open space is located south and east of the western property and directly north of the eastern property.

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 can be regulated.

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

Implementation Measure D.7.1: DPR will coordinate with the Center for Natural Lands Management Inc. and San Diego Habitat Conservancy (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 MSCP.

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, and 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 – Identify, record, and assess the significance of cultural resources within the Preserve in areas over 20 percent slope (*Priority 2*)

Implementation Measure E.1.1: Inventory all Preserve lands over 20 percent slope for cultural resources. Cultural resources include historic structures, features, and landscaping, as well as historic and prehistoric archaeological sites, features, and artifacts. Inventories shall include a record search at the South Coastal Information Center, SDSU, and on-foot field survey, as well as pertinent archival and historical research.

Any cultural materials collected from the Preserve in relation to construction of new trails on-site will be curated at a qualified curation facility including the San Diego Archaeological Center. No removal or modification of cultural resources shall occur without written approval by the Director of Parks and Recreation.

Implementation Measure E.1.2: Identify and record sites in those areas of the Preserve that were not accessible during the initial Phase I cultural resources survey.

Implementation Measure E.1.3: Assess each newly identified cultural site within the Preserve for eligibility as a Historical Landmark, and to the California Resources Historic Register/National Register of Historic Places.

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

Implementation Measure E.2.1: 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.2.2: The condition and status of 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.2.3: All management activities within the Preserve including, but not limited to, trail construction and 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.2.4: 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.3 – Promote the beneficial uses of cultural resources through interpretation and educational programs (*Priority 2*)

Implementation Measure E.3.1: 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 Parks and Recreation. The plan will

include supervision by a qualified archaeologist approved by the Director of Parks and Recreation. See also implementation measures C.3.1-3.

Management Directive E.4 – Honor Native American Heritage and promote Native American ceremonies, gathering, and cultural practices (*Priority 2*)

Implementation Measure E.4.1: Consultation with the Viejas and Barona Band of Mission 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.4.2: The County will open the Preserve to traditional uses by the Viejas and Barona Band of Mission Indians. All activities by Native Americans in the Preserve shall be conducted with a Right-of-Entry permit specifically designed for the Preserve.

6.0 REFERENCES

Broersma, Bill. c.2005 Personal Communication with Edna Kouns and Cathy Hansen. On file in the Dairy File of the Lakeside Historical Society.

Cal-IPC (California Invasive Plant Council). 2007. California Invasive Plant Inventory. Accessed January 2010: <http://www.cal-ipc.org/ip/inventory/>

California Regional Water Quality Control Board. Accessed 2008.
<http://www.swrcb.ca.gov/rwqcb9/programs/basinplan.html>.

Campbell BioConsulting, Inc. 2002. Biological Reference Evaluation and Management Recommendations for the County-owned MSCP Lakeside Archipelago Lands, San Diego County, California. Prepared for County of San Diego Department of Parks and Recreation.

Carrico, Richard L. 1980. San Diego Indians and the Federal Government Years of Neglect, 1850-1865. Journal of San Diego History, Summer 1980, Volume 26, Number 3.

City of San Diego. 1998. Final Multiple Species Conservation Program: MSCP Plan.

County of San Diego. 1997. Multiple Species Conservation Program: County of San Diego Subarea Plan.

County of San Diego. 1998. County of San Diego Multiple Species Conservation Program Implementing Agreement by and between United States Fish and Wildlife Service, California Department of Fish and Game, County of San Diego.

County of San Diego. 2001. Framework management plan for the Multiple Species Conservation Program (MSCP) South County Subarea Plan.

County of San Diego. 2005. County Trails Program: Community Trails Master Plan. Available at: http://www.co.san-diego.ca.us/reusable_components/images/parks/doc/tocrev.pdf

County of San Diego Board of Supervisors. 2006. Statement of Proceedings, County of San Diego Board of Supervisors Regular Meeting - Planning and Land Use Matters, Wednesday, June 14, 2006. Available at: www.co.san-diego.ca.us/cnty/bos/agenda/sop/061406sop.doc. Retrieved 4/25/08.

HDR Engineering Inc. 2006. Habitat Restoration Plan and Non-Native Plant Removal Guidelines, Otay Valley Regional Park, County of San Diego, City of San Diego, and City of Chula Vista, California. Prepared for the County of San Diego Department of Parks and Recreation.

- Jones & Stokes Associates, Inc. 2008. The Hilltop, Donated by Mildred and Hale Whitaker, Historic Structures Report, Lakeside Linkage Preserve. Prepared for the County of San Diego Department of Parks and Recreation; on file at Headquarters.
- Keeley, J.E. and C.J. Fotheringham. 2001. Historic Fire Regime in Southern California Shrublands. *Conservation Biology* 15:1536-1548.
- Mooney, H.A. and C.E. Conrad. 1977. Proceedings of the symposium on the environmental consequences of fire and fuel management in Mediterranean ecosystems. U.S. Forest Service Gen. Tech. Rep. WO-3. 498 p.
- Oetting, A. C. 1979. Site form for site CA-SDI-5047. On file at the SCIC, San Diego State University, San Diego.
- Ogden. 1996. Biological Monitoring Plan for the Multiple Species Conservation Program. Prepared for the County of San Diego.
- RECON. 1990. Los Coches Subdivision Introduction. MS on file South Coastal Information Center, San Diego State University.
- Regan, H., L. Hierl, J. Franklin, and D. Deutschman. 2006. Grouping and Prioritizing the MSCP Covered Species. Technical Report prepared for the California Department of Fish and Game. San Diego State University. San Diego, CA.
- San Diego Graphic Information System (SanGIS). Accessed 2008.
- Strand, R. G. 1962. Geologic map of California, San Diego-El Centro Sheet (fourth printing 1993). State of California, The Resources Agency, Department of Conservation, Division of Mines and Geology, Sacramento, California.
- Unitt, P. 2004. *San Diego County Bird Atlas*. Proceedings of the San Diego Society of Natural History 39: i-vii, 1-639.
- U.S. Department of Agriculture. 1973. Soil Survey, San Diego Area, California. Washington, DC: U.S. Dept. of Agriculture, Soil Conservation Service [now Natural Resources Conservation Service] and Forest Service
- Westman, W.E. 1976. Vegetation conversion for the fire control in Los Angeles. *Urban Ecology* 2:19-137.
- Westman, W. 1982. Coastal sage succession, pp. 91-99. In C. Conrad and W. Oechel (eds.), Proceedings of the symposium on dynamics and management of Mediterranean type ecosystems. U.S. Forest Service Gen. Tech. Rep. PSW-58. Berkeley, CA